

University of Delaware
Disaster Research Center

REPORT SERIES
#16

THE ROLE OF LOCAL CIVIL DEFENSE
IN DISASTER PLANNING

Russell R. Dynes
E. L. Quarantelli

1975

This report prepared for the Defense Civil Preparedness Agency,
Washington, DC 20301.

DCPA REVIEW NOTICE: This report has been reviewed in the Defense
Civil Preparedness Agency and approved for publication. Approval
does not signify that the contents necessarily reflect the views
and policies of the Defense Civil Preparedness Agency.

Contract DAHC20-72-C-0301: Work Unit 2651C.

THE ROLE OF LOCAL CIVIL DEFENSE IN DISASTER PLANNING

Abstract

Intensive field studies involving over 300 in-depth interviews in 12 American cities were conducted in an effort to ascertain the conditions or factors associated with variations in the tasks, saliency and legitimacy of local civil defense organizations around the United States. All of the cities were objectively subject to at least two major natural disaster threats and half had undergone a major disaster in the last decade. Data were obtained from key community and emergency organization officials by way of a disaster probability rating scale, two intensive interview guides, and a general documentary checklist.

Among the findings were the following. While overall disaster planning by civil defense has tended to be differentiated, segmented, isolated, cyclical and spasmodic, in recent years planning has broadened to include a wide range of disaster agents, a lesser focus on nuclear attack, more concern with local community viability and increasing involvement of a greater number of organizations in community disaster plans. Currently in almost all communities there are multiple layers of planning with little consensus on disaster tasks, on organizational responsibility and on the scope of disaster planning, as well as confusion concerning the role of civil defense in such planning. Local civil defense directors not only differ in following a professional or a political career path, but also manifest a variety of behavioral styles in carrying out their roles.

Local civil defense agencies tend to be ambiguously viewed as to their interests, structures and functions by the general public, community influentials and organizational officials. Civil defense agencies have also evolved in two different ways -- some following a traditional path with an emphasis on nuclear hazards and others concerned with a number of different hazards. High saliency seems to be related to extensive horizontal relationships, broad scope of tasks and multiple hazard concerns.

A number of factors undercut the legitimacy of civil defense organizations. These include changes in organizational purpose, perceived need for services, decline in resources, poor performance and changing saliency of the military model. Local offices which have legitimacy tend to be in localities where there are persistent threats, where civil defense is within the local governmental structure, where extensive relationships are maintained with other organizations, and where the output or product of the civil defense organization is seen as useful to other community groups.

Conditions which are most likely to be productive of successful local civil defense involvement in disaster planning are that the local organization develops experience in handling a variety of community emergencies, that municipal government provides a structure which accepts and legitimizes the civil defense function, that the local civil defense director has the ability to generate significant pre-disaster relationships among those organizations which do become involved in emergency activities, and that emergency-relevant resources, such as EOCs, be provided and that the knowledge of their availability is widespread throughout the community.

Preface

An initial comment is necessary on the use of terms. Throughout the report the term "local civil defense office" will be used. Such a local unit is often found under a different designation -- disaster services, emergency services, defense council, etc. While there is a trend toward such usage, local civil defense is maintained here for two reasons. This usage points to common origins and common functions, regardless of different designations which might now be used in particular localities. In addition, when the original interviewing was done, most of the offices studied were known by this terminology.

It is important to indicate that field work upon which this study was based was done by past and current DRC staff members: John Bardo, Sue Blanshan, Dan Bobb, Paul Cass, John Fitzpatrick, Marvin Hershiser, Michael Kearney, Rod Kueneman and Verta Taylor. In addition, they contributed various summaries to the continuing discussion of the materials. Their contributions were essential to the final product.

Funding for this study was provided by the Defense Civil Preparedness Agency under Contract DAHC20-72-C-0301 Work Unit 2651C, and for which a report was issued in January 1975. The reprinting of this version of the report has, however, been borne by the Center itself.

TABLE OF CONTENTS

	Page
Preface	ii
List of Illustrations	v
Chapter	
I. INTRODUCTION	1
The Problem	
The Study Undertaken	
The Analytical Framework	
II. THE HISTORY OF DISASTER PLANNING	15
Basic Characteristics of Disaster Planning During the 1960s	
Basic Trends of Disaster Planning in the 1960s	
Factors Affecting Disaster Planning	
Community Estimates of Disaster Probabilities	
III. THE NATURE AND SCOPE OF CURRENT DISASTER PLANNING	24
The Focus of Disaster Planning	
The Locus of Disaster Planning	
Disaster Tasks and Organizational Responsibility	
Disaster Plans	
IV. THE ROLE OF LOCAL CIVIL DEFENSE	36
How Local Civil Defense is Viewed in the Local Community	
Variation in the Ways Local Civil Defense is Institutionalized	
Two Different Patterns of Organizational Evolution	
A Concluding Note of the Saliency of the Local Civil Defense Office	
V. THE LEGITIMACY OF LOCAL CIVIL DEFENSE	48
Special Problems Involved in the Legitimacy of Local Civil Defense	
Characteristics of Local Offices Which Have Legitimacy	

Chapter	Page
VI. THE ROLE OF THE LOCAL CIVIL DEFENSE DIRECTOR	55
Concluding Thoughts	
VII. THE FUTURE ROLE OF LOCAL CIVIL DEFENSE IN DISASTER PLANNING	60
Appendices	
A. CASE STUDY: CITY A	63
Descriptive Characteristics of City A	
Disaster Vulnerability of City A	
History of Disaster Planning in City A	
Current Overall Disaster Planning in City A	
Position of Civil Defense in the City	
B. CASE STUDY: CITY B	77
Descriptive Characteristics of City B	
Disaster Vulnerability of City B	
History of Disaster Planning in City B	
Current Overall Disaster Planning in City B	
Position of the Civil Defense Office in City B	
C. RESEARCH INSTRUMENTS	90

LIST OF ILLUSTRATIONS

Figure	Page
1. Scope and Extensiveness of Disaster Planning Within the Local Community	24
2. Patterns of Disaster Planning in the American Urban Community . .	28
3. Possible Patterns of Acceptance and Assignment of Search and Rescue Among Community Organization	31
4. Variations in the Degree of Institutionalization of Local Civil Defense	43
 Table	
1. Rating of Community Disaster Probability (for City A)	66
2. Rating of Community Disaster Probability (for City B)	80

CHAPTER I

INTRODUCTION

In this introductory chapter we set forth the problem being researched, the study undertaken, and the analytical framework used.

I. The Problem

In this section, we briefly consider the prior field work involved, note the literature examined, and state the research question with which our overall report is concerned.

Prior Field Observations

Field work on natural disasters and similar kinds of consensus-type community emergencies has been conducted by the Disaster Research Center (DRC) since late 1963.¹ In the course of nearly a decade about 100 disaster situations have been studied, as well as dozens of kinds of other emergency situations.² During the course of these studies, for a variety of reasons, the local civil defense organization has been looked at with varying degrees of attention and of depth.

One consistent impression from all the various observations and research is that local civil defense organizations are quite heterogeneous in at least three basic ways. They differ considerably in what they do; the range of tasks they undertake. The local groups have different degrees of saliency in their community, ranging from being almost unknown to being seen as the central emergency organization in their area. Civil defense agencies also range from being totally accepted as a legitimate group in their locality to almost being seen as a somewhat suspect "outside" organization despite their local base.

Looking at these three points in more detail, our prior field observations suggest the following. In some communities the local civil defense office has a very restricted set of tasks or responsibilities, almost the minimal possible to be a viable group. Thus, at times the local agency is involved solely in wartime or perhaps more accurately nuclear warfare planning since the notion of preparations for more conventional warfare seems to be almost totally absent everywhere. However, in other areas the civil defense organization has a function in peacetime or natural disaster activities. This is a rather widespread role. In still other localities, the civil defense agency is involved in the widest range of disaster planning, including technological or ecological disasters. And a few civil defense groups have even functioned in different capacities in such community emergencies as civil disturbances. The rarest cases of all, although a few exist, are where the civil defense organizations are participating in more general community problem areas such as the highway safety program or crime prevention activities. Thus, what a local civil defense group might do by way of tasks or responsibilities can vary rather widely from one locality to another.

Then there is the matter of how salient civil defense is or is not in a given community, how much it stands out or is recognized. In some localities, including some major cities, it is difficult to locate civil defense even in the phone book; in such places many of the key community emergency organizations often are totally unaware of the existence of civil defense, where it might be located and what, if anything, it might be doing. On the other hand, in certain other areas, the local civil defense organization is clearly a very salient group. Its presence might not only be acknowledged but it may be seen as the key emergency group in the area. But there is no necessary or direct connection between what local civil defense groups may do and whether they are recognized or not. One is able to find all possible variations on this matter. For example, there are civil defense organizations with many tasks and low saliency, some with a few tasks and high saliency, others with many responsibilities and high saliency, and still other instances of almost no emergency tasks and almost non-existent saliency. Just as there is considerable variation in what local civil defense groups do or do not do, so there is a considerable range of how salient or not the organization will be in a given community.

Along the third dimension, that of legitimacy, there is also considerable variation not totally correlated either with saliency or nature of tasks. At one end of a continuum, there are some local civil defense agencies that have clearly won full community acceptance and are considered and function as an integral part of the community's response to any major local crisis. At the other end of the continuum, there are other local civil defense groups that obviously have little legitimate standing in their communities, and are not expected to, nor do they participate in any meaningful sense in the planning and response to community emergencies of any kind. In between are a number of other local civil defense organizations, some of whom are accorded a degree of legitimacy in community emergencies, but whose overall position nevertheless is somewhat marginal; still other local civil defense groups are rebuffed in their efforts to be an integral part of the emergency stances and responses of their areas.

These were some of our rather impressionistic observations in our earlier field work. Civil defense groups seemed to be somewhat heterogeneous insofar as community tasks, saliency and legitimacy were concerned. However, our research has never systematically focused on these matters; certainly we have never made any in-depth study of local organizations examining them in detail along these lines (even though we had conducted other kinds of studies).³ But perhaps more important we know very little of the conditions or factors associated with variations in local civil defense tasks, saliency and legitimacy. What accounts for one group having a certain set of responsibilities, and another local office having a rather different set of tasks? Why is one civil defense organization all but unknown in one area, and yet another group is highly visible elsewhere? What is responsible for the fact that a given civil defense agency is viewed perhaps as the legitimate group for planning and

responding to community emergencies in one locality, but in another place the local civil defense organization is seen at best as an interfering interloper from the outside? The observations from our earlier field work generated these and similar kinds of questions. But since the research undertaken up to this time by ourselves or others was never directly aimed at a systematic and in-depth examination of local civil defense with regard to these matters, the observations are at best impressions and the questions they raised are not yet answered.

The Literature

There are two sets of literature pertaining to local civil defense. There is the voluminous, exhortatory set of writings setting forth what civil defense ought to be and should be doing. Then there is the much scantier body of literature on actual civil defense operations. Whatever their other incontestable merits, the bulk of these writings are not too useful in either helping to confirm our impressions, or to assist us in answering our questions.

The vast bulk of the literature discusses how local civil defense organizations should be set up, what their functions ought to be, how the groups should respond to emergencies, what their responsibilities ought to be, and similar topics couched in terms of idealized expectations. We can see this approach illustrated in the DCPA on-site assistance manual, the SDC documents on the development of natural disaster exercises, the OEP backed May 1973 issue of Nations's Cities on "Is your city prepared for a major disaster?", the DCPA document, Disaster Operations: A Handbook for Local Government and similar publications.⁴ This kind of planning and training literature essentially depicts, and intentionally so, the ideal structure and functioning of local civil defense units.

This kind of literature is vital to setting up and developing local civil defense agencies in that it presents models for emulation. This literature is very useful in evaluating and judging civil defense activities for it provides a benchmark against which measurements regarding training and planning can be made. The value, importance and necessity of these kinds of publications is obvious and needs no defense.

But for our purposes, it is important to note that this kind of literature is addressed to the ideal rather than the actual, to what ought to be rather than to what actually exists. That there is always a discrepancy between any organization as it might be ideally desired and as it actually operates, is a commonplace sociological observation. As such, it is to be anticipated that there is almost inevitably a discrepancy also between the ideal civil defense organization as depicted in the training and planning literature, and the actual civil defense groups as they really operate in local communities in American society.

Thus, it would be possible to be very misled if the ideal is assumed to be totally realized in the actual, or if it is supposed that the actual corresponds to the ideal. It would not be expected, furthermore, that the

tasks, saliency and legitimacy among civil defense organizations would range so widely as suggested by our earlier impressionistic observations, if all actual situations adhered closely to the ideal desired. To understand the actual as compared to the ideal, it is necessary to study real, on-going local civil defense groups. Knowledge of such groups cannot be obtained by a study and analysis of the planning and training literature on such groups. Useful and vital as that literature is for many purposes it will not provide us with a good picture of the actual structure and functioning of local civil defense groups in everyday American community life.

A relatively minor part of the literature in the area does report on actual research about the "real" world of civil defense. In fact, some of the very earliest studies in the area did attempt to describe and to understand differences between the ideal and the actual. Thus, research by Ktsanes and his colleagues⁵ as early as 1955 attempted to ascertain those factors that determined the ways in which the civil defense program in Mobile, Alabama was articulated and accepted into the ongoing community structure. This survey study, which we use merely as an example, suggested social class and ethnic differences with respect to involvement in civil defense activities and the importance of the community power structure in the position local civil defense had in the city. Nearly a decade later, to cite another example, a study was made of the use of volunteers and voluntary organizations in civil defense and preparedness.⁶ Among other things, this survey research indicated that the lack of saliency of civil defense was a major constraint on widespread volunteerism. An actual study again showed that what was often stated as desirable if not necessary in planning and training documents oriented to an ideal world, probably could not be attained in the real world.

The bulk of recent research in this vein in the last decade has been conducted at the University of Pittsburg, at Michigan State University and at Iowa State University. The topics studied and the means used have varied somewhat, but in the vast majority of cases the research findings have been derived from actual data on what people said and did rather than on what others speculated about their thinking and actions, or what was thought ought to be believed and done. Most of these studies have been ably summarized in a recent publication by Ralph Garrett, Civil Defense and the Public: An Overview of Public Attitude Studies,⁷ and so will not be reviewed here again.

This line of research, while undoubtedly useful for many purposes, and based on actual studies of real people, only partly touches on some of the concerns we have. This is understandable for the research objectives and procedures were different in varying degrees from those with which we conducted the study reported in the following pages. For instance, except for some very recent work at Iowa State,⁸ this body of literature has not been focused on the activities of local civil defense with regard to natural disasters. The focus has been on civil defense with respect to a nuclear or wartime situation. Our research focus has been different; we have tried to answer a different research question.

The Research Question

In a way, our research question was a very simple one. What factors affect the activities, saliency and legitimacy of local civil defense offices? Assumed in the question (although we were to examine the assumption in our actual field work) was that there were differences in activities, saliency and legitimacy among different local civil defense organizations. Put another way, we wanted to be able to specify the range of differences in the dimensions indicated, and to indicate the conditions associated with such differences.

II. The Study Undertaken

This section discusses the logic of the sample obtained, the reasoning behind the data gathering instruments used, and the nature of the field work undertaken.

While in principle a variety of research designs could have been used, practical considerations fairly well structured what we could and did do. A limited budget for example, meant we could sample only a very limited number of local civil defense organizations. It might have been desirable to obtain overall community perception of disaster vulnerability for each given locality, but we had to restrict our contacts to key emergency organization officials rather than conducting a general survey of the total population. Similarly, even though we know there are differential perceptions of situations by personnel at different levels within complex organizations, our field work had to be confined to only one or two higher officials in most groups except civil defense. Nevertheless, despite such kinds of limitations in the study undertaken, we feel fairly confident that the field data were adequate and valid for our purposes.

The Sample

As to the sample, we decided to pick communities that were highly disaster vulnerable rather than attempting to choose among localities where the threat of catastrophe ranged from almost zero to very likely over a given period of time. This bias in our sample was deliberate. It was based on the notion that if a high disaster threat existed in a given community: (1) there would be extensive disaster planning; (2) local civil defense would have an obvious role to play; and (3) no other justification, such as threat of nuclear warfare, was needed to give legitimacy to emergency planning. Furthermore, it was assumed that if disaster planning and civil defense were weak or absent in such risk areas they were somewhat less likely to prevail in less hazardous areas elsewhere.

We of course already knew from our earlier field studies that while there was a correlation between disaster threat and planning, it was far from a one-to-one relationship. Thus, if we did encounter

situations in our field work where the objective threat in the area was not related to disaster planning, saliency and legitimacy by local civil defense and/or emergency organizations, such a discrepancy in itself might suggest to us clues about what was involved in such discrepant situations. In short, the very absence of the assumed relationship could serve as a diagnostic and analytical tool.

In order to choose our cities, an examination was made of various hazard risk maps that are currently available. Because such hazard exists only for natural disaster agents, we had to forego any possible examination of localities with high man-made or technological risks. To maximize our study situation, only communities with at least two major objective threats from natural disaster agents were considered (examples would be a city subject to river flooding and tornadoes, one exposed to volcanic eruptions and earthquakes, another vulnerable to hurricanes and flash flooding, etc.). Only cities with over 75,000 population were included in the original listing.

The cities chosen for actual study from the master list were then picked on the basis of different combinations of three other criteria. First, if DRC had done prior field work in the community, higher priority for being selected was given to that city. There are a number of cities around the country where we had, in our earlier field studies, acquired considerable knowledge about emergency organizations and disaster responses, and it seemed inefficient not to use such information. Second, we attempted to pick communities in all major sections of the country and in as many different states as possible. This was an effort to avoid the bias of whatever peculiar state or regional conditions that might be operative. Third, in order to minimize travel costs, everything else being equal, cities that were closer to DRC were chosen over those more distant.

The final sample consisted of a dozen cities, six of which DRC had previously studied and six that had never been looked at by DRC before. We had communities on both coasts, in 12 states and that ranged in population from around 75,000 to major metropolitan areas of over a million persons. Although all highly vulnerable to natural disaster agents, half of the cities had not had a major disaster in the last decade.

The Research Instruments Used

Four data gathering instruments were used: a disaster probability rating scale, two intensive interview guides, and a general documentary checklist.

The disaster probability rating scale was intended to get at overall organizational perspective on a range of possible threats to the community. It was aimed at eliciting organizational rather than individual perception of community risks. The object was to see to what extent the objectively known risks in the community were perceived as such, what disaster hazards were singled out as most probable, and

what consensus, if any, there was on the likelihood of disasters in the given locality. As we will indicate later, at the very least, we hoped to obtain a picture of what key officials in local emergency organizations -- the basic elements of any organized response to threat -- saw as probable and potential disasters in their localities.

There was one interview guide for personnel in the local civil defense office and another for officials in all other emergency-oriented organizations in the community. The interview guide for civil defense personnel focused on the internal structure and functions of the office, its interorganizational relationships, involvement in disaster planning and preparations, the disaster relevant community context, and the history of civil defense in the given community. The other interview guide particularly focused on perceived organizational responsibilities for disaster relevant tasks, intra- and inter-organizational aspects of disaster planning, and the history of emergency planning in the locality. The overall objective was to develop a picture of how the local civil defense organization fitted into past and present community disaster planning.

The general documentary checklist was used to insure that we collected all copies of disaster plans and other written material relevant to understanding emergency planning and response. Current documents as well as those available from the past were sought so as to obtain some idea of any changes that had been introduced.

Copies of the interview guides used as well as the disaster probability scale which was a part of such guides are reproduced in Appendix C of this report. The more specific instructions for the field teams are however not reproduced for they involve certain standardized DRC research procedures and policies not unique to this study. This involved such matters as providing an assurance to interviewees of the confidentiality of both the specific source and the particular information obtained insofar as later identification is concerned.

The Field Work

A few telephone calls were made prior to the departure of the field team so that interviews could be scheduled with officials, especially in the local civil defense office. This procedure had the effect of alerting some local personnel that a study was underway and in some cases allowed them to consider what they might be asked. Such prior alerting is normally not the best field research procedure and is often costly in terms of spontaneity and openness of answers. But we had to balance this disadvantage against the time gained in the field by having some appointments already scheduled. In a number of cases also the necessity of clearance with the chain-of-command in civil defense required giving notice even though going through official channels to some extent threatens the possible validity of the data obtained. Fortunately, there was no need to do this in all

cases and seldom was any prior scheduling undertaken with personnel in any non-civil defense organization. Thus, it was possible in a number of the cities and among most of the organizations for DRC to initiate the field work without any prior alerting about the study.

In general, little effort was made to hide the purpose of the research from the officials and organizations contacted. Most probably understood it as a study of disaster planning in the city more than as something focusing on civil defense. The legitimacy and value of the research was very seldom challenged and in a number of cases openly acknowledged.

An attempt was made to interview all full-time personnel in the civil defense office, be these directors, operational heads, office workers or whatever positions were involved. Because some persons were on vacation, sick leave or otherwise not available, interviewing of all personnel was not always possible, although in all 12 cities the majority of the staff in the local civil defense office were interviewed. Cooperation and rapport in all communities except one ranged from excellent to good, with operational heads often being the most informative and candid of the local staff.

In the one exception, not only was cooperation minimal but the local civil defense personnel actively avoided the DRC field team to the extent of openly failing to keep appointments and lying to them. This highly unusual reaction to the study, almost never before encountered by DRC in any of its over 200 field studies, appeared to be in part the consequence of the recognized absence of overall disaster planning in the city, the lack of professionalism if not work competence among some of the personnel and a general corruption -- at the time of the DRC visit resulting in criminal indictments -- among some of the personnel in key emergency organizations in the city. This interpretation is partly supported by the fact that while interviewing went very well among certain organizations in the community, it proceeded with difficulty among other city agencies whose personnel were under suspicion or indictment.

However, even in this city because a few officials interviewed were highly observant and open, a fairly good picture of the overall disaster planning in the community was nonetheless obtained. In the 12 cities generally, the DRC field staff felt that the information obtained from civil defense personnel was quite adequate and valid for the purposes of the study.

Cooperation provided by other organizations was equally as good, although on rare occasions a reluctant, indifferent or hostile official was encountered. Usually a top official in the organization was interviewed, sometimes two as in the instance of most police departments. There seemed to be little hesitation about expressing views and attitudes about the local civil defense personnel and operations. In fact, some officials were very blunt in making either negative or positive statements about civil defense.

Some problems were encountered in obtaining the history of past disaster planning in some communities. This did not stem from lack of cooperation, but was due to turnover in personnel; current organizational officials were not always knowledgeable of past events. Usually, however, there were some incumbents who could provide enough details about the past, so that a composite history of disaster planning in the community could be assembled from the separate pieces of information.

DRC field teams consisted of from two to five persons. They spent about four or five working days in each city. The total field work extended over a period of several months. A total of over 300 interviews were obtained ranging from a high of 52 in one community to a low of 17 in another city. Interviews with civil defense personnel averaged about two hours in length; with other officials about an hour and a half. Apart from difficulties encountered in the one city discussed above, there were only two refusals among the officials the DRC field teams attempted to contact.

The vast majority of interviews were tape recorded thus assuring fidelity of the information that was analyzed. Because of budget considerations, it was not possible, as had been the case in other DRC research, to transcribe most of the recordings. Much of the data analysis therefore had to be done from the tape recordings themselves. This made the analysis considerably more time consuming and tedious but of course had no consequences on the quality of the data gathered or analyzed.

One final observation about our data gathering should be noted. The data gathered in this systematic 12-city study were consistent with information DRC had obtained about civil defense operations in earlier studies. As noted before, this earlier research involving dozens of disasters had not systematically focused on civil defense as we have done in this study but certain passing impressions and observations had been made. The consistency of the information in both the systematic and unsystematic studies supports our impression about the validity and reliability of the data obtained. This rough correspondence of data also allowed us to use earlier gathered data in the six cities where we had done prior field research.

III. The Analytical Framework

In this section we present the major analytical dimensions examined, and outline the format of the rest of the report.

Major Dimensions Examined

The basic assumption of our study was that the current position of the local civil defense office was affected by the history of disaster planning in the community, its vertical and horizontal relationships to

other groups within and outside the community, and the resource base of the agency. That is, we assume the activities, saliency and legitimacy of civil defense can be seen as a consequence of the interplay of these four major factors or dimensions. The rest of this section explains what we were looking for in our data analysis with respect to these four dimensions.

History of disaster planning.

We sought to ascertain what changes, if any, have taken place in disaster planning in the given city, and what conditions or circumstances contributed to these trends. The focus was on the years from 1960 to 1970. Going back earlier in time would in most cases inhibit the availability of data, and the time period beyond 1970 was treated as a contemporary period.

Our major focus was on such questions as the following. Had there been any shifts in the scope of disaster planning in the community? What changes, if any, had there been in legal responsibility for developing and/or administering actual community-wide plans? If there had been changes in overall disaster planning, what about the speed and quality of such changes? Where had the impetus for change come from (e.g., actual disasters in the area, awareness of catastrophes elsewhere, internal community processes, extra-community factors such as OCD matching funds, etc.)?

Vertical and horizontal relationships.

We attempted to establish how the local civil defense office was vertically and horizontally related to other groups in the community. By vertical we had reference to the fact that goals, tasks, objectives, etc., of the local civil defense agency are to some extent given to it from outside of the local community as we shall explain and illustrate shortly. On the other hand, the local civil defense organization has horizontal links by way of formal and informal interactions with other elements in the local community

An illustration of vertical elements would be the task areas that have to be reported in civil defense annual reports. These include: the day-to-day use of EOCs; training programs for public and local officials; the distribution of information to the mass media; work with volunteer organizations on civil defense projects; the lines of emergency communication in the local civil defense area; the licensing, marketing and stocking of shelters; the training and assigning of shelters; and recommendations on which key governmental officials were to be notified in an emergency. In one basic sense, these are objectives presented to the local group by an extra-community element, in this particular case, federal civil defense (formerly the Office of Civil Defense now Defense Civil Preparedness Agency). Examples of other extra-community factors would be the kind of interaction with other civil defense groups elsewhere, training of civil defense personnel at the DCPA Staff College, exposure to disaster planning literature, etc.

An illustration of horizontal elements would be the systemic linkages the local civil defense office would have with the local governmental system. These would include formal ties of a legal nature, political connections, interorganizational understandings and all the variety of ways groups are formally and directly linked to one another. Other examples of what we want to consider as horizontal elements would be knowledge of procedures of how to obtain funding, informal links because of past relationships, unofficial exchanges of personal and professional favors, etc.

Oversimplified, we assumed that the local civil defense office is affected by its vertical relationship (i.e., the dimensions from outside the local community) and its horizontal relationships (i.e., the dimensions from within the community). Part of our data analysis was to establish what these dimensions actually were and how they operated in given communities. It was of course assumed that there could be different combinations of the vertical and horizontal dimensions, and that some combinations had different consequences for local civil defense groups than did other combinations. In a sense, the activities, saliency and legitimacy of local civil defense are seen as a partial function of the combination of the vertical and horizontal dimensions in the community.

Resource base.

While we did not assume that the resource base of a local civil defense office was independent of either the history of disaster planning or the vertical and horizontal dimensions operative in the community, for analytical purposes we did treat it as a somewhat independent element. By resource base we mean the personnel, facilities and financial base of the local civil defense agency. In one sense, such a resource base is a product of the other factors, but in another sense is itself an element that can be used to account for the activities, saliency and legitimacy of local civil defense.

Personnel has reference not only to sheer number of personnel but also something of their quality. For example, previous background or disaster relevant experiences of the staff would be considered as part of the resource base of a local civil defense agency. In similar fashion, facilities such as an EOC or financial aspects such as budget allocations would also be part of the resource base.

Format of Reporting

In the following chapters we present the findings of our study. Chapter II discusses the history of local disaster planning in this country as exemplified in the 12 cities studied. As far as we can ascertain, this is the only empirically based research about the general history of community disaster planning that has ever been undertaken although there are a few accounts that touch upon the specific historical development of emergency planning in particular

cities. This discussion while primarily focused upon the local civil defense office, takes into account that much planning occurred outside of that context. In this chapter we also take the opportunity to note such differences in disaster vulnerability as objectively exist in the 12 chosen cities (selected because they were subject to at least two major threats) and as disaster risk is actually organizationally perceived.

The next chapter deals with the nature and form of current local planning. That is, the range of activities generally undertaken with respect to possible disasters is examined. Here again the focus is on the local civil defense group, but of necessity whatever other emergency organizations plan for and do in large-scale catastrophes is considered. Also while efforts directed primarily at natural and technological disasters are reviewed, some attention is paid to local civil activities outside of those two areas. Possible conditions associated with different combinations of activities are noted.

Chapter IV looks at the perceived role of the local civil defense organization in the community. In considering the saliency of the agency, while some attention is given to organizational self-perception, greatest attention is given to how the group is perceived by other emergency organizations in the area. Again the analysis is in general terms, rather than examining the saliency of a specific civil defense office in a particular locality. Some consideration is given to the factors that might account for differential saliency.

In the next chapter we discuss the matter of the legitimacy of civil defense within the local community. Attention is paid to the degree of legitimacy accorded and the differing kinds of relevance that civil defense is sometimes seen as having. An extensive examination is made of the conditions and circumstances which seem to be associated with a high degree of legitimacy. In this analysis the vertical and horizontal dimensions discussed earlier are looked at closely. Particularly noted are the political and governmental links and base of the local civil defense organization.⁹

FOOTNOTES

1. Up to the time of the writing of this report, DRC had studied 244 different events, primarily natural disasters and secondarily civil disturbances. The list of specific events is given in a listing, Field Studies put out periodically by the Center.
2. These studies are reported on in summary form in American Behavioral Scientist 13 (January-February 1970) and American Behavioral Scientist 16 (January-February 1973).
3. See, for instance, the report by William A. Anderson, Local Civil Defense in Natural Disaster: From Office to Organization (Columbus, Ohio: Disaster Research Center Report Series No. 7, 1969).
4. The specific referent is Defense Civil Preparedness Agency, Disaster Operations: A Handbook for Local Government (Washington, D.C.: U.S. Government Printing Office, 1972).
5. T. Ktsanes, F. E. LaViolette and J. T. Roherer, et al., Community Structure, Organization Structure and Citizen Participation in Community-Wide Activities: A Study of Civil Defense in Mobile, Alabama (New Orleans: Urban Life Research Institute, Tulane University, 1955).
6. Lois Dean, Katherine Locke and Edwin Locke, "A Comparison of the Attitudes of Civil Defense Directors and Community Leaders," 2 Journal of Applied Behavioral Science (1966), pp. 413-430.
7. Ralph L. Garrett, Civil Defense and the Public: An Overview of Public Attitude Studies (Washington, D.C.: U.S. Government Printing Office, 1971).
8. As examples see Charles T. Griffin, Charles L. Mulford and Gerald E. Klomglan, An Analysis of Operating System Effectiveness: Focus on the Behavior of Local Coordinators (Ames, Iowa: Department of Sociology and Anthropology, Iowa State University, 1972); Gerald Klomglan, et al., Local Civil Defense Directors in Action: Their Opinions, Attitudes, Knowledge and Behavior (Ames, Iowa: Department of Sociology and Anthropology, Iowa State University, 1972); and, Charles L. Mulford, Gerald E. Klomglan and Charles T. Griffin, Role Performance in the Operating System: Civil Defense Operations in Disaster (Ames, Iowa: Department of Sociology and Anthropology, Iowa State University, 1972).

This research also differs from that reported in the following pages in that its focus is upon civil defense personnel, especially directors, whereas our study deals with the civil defense organization as such.

9. For purposes of illustration, we have included as appendices two shortened versions of the case studies we wrote up for each city when making our analyses.

CHAPTER II

THE HISTORY OF DISASTER PLANNING

Based on observations made in our twelve cities, it would be accurate to characterize the decade 1960-70 as a period of transition in disaster planning. We will try to indicate some of the elements in this transition. In spite of these transitional elements, there were certain base line statements that need to be introduced as a background to the transition.

Basic Characteristics of Disaster Planning During the 1960s

In the cities that we studied, there were certain commonalities that stood out as characterizing disaster planning. These were:

1. Disaster planning was located in three different segments of the community with minimum contact among the segments. These three segments can be identified as the local civil defense office,* private health and welfare agencies, and the municipal emergency organizations, such as police and fire departments. This segmentation tended to be maintained and reinforced by quite different assumptions and loyalties. On the one hand, the civil defense focus tended to make the assumption that the possibilities of nuclear attack should hold the highest priority since it was more strongly identified to national goals and national survival. This tended to be supported by the assumption that preparations for the nuclear possibilities would, in effect, be the prototype which would cover all other disaster situations. In other words, preparations for nuclear attack would be inclusive enough to cover all other "lesser disasters." On the other hand, various community agencies with stronger ties to serving the local community became much more concerned with disaster agents -- floods, hurricanes, tornadoes, etc. -- which they felt presented more "realistic" threats to the local community. Since they found that sometimes the local civil defense offices were not particularly

*It may be useful here to point to a potential source of confusion in terminology. The term "civil defense" in many national policy assumptions is seen as the totality of emergency preparations within the local community. In effect, it is seen as "civil government in emergency" so that all organizational activities are seen as being a part of civil defense. On the other hand, in discussions with organizational officials within communities, civil defense is seen as the activities of the civil defense unit or office within the community. Thus, police chiefs see police activities in emergencies, not as a part of civil defense, but as an extension of the responsibilities of the department itself. When they make reference to civil defense, they refer to the specific activities of the civil defense office. Since this latter use is almost universal within local communities, we have accepted that usage in this report.

interested in these types of disaster agents, planning still developed, often centered in the medical and welfare segments of the community. As a consequence, key municipal agencies, such as the police and fire departments, were "pulled" in two directions. Since these agencies' primary loyalty was to the local community, they often felt more identified with what they felt to be the more probable and more "realistic" types of threat.

2. As a consequence, most community organizations tended to engage in planning in isolation from other community organizations. Because of the various contradictory pulls which many community organizations felt, each organization tended to develop its own planning which often had little relationship to other community organizations within the community. That is, police departments developed their own plans; hospitals developed their own plans; Red Cross developed its own plan. While there were effects from the various community pressures, for example, a hospital might orient its plan more directly to the nuclear situation while a police department might orient its plan more directly to a natural disaster agent, by and large, organizations made their own judgments as to the appropriate direction and extent of planning. Consequently, there was a minimum of planning which emphasized coordination among the various individual community organizations.

3. Consequently, organizations tended to plan on the basis of attempting to maximize their own organizational functioning during the emergencies which they expected. Each organization, relatively isolated from other community organizations, tended to establish plans which would allow it to perform its functions with a minimum of interference from the "disaster agent" or from the simultaneous operations of any other community organization. The services necessary for their own operations were often considered but seldom in the context of the possible needs of other organizations that would also be operating in such a context. There was very little effort to anticipate how their own operational problems might be related to other organizations within the community.

4. Planning, throughout the period, tended to be cyclical and spasmodic rather than continuous and cumulative. At the beginning of the 1960s, the Berlin Crisis and most importantly the Cuban Missile Crisis provided an increased interest in civil defense activities. This was also reflected in dramatically increased federal funding for certain types of civil defense related programs, in particular, fall-out shelter construction, location, and supply. The massiveness of the Alaskan earthquake in 1964 provided added impetus to disaster planning, particularly in earthquake prone areas. Of course, in particular localities, specific localized disasters often acted as a stimulus to after-action discussion and to increased and improved planning.

While the previously mentioned characteristics seemed to dominate disaster planning during the 1960s, there were a number of cross-currents and, in fact, a number of changes that were going on within American communities. As one looks back over the decade, many of the cross-currents began to develop into what we can call trends of direction. It is to these trends we turn next.

Basic Trends of Disaster Planning in the 1960s

Among the cities that we studied, the following trends seemed to emerge:

1. The scope of disaster planning was broadened to include a wider range of disaster agents. While both nuclear and natural disaster agents became increasingly integrated into the planning of various community organizations, other types of emergency situations increasingly appeared within local communities which required attention and action. For example, the development of a super-highway system throughout the nation accentuated the problems of handling dangerous materials in transit. Such problems had previously been confined to port cities or to major rail lines. Increased air travel in planes with massive passenger capacities created new dimensions to be considered in emergency planning. In the mid-sixties, the emergence of civil disturbances across many of the major and minor cities in the United States presented a whole new set of problems, not only for law enforcement agencies but for welfare agencies, hospitals and for all municipal agencies. In general, there was a tendency to see continuities among the various threats and to emphasize certain common responsibilities among various community agencies rather than the continuation of specialized involvement and concern.

2. There was a decline in the assumption that preparation for a nuclear attack was sufficient planning for all types of disaster contingencies. It was evident in the local community that one heritage of the emphasis on planning for a nuclear attack was the implicit assumption that a nuclear attack was such a massive threat that planning for it would be sufficient for all other "smaller" emergencies. A number of people in various agencies began to suggest that the best way to prepare for a possible nuclear attack would be to develop emergency planning and operational capacities to the range of agents which the local community regularly experienced. As operational experience was gained, it would provide the basis for broader and more extensive agent demands. In addition, in particular with the emergence of civil disturbances, questions arose as to the difference between community conflict situations which the disturbances represented and other types of emergency situations. In general, there was the effort to assess the commonalities across various agents as well as the differences among them but the assumption that one type of planning was sufficient for all types of emergencies came increasingly into question.

3. There was a shift in the focus of disaster planning from the emphasis on security of the nation to the concern with the viability of the local community. Since most of the planning concerning nuclear attack had started with assumptions which were predicated on national security, most of the planning used the nation as the social unit and the role of the local community was seen as one of the many smaller units which would act collectively to support national goals. The local community then was important primarily because it would help sustain national aims. Over time, this assumption began to have less appeal. Local communities had their set of problems which might or might not be supportive of national efforts. If flooding was a persistent problem for a local community, its very persistence necessitated greater priority of attention than some more distant and more removed problem. While the concern for the nuclear situation did not disappear, greater amounts of time and energy were spent on local problems.

4. The number of community organizations involved in disaster planning increased. Over the decade, an increasing number of community organizations became interested in disaster planning. There were many different reasons for this. Sometimes, it was as a result of experience on the local level with a disaster agent which revealed the lack of previous planning. At other times, the impetus came from national organizations which was translated down to the local level. Too, some local organizations were prompted to plan their own by the subtle pressures created by their awareness of ongoing planning on other organizations on which they would be dependent in emergencies. If they did not want to be unprepared in situations in the future, the initiation of planning was mandatory. All of these diverse reasons combined to increase the number of organizations involved in disaster planning.

5. The organizations involved in disaster planning became better integrated. Gradually over time, a better integration was achieved among the various segments of community organizations. This better integration was, in part, a reflection of continued contact among the various organizations as well as other factors, discussed below, which facilitated disaster planning.

Factors Affecting Disaster Planning

Obviously in several different cities and over an extended period of time, there were a number of factors which affected disaster planning. Each of the sample cities had its own pattern of uniqueness but there were certain factors which were sufficiently important to be considered as critical dimensions affecting change in disaster planning. It is possible to divide these factors into those that tended to inhibit disaster planning within the community and those which facilitated such planning.

Factors Inhibiting

Some of the factors which inhibited disaster planning were related to earlier more traditional definitions of the role of civil defense. Particularly in the early sixties, there was the almost exclusive identification of civil defense with planning for nuclear problems. In some communities, this previous history of concern for planning for nuclear threat had had certain unanticipated negative results. Some of these negative results were in the nature of hostility which had emerged as a result of particular actions which had been associated with earlier planning activities. In several cities, some emergency organizations, particularly police and fire departments, had earlier experienced situations which they interpreted as an attempt on the part of local civil defense officials to assume authority over them. Personnel in such organizations expressed resentment at such earlier attempts and suggested that such attempts had exhibited a greater desire to impose authority than to facilitate planning. In such communities, it was difficult to trace the actual circumstances of these incidents but there is no doubt that there

was a residue of distrust which had emerged over the question of authority in emergency situations.

The earlier primary concern with planning for nuclear situations had an inhibiting effect on disaster planning by the emergence of an attitude which suggested that a nuclear plan was sufficient for all other "smaller" contingencies. This attitude suggested that nuclear planning was "wholistic" since it encompassed the total nation and therefore it would be applicable to any other types of "lesser" disaster agent.

The somewhat distinctive organizational charter of civil defense also created several kinds of difficulty. Most local agencies were seen to have "local" responsibility but civil defense was seen as having national (federal) responsibility on the local level. This was the basis for several points of tension. The attempt by the local community to "move" local civil defense offices in the direction of more inclusive emergency responsibility was often slowed by the insistence of local civil defense directors that their primary responsibility was nuclear preparation. In some cities where political change was occurring, new mayors and councilmen often suggested a more inclusive concern on the part of local civil defense but these suggestions were often met by a reaffirmation of traditional responsibilities. In some instances, local civil defense directors saw the necessity of a more inclusive involvement in disaster planning on the part of their office but they often felt that their desire to become more involved in such activities was precluded by national guidelines for civil defense activities.

There were, of course, a number of other factors which tended to inhibit disaster planning. Much of the earlier planning had been overly detailed and therefore the movement to more inclusive planning seemed to imply a greater level of detail and complexity. Many organizations within the community saw this as being unnecessary and even counterproductive. There was a tendency for organizations to be concerned with planning for their own activities in disaster situations but to be rather reluctant to become involved in more inclusive planning because they saw it leading, not to greater coordination, but to greater complexity.

In addition to the factors previously mentioned, one other important tendency should be indicated. A great deal of early planning tended to center around the roles and activities of particular individuals. In other words, in many organizations, planning was the concern of a particular person within the organization, e.g., John Jones, rather than the concern of a particular position within the organization, e.g., Director of Safety. Because of this tendency, there was very little continuity of planning. When the particular person left the organization, and personnel turnover is frequent in such organizations, the knowledge and skills went with them. At some later date, a new person might be given the same responsibility and would retrace the same steps. Thus, planning became circular rather than continuous.

Factors Facilitating

In addition to the barriers which inhibited disaster planning, there were other factors which played an important part in moving some local communities toward more inclusive planning. Certainly one of the more important factors was the experience with local disasters. In the ten year period of many of the communities which we studied, several had had significant experience with natural disasters. These generally prompted a rethinking about disaster preparation and a more concerted effort on the part of many different emergency organizations. A similar effect was also created on the local community by disasters which gained national visibility. For example, the scope of the Alaskan earthquake and the attention it received did have an effect on those communities which were in earthquake risk areas.

Also during the 1960s there were certain new threats to the community which appeared and which prompted renewed interest in types of emergency planning. More specifically, the emergence of civil disturbances in most large cities presented a set of quite different considerations for most emergency organizations. While most disaster agents, such as the possibilities of nuclear attack or natural disaster agents came from "outside" the community and tended to produce problems which were considered "bad" by prevailing community standards, civil disturbances emerged from latent community conflicts and thus were "internal" problems. Regardless of the considerable differences in the nature of the "agent," civil disturbances produced many of the same effects which resulted from other disaster agents. There were people who were injured. There were people made homeless. There were major problems in the maintenance of community order, since this was at the heart of the conflict. There were major fires. While some traditional emergency organizations were initially reluctant to become involved, the primary burden of community action fell to the major social control agencies within the community, such as the police, and gradually involved other major segments of municipal government. Emergency planning was developed. Community resources were developed. Emergency operating centers came into being. New types of community structure emerged. New patterns of community coordination and conflict resolution were developed. A similar development was seen in student conflict situations. In addition to these forms of collective violence, there were other types of community threats posed by individual acts. In some communities, isolated acts of "political" terrorism and/or of psychopathology produced other types of threats to the community, such as bomb scares. In a few instances, local civil defense offices assumed the responsibility within a community in attempting to deal with these. The net result of the emergence of these "new" types of violence within the community was a renewed interest in certain types of emergency planning and operations with the urban community. Part of this renewed interest did spill over into a more generalized concern for more comprehensive emergency planning. More frequently, however, planning was done for the specific situations without any consideration for the continuities for other emergency situations.

There were other factors which tended to facilitate disaster planning. In some communities, there were new local governmental officials elected to positions where their interest in emergency planning could be implemented. In other communities, there were new administrative appointments in key emergency organizations who accepted as a major element in their programs of change the tasks of improving emergency planning. In these instances, the reasons for the action might be diverse -- the individual may have had experience and/or interest in the area, the "need" for improvement may have been so obvious, a disaster event may have prompted community interest which was used as a springboard for change, etc. For whatever reasons, there were several instances in our data in which individuals in assuming new community roles had acted as a catalyst in initiating or revising emergency planning.

One final factor which facilitated disaster planning was just beginning to make an initial impact at the end of the 1960s and this was what had come to be known as "on-site assistance." This program, initiated by the then Office of Civil Defense, was oriented toward providing extensive "external" assistance in the form of a team of "experts" who would come into the community and act as a stimulant to local emergency planning. The intent of this program was to provide extensive interest and concern on the part of local agencies in thinking out not only their own individual response but how their response would fit in with other involved agencies. In other words, it provided the "occasion" to rethink emergency planning outside of the immediate post-disaster situation. This program was just being initiated and it had been attempted in only a few communities at that time. It did happen that this type of planning innovation had been attempted in one of the communities where we did our research and the more immediate consequences seemed impressive.

Community Estimates of Disaster Probabilities

As we have already indicated, of some importance in facilitating disaster planning are the "risks" to which a particular community may be subject. Certain communities may be particularly "disaster prone" for certain agents. In such communities, there is often a sensitivity to such probabilities reinforced by previous experience in dealing with the actual disaster events. From previous research, however, it is clear that there is no simple one-to-one relationship between the actual probabilities for an event and the degree of awareness about these probabilities within a community. Nor is there any assurance that a high probability for an event will automatically translate itself into extensive emergency planning. The complexities of the various outcomes we wished to examine more closely, so when respondents were interviewed they were asked to fill out a form which asked them to rate the probability of thirty-six different disaster events. These thirty-six different disaster events included almost every possibility ranging from such "natural events" as drought, earthquake, hurricane, tornado, sand dust storm, fog and smog episodes, avalanche, tsunami, volcanic eruption, "technological" disasters, such as chemical contaminations, major gas

or water breaks, water pollution, blackouts, etc. as well as massive accidents, such as ship disasters, plane crashes, massive automobile wrecks, etc. This form was given to the respondent at the beginning of the interview session so as to minimize any bias which might be created by subsequent questions in the interview. Each respondent was asked to rate each of the thirty-six different events in terms of their probability within their own community within the next decade. Rankings ranged from "nearly certain" to "not probable." Overall averages from the twelve different cities are irrelevant since the objective probabilities of the various disaster events would vary considerably among the communities. More important for the purposes here are certain generalizations which can be drawn from observation of data within each community. Some of these generalizations relate to the differences in the perception of threat and to the degree of consensus on certain disaster probabilities.

1. The perception of threat to a community is not directly related to the objective probability of that threat within the community.

In one community, for example, Weather Bureau records suggested that in the previous fifteen years, this area had had the highest damage from tornadoes than any other area in the country. It was an area where tornadoes were not as frequent as in other sections of the country but its population density made it particularly susceptible to extreme damage. Within this community, tornadoes were seen as having very low probability. Within the same community, historical records suggest a considerable risk from earthquakes. In fact, in the early days of settlement, an earthquake had destroyed most of the structures within the area now built up, but few of the members of the current community were aware of this and it was not reflected in planning.

2. In general, the threat produced by "technological" disaster is seen as being low. Community members seemingly are much more sensitive to repetitive natural disasters than to technological disasters. These technological disasters actually may occur much more frequently within the life of the community and therefore take on the character of a "routine" emergency.

3. There is a lack of consensus within the community as to the probabilities of technological disasters as well as certain relatively infrequent natural disasters.

4. Those events which affect masses of people are seen as being more probable than those events which are selective in their effects. Disaster agents, such as massive snowstorms or electrical blackouts, which affect "total" communities are seen as more probable than disaster agents which are more selective or segmental in their impact. Some of the inconsistencies of evaluation within a community emerge from the fact that the probability of certain disaster agents often is judged by the implications that the agent has for a particular organization.

5. Organizational personnel are most sensitive to those disaster agents which have important implications for their own activities. For example, persons in health care institutions are most sensitive to those disaster agents which would be productive of mass casualties and therefore tend to rate these events as more probable. In the same context, individuals in organizations with public works responsibilities are

particularly sensitive to those agents which disrupt the technological capabilities of the community.

6. Personnel in civil defense offices had a high "sensitivity" to a wide range of disaster agents. In general, this is a specific application of the principle which would underlie the previous statement. Personnel in civil defense offices "occupationally" are concerned with a wide range of threats and part of their "responsibility" is to maintain a concern for these threats and to convince others of the possibilities.

The perception of the probabilities of certain disaster agents within a community, of course, will have implications for disaster planning within the community.

7. Planning within the community is more closely related to "subjective" threat than to "objective" threat. Planning within the community tends to follow the concerns of personnel within those organizations involved in planning. For example, planning which primarily involves organizations related to health care tend to center on those disaster events which have the probabilities of high casualties and tend to ignore other probabilities. In addition, certain disaster agents which might have high objective probabilities sometimes are ignored. For example, several communities which are located in high risk earthquake zones and where massive earthquakes have occurred in the past, tend to downplay the potential threat. Historical reconstruction of these past events is difficult to communicate in terms which are meaningful for the present.

8. The increasing awareness of the threats posed by technological disasters is not reflected by an increasing attention being given these events in planning. While there seemed to be an increasing awareness of the increased threat posed by the complexity of technology, very little of this concern can be seen reflected in ongoing community planning.

With these background comments on the history of disaster planning, we will move on in the next chapter to discuss the nature and form of the disaster planning as it existed at the time of the study within the various communities.

CHAPTER III

THE NATURE AND SCOPE OF CURRENT DISASTER PLANNING

In the previous chapter, we have discussed certain trends in disaster planning which occurred during the 1960s. While these trends showed directionality, communities differ as to where they are in relation to the status of their current planning. In fact, it may be more accurate to talk about multiple layers of planning which exist within each community. These multiple layers can perhaps be illustrated by the following figure.

Figure 1

Scope and Extensiveness of Disaster Planning Within the Local Community

		Extensiveness	
		Single Organization	Multiple Organizations
Scope	Single Agent	(I) Specific plan: e.g., police civil disturbance plan	(III) Inclusive plan for specific agent: nuclear civil defense plan
	Multiple Agents	(II) Extended plans: police plans for natural disaster and civil disturbance	(IV) Comprehensive plan: multiple agent and organization

If one observes a specific community, the extent of disaster planning is likely to include elements from at least three of the four categories. Most frequent would be (I) specific organizational planning involving a single agent and a specific organization, such as the civil disturbance plan which might be developed by a police department or a natural disaster plan which was developed by a local Red Cross unit. Many of these organizations, however, have over the years developed a more generalized plan which they feel to be applicable to a wider range of agents (see II). For example, police departments may develop an emergency operations plan which they feel will be applicable to a wide variety of emergencies. Similarly, hospitals, fire departments, and other organizations within the community which deal with emergencies on a somewhat routine basis may develop a more inclusive plan to deal with diverse types of disaster agents.

On occasion, there may have been significant attention given on the part of a variety of community organizations to a specific disaster agent (III). This would be most descriptive of earlier attempts on the part of civil defense offices to develop planning for nuclear attack among a broad range of community organizations. A similar effort took place in many American cities during the 1960s in reference to civil disturbances. A broader range of community organizations became involved in planning in conjunction with other segments within the community. Some of this planning involved agencies e.g., human relations councils, etc., which previously had never been involved in emergency planning. The last category (IV) is best described as comprehensive community planning for emergencies. This type of planning is perhaps still more of an ideal than an actuality in the various communities we studied. On the other hand, we could see evidence of developments in all three of the other categories within the communities we studied.

Perhaps the most accurate analogy which can be made to describe disaster planning in a particular community is one which likens it to geological strata. Every planning effort from the past leaves some trace or residue and some even leave a stratum. Each of these efforts and residues are combined with other more recent planning attempts. The previous planning and the more recent planning seldom are incorporated so that planning is "added on" and the result is a "layering" effect. This layering effect, however, is filled with "fault" lines. These fault lines are created by the differential attention given to certain disaster agents in planning -- the focus of disaster planning -- as well as the differential attention to disaster planning which has been given by various community agencies -- the locus of disaster planning. Each of these dimensions will be discussed further.

The Focus of Disaster Planning

Every community reflects in its history periods in which interest and effort is directed toward one or another disaster agent. Each interest and effort has its own history and impetus. For example, almost every community has a residue left by the interest and effort in nuclear preparation. Stemming from the encouragement of the federal government as well as local concern, communities often have written plans, trained personnel in radiological monitoring, shelter locations designated, warning systems developed, and a variety of other "traces" of this period. In these same communities, there may have been sporadic and recurrent attempts to deal with a particular disaster agent which created special vulnerabilities for the community. Communities along waterways have developed certain types of planning for floods. Communities in coastal areas developed planning for hurricanes or tsunamis. Communities in high risk earthquake belts were concerned about earthquakes. Other areas and communities focused on tornadoes. These concerns result sometimes in written plans, special equipment and a continuous sensitivity to such threats. On the other hand, as we have indicated in the previous

chapter, certain types of "objective" threats to particular communities were often ignored and given little, if any, attention. During the late 1960s, many communities became concerned with the emergence of civil disturbances and often embarked on extensive planning for that type of "emergency." In all of these instances, the planning efforts were directed toward specific agents and specific effects. For the most part, the activities were sometimes justified on the basis that the "current" effort in planning would generalize to all other disaster agents and all other potential situations. This argument was often used in reference to planning for nuclear attack. The argument of "generalizability" was increasingly used when the initial interest in nuclear planning began to wane. In any case, planning within these communities tended to be episodic -- effort focused on a particular situation or a specific agent. Each effort showed little continuity to previous efforts in the sense that it involved a "different" situation and very often it involved a different combination of community elements than had the previous effort.

The Locus of Disaster Planning

Another critical dimension in reference to disaster planning has been differences in the location of the social unit in which planning had taken place. Again the reasons for this are many -- various types of governmental structure, different interest, differential responsibility, etc. At least three major locations of disaster planning can be observed in most communities. These are planning by (1) specific community organizations, (2) clusters of community organizations with similar interests and/or problems, and (3) differing political jurisdictions.

1. Specific community organizations. A most frequent location of disaster planning is, of course, within organizations which have emergency responsibilities within their own organizational charter. For example, hospitals with implicit responsibility for treatment of casualties will develop their own "disaster" plan. (Such planning may, of course, be encouraged by requirements for accreditation.) Police departments may develop their own set of emergency operations. Industries with large work forces may develop plans for "evacuation" of employees and for plant maintenance during an emergency. This type of planning is perhaps most frequent within a community simply because it can be accomplished within the context of the ongoing activity of the organization. Within this context, internal resources can be allocated to planning, participation in the planning process can become one part of the responsibility of the members of the organization and authority would fall within the conventions of other types of organizational activity.

2. Clusters of community organizations. Since planning for disaster involves so many facets of community life, it is not surprising that organizations with like problems or those with similar bases of community authority might become involved in joint planning. Large communities, by their very size, are composed of many organizations with identical functions serving different regions and clientele. For example, a community may have six hospitals, differing in location, support structure and to a certain extent, in emphasis, but all of these hospitals might be involved in

casualty care. Because they anticipate a situation where resources might be shared or transferred in an emergency, it is usual for representatives of these separate but similar organizations to have a common interest in the initiation of planning. In such a context, an inter-hospital plan might be developed.

A similar type of "cluster" planning may involve several different types of organizations, that is, organizations with different functions, who share a common basis of authority. For example, municipal organizations -- such as the police department, the fire department, the public works department and other related city agencies -- may be involved together as a consequence of being a part of a major municipal division such as the safety or service division. In many ways, this locus of planning comes close to "city" planning but it is more delimited in the scope of involvement.

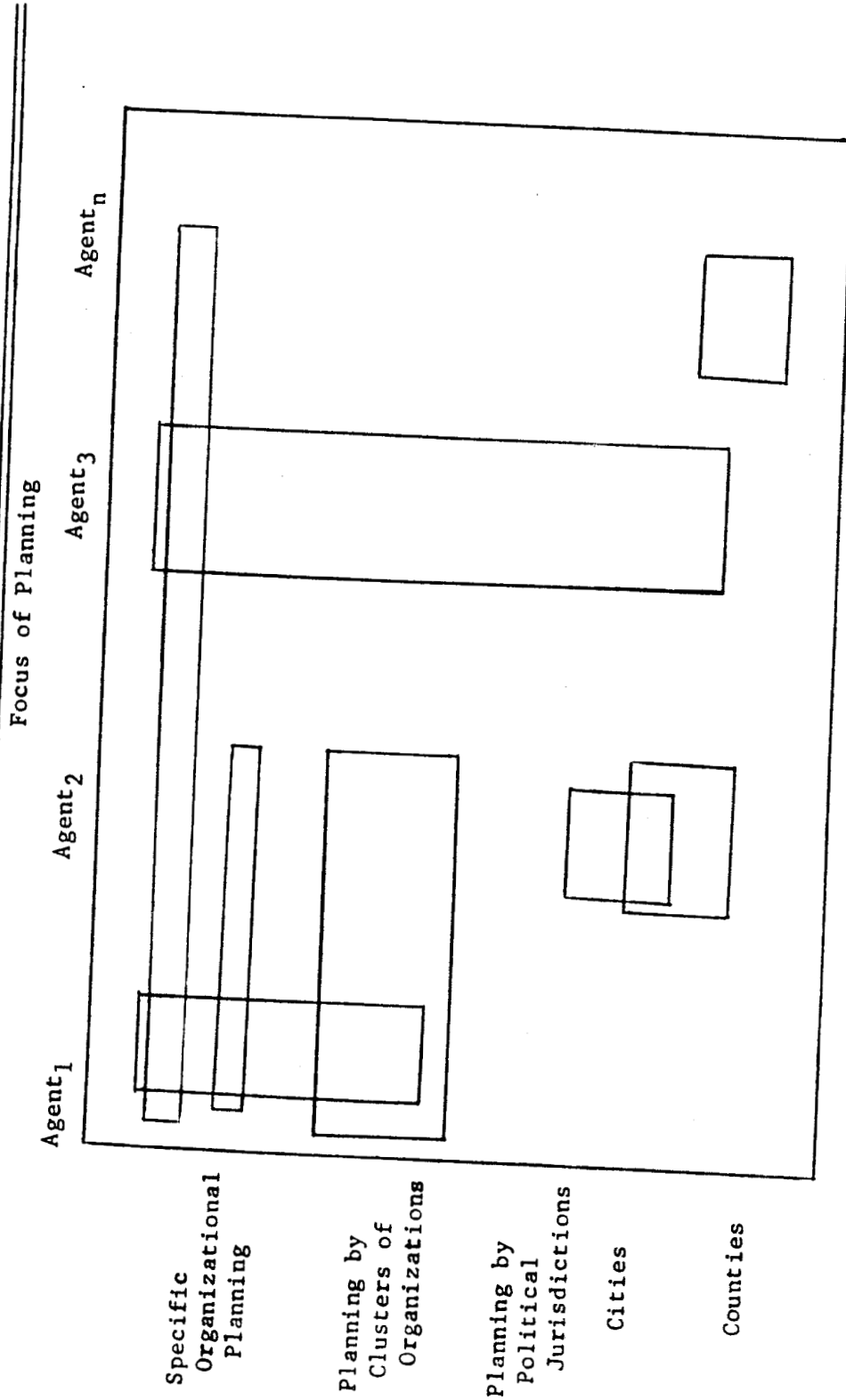
3. Differing political jurisdictions. In American society, the major locus for planning is at lower levels of governmental units. These generally have been centered on administrative units based on geographical considerations, such as counties as well as units based on geographical units with high population density, called cities. On occasion, certain types of disaster planning have been somewhat inclusive and have involved efforts of a variety of local governmental and non-governmental organizations. In addition, in situations where no urban areas predominate, the county is often the logical administrative unit. Too, where urban areas are so predominant, city-county planning may be one and the same. There are other situations, however, when city planning and county planning may be competitive and overlapping. In certain communities, planning for nuclear attack may have been on a county-wide basis while planning for specific natural disaster agents may have been on a city-wide basis.

In any case, the locus of disaster planning within a particular community will reflect considerable variability. Some organizations may be well advanced in their own planning on specific disaster agents, while ignoring others. Some clusters of organizations will have developed interorganizational networks for a specific set of potential disaster problems. Some political jurisdictions may have developed planning which has been inclusive of a variety of governmental and non-governmental organizations. Other political jurisdictions may have provided overlapping planning. Some of these planning efforts will have been recent while others will exist in the memories of a few people and in the dead files of a larger number of organizations. Some organizations will be preoccupied with one type of planning and not interested in another. The results of these differentials in the focus and locus of disaster planning might be illustrated in Figure 2.

Disaster Tasks and Organizational Responsibility

Disaster agents create a series of problems in the community. These problems, in turn, become the responsibility of organizations. Organizational responsibility, however, is very complex since it has

Figure 2
 Patterns of Disaster Planning in the American Urban Community



several dimensions. The first dimension is simply the question as to whether an organization recognizes a particular task as being a part of its own emergency responsibility. In other words, does the organization accept certain responsibilities as a part of its organizational charter? The second dimension is whether the rest of the organizations that might be involved in the emergency social system define responsibility in the same way as the organization that accepts the task. In other words, do organizations in the emergency network have some sort of consensus on how task responsibility within the community will be allocated? A third dimension, perhaps only an extension of the second, is that if the community has developed types of disaster planning, how are organizational responsibilities defined in them? It may be, of course, that there are several types of disaster plans in effect and then the question becomes: How much consistency and agreement can one find among the various plans in their allocations of organizational responsibilities?

These dimensions of organizational responsibility by their very complexity have the potentiality of contradiction and confusion. The "ideal" situation, of course, would be one where a particular community organization accepts certain responsibilities, and where the other community organizations in the emergency network agree on the location of that responsibility in the claiming organization and that this location is acknowledged and defined in the overall disaster planning which is existent within the community. While the preceding would represent the "ideal" situation, it is obvious that there would be many situations in actuality which would be less than ideal. Some tasks may be "claimed" by several different organizations. Each of these organizations would be considering the task as constituting their own major responsibility. Some tasks may be "claimed" by no organization and therefore are considered no one's responsibility. Other organizations within the emergency network may consider certain tasks as not the appropriate domain of those organizations which claim them. Other organizations may "give" responsibility to organizations that do not accept it. Too, disaster plans may assign responsibility to organizations which do not accept it. Many of the possible complications are indicated, in Figure 3, by using just one potential task -- search and rescue.

In this study we tried to examine some of these dimensions. In our interviewing, we attempted to ascertain what organizational officials defined as the disaster responsibilities for their own organization. In addition, we asked each of our respondents for their perceptions of the organizations which had major responsibility for a series of tasks which could be anticipated in disaster events. This list included the following: pre-disaster overall community emergency planning, warning, stockpiling emergency supplies and equipment, search and rescue, evacuation, compiling lists of missing persons, care of the dead, maintenance of community order, housing victims, providing food and clothing to victims, establishing a pass system, overall coordination of disaster response, ambulance service, disaster simulation or drill as well as other functions. When aggregated, these responses provide an indication of the degree of consensus within a community as to where task responsibility is perceived to be located. In addition, in all of the communities

studied, copies of disaster plans were obtained and subsequently examined to see whether their assignment of tasks was consistent among the various plans as well as the degree of consistency among the plans, the organizational consensus and the organizational self-definition.

The pattern varied in each of the communities studied. Each community had its own unique disaster planning history as well as a slightly different mosaic of community organizations. However, there were certain commonalities which would seem to indicate certain persistent problems. First, certain problematic aspects of the assignment and acceptance of disaster tasks will be discussed, then certain observations concerning the role of community organizations will be made, and finally certain comments will be made about the relationship of existing disaster planning to the actual perceptions of organizational responsibility.

Figure 3

Possible Patterns of Acceptance and Assignment of Search and Rescue Among Community Organizations

Acceptance of Responsibility by Organization	Definition of Responsibility by Other Organizations		Assignment by Disaster Plan(s)	
	Plan1	Plan2	Plan1	Plan2
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	No
Yes	Partial	Yes	Yes	
Yes	No	Yes	Yes	
No	No	No	No	
No	Yes	Yes	Yes	
No	No	No	Yes	
No	No	No	No	

Disaster Tasks

Within the communities, there seemed to be considerable consensus on the responsibility of organizations to become involved in the range of operational disaster tasks. In part because of previous experience and the creation of mutual expectations, many of the disaster tasks were seen by particular organizations as constituting their responsibility in emergency situations. In addition, their claims were reinforced by other community organizations. Given this relatively high degree of consensus, it is useful to concentrate on the more problematic situations where there is less consensus.

1. There is less consensus on responsibility for pre-disaster planning and for community coordination. There are several reasons for greater lack of agreement here. Certainly, planning and coordination are more "abstract" than many of the operational tasks. In addition, they are tasks which are by their very nature "interorganizational." that is, they cut across organizations and they involve multiple organizations. Therefore, they require more than the determination of committing the resources of one organization. By the very nature of the tasks, they involve the commitment of some resources of many different community organizations as well as the necessity to develop a "new" structure of authority within the community.

2. There is less consensus on tasks of great complexity, such as warning and evacuation. Disaster tasks may differ in their degree of complexity and therefore more complex tasks may necessitate the involvement of "parts" of several different organizations. For example, compiling a list of missing persons could be handled with a clerical staff of some organization supplemented by information sources from within the community. A task, such as evacuation, however, will involve complex systems of communication, extensive transportation resources, the identification of alternative shelter locations as well as other resources necessary to move people. This task, by its very complexity, would involve the resources of several different community organizations. This multiple involvement, by its very complexity, presents a relatively unclear picture to the various organizations. Many of the organizations know they will be involved but they are not certain how they will become involved and what other organizations they will be working with. Such tasks often are handled in actual emergency situations by the emergence of an ad hoc "task group."

3. There is less consensus on tasks which have little continuity to pre-disaster experience. Certain tasks have greater continuity to pre-disaster experience than do others. For example, the fires which might be created by disaster impact are little different than the fires which fire departments cope with every day. On the other hand, there are certain tasks which do not have any pre-disaster parallel, such as the compilation of a list of missing persons. In addition, there are certain tasks, which are anticipated to be so qualitatively different, that pre-disaster ways of handling the tasks are seen as not being applicable. An example of this would be the care of the dead. In these situations where there is real or apparent discontinuity between pre-disaster experience and the anticipated actions necessary subsequent to a disaster event, there tends to be an unclear definition of organizational responsibility.

Organizational Responsibility

Within the communities, there was considerable consensus on the organizational responsibilities of key operational groups. In most communities, such organizations as police departments, fire departments, public works departments, Red Cross, etc., tended to be seen as key organizations with definite organizational responsibility in disaster situations.

1. There was less consensus, however, on other organizations. Not all municipal agencies were seen to play important disaster roles. For example, the role of public health offices and of public welfare offices and even the roles of the city manager and mayor seemingly exhibited considerable unclarity. Too, while the role of the Red Cross was seen as being central, the role of the Salvation Army was unclear. In addition, the mass media was seldom seen as being an integral part of the warning system and seemingly representatives of the mass media were seldom involved in any disaster planning. In many communities where the focus of planning was on the municipal level, there was considerable unclarity as to the role of county organizations, in particular, the sheriff's office.

2. There was less consensus on the role of medical organizations. Much of the planning within the communities tended to be bifurcated into "medical" and "non-medical" spheres of responsibility. While there might be a high degree of consensus of organizational responsibility within the medical area, this was generally not known in the non-medical sphere. In turn, the operational planning within the non-medical organizations was not clear in the medical areas. In general, medical planning was not well integrated into overall disaster planning within the community.

3. There was confusion as to the role of civil defense. In many task areas, there was the assumption that civil defense would somehow be involved but respondents were not clear as to how it was involved. For example, many persons assumed that civil defense would be involved in pre-disaster planning but were not sure in what ways it was involved. It was clear that the respondents in the various emergency organizations did not visualize their own activity as a part of "civil defense" effort. They saw civil defense as a separate organizational entity. Their view of civil defense was to treat it almost as an organization whose major function was to cope with "left-over" problems, that is, problems which were not the responsibility of any other organization. Therefore, if it were not clear that other organizations were involved in pre-disaster planning, then this must be a function of civil defense.

Disaster Plans

o Within the communities, disaster plans were seldom an accurate reflection of the current expectations for organizational involvement and responsibility. The fact that disaster plans often were not an accurate reflection of present reality was due to the following factors:

1. Disaster plans make task assignments to organizations which are not aware of them.
2. Disaster plans often do not anticipate the involvement of certain organizations which claim certain emergency responsibilities as a part of their everyday charter.
3. Multiple disaster plans oriented toward different disaster agents may specify quite divergent task assignments.
4. Disaster plans which are not updated may involve task assignments to organizational structures which no longer exist in the community.
5. Disaster plans, once written, are seldom used as a point of reference for current considerations in emergency planning.

Perhaps one illustration might cover most of the preceding points. In one community, during the 1960s, two different plans were developed. One focused on nuclear disasters and was the product of civil defense efforts and the other focused on a wide range of agents -- natural disaster, wartime situations, widespread fires, and civil disturbances, etc. One of the plans focused on the city government while the other centered around the county government. In this community, when the perception of disaster responsibilities attributed to and accepted by community organizations was determined, it was checked against the assignment of these tasks in the two different disaster plans. In the "natural disaster plan," over 60 percent of the current expectations were not specified by plan. In the civil defense disaster plan, over 90 percent of the current expectations were not specified. Looking for organizational assignments which were consistent in both plans and accepted by the current organizational network revealed there was only about two percent agreement and consistency.

The overall problems concerning the nature and form of disaster planning can perhaps best be illustrated with references drawn from our field notes on planning within another community.

Responsibility for pre-disaster planning was seen clearly as a responsibility of local civil defense. On specific tasks, however, there were elements of confusion. In reference to warning, the city disaster plan states that the local civil defense, the police department, the fire department and the sheriff's department all become involved. Local civil defense officials suggested that this is a responsibility shared by themselves, the police and fire departments, the public works department and make no mention of the sheriff's department.

The local plan designates local civil defense and the public health department as responsible for stockpiling of emergency supplies and equipment, but apparently the public health department is not aware of this.

While there are no discrepancies in the assignment of search and rescue efforts among police department, fire department and sheriff's department, there is one general discrepancy concerning evacuation. While these same three organizations are considered by local civil defense personnel to be responsible and the organizations themselves accept this responsibility, evacuation is not even mentioned in the city disaster plan.

The organization designated by civil defense as being responsible for compiling a list of missing persons are the police and fire departments. This location is not designated in the city plan nor are these two organizations aware that this is their responsibility.

The local plan specifies that the police, fire and sheriff's departments are to assist in the maintenance of community order -- beyond these three, local civil defense officials and the mayor's office and the public works department. Neither the fire nor the public works department see their responsibilities in this area. On the other hand, the sheriff's department sees this as a major responsibility but is not mentioned by local civil defense.

The city disaster plan makes no specific reference to the involvement of the Red Cross except in an appendix dealing with a cooperative agreement. There is no mention to the involvement of the Salvation Army but there is an informal agreement between the Red Cross and the Salvation Army for cooperative effort in housing and providing food and clothing.

The division of labor on the establishment of a pass system involves some discrepancies. Local civil defense sees itself as coordinator of such a system while the local plan gives this responsibility to the police department. The sheriff's office also claims a major responsibility in this area.

Overall coordination of the local effort seems to be clearly understood by all of the community organizations as the responsibility of the mayor's office and the local civil defense agency. The local plan, however, delegates major medical responsibility to a medical coordinating group which seems to be nonexistent. On the other hand, no mention is made of the local medical society which at the time of the interviewing seems to have been the closest approximation of a medical coordinating entity.

Most organizations within the community were aware of their task responsibilities assigned to them by the city plan or attributed to them by the local civil defense office. The major source of discrepancy appears to come from the failure to acknowledge the roles anticipated by the sheriff's office and the local medical society. While these organizations were mentioned frequently by others, local civil defense respondents did not mention them. The sheriff, in turn, claimed to run the entire disaster operation with little assistance from anyone else. In addition, many of the respondents, when asked about the responsibility for organizational tasks, answered "I guess we do that." In addition, almost never did a respondent consult a planning document to check organizational responsibility but answered from their own experience, knowledge, or guess.

CHAPTER IV

THE ROLE OF LOCAL CIVIL DEFENSE

In general, one might expect that civil defense offices on the local level would exhibit a high degree of uniformity in program and in structure. While there are certain uniformities and continuities among communities, considerable variability does exist. Some local offices are involved in a wide range of tasks, involved in disaster planning, civil disturbances, bomb threats, general safety activity, etc., while others are involved in housekeeping activities related to earlier nuclear planning. Some operate on a minimum permanent staff, often with high turnover while others have a larger number of permanent personnel, extensive volunteers, impressive physical resources and equipment. Some of the offices and their personnel are isolated both physically and socially from the rest of the community, while others act as integral parts of on-going planning which is well integrated into municipal structure. Some have close and continuing ties with state and local offices while others have minimal and occasional contacts. Because of this diversity, it is difficult to isolate an average or model case which might be "typical." Nor is it easy to clearly identify the factors which have resulted in certain local offices becoming very salient in one community and other offices being ignored and overlooked in another community. We will try to isolate some of the patterns which lead to greater saliency among local civil defense offices later but certain dimensions of local civil defense operations will be discussed first. First, certain comments will be made as to ways in which local civil defense is viewed by other community members. Next, certain dimensions on which local civil defense offices seem to vary will be discussed. Some local offices are well institutionalized in the communities in which they exist while others play a marginal and somewhat outsider role. After these dimensions are identified, an analysis is made to attempt to determine what factors have lead to these differential outcomes. Two model patterns are isolated -- a traditional one and an adaptive one. Finally, illustrations are provided for the adaptive pattern. Initially, however, we will start with certain materials which provide some indication as to how local civil defense is seen within the community.

How Local Civil Defense is Viewed in the Local Community

Perhaps one place to start a discussion of local civil defense is to focus on how the agency is seen by community members. This view can be obtained from several vantage points: 1) the general public, 2) community influentials and 3) officials in emerging organizations.

1. The General Public. There is indication that civil defense activities have very low visibility within most American communities. In a study done in 1968, on a nationwide sample, 63 percent claimed that they knew nothing about the activities of their local civil defense office.

This scope of activity and responsibility, however, is also unclear to officials in most other community organizations. In fact, there are three very pervasive types of ambiguity: (a) ambiguity of interest, (b) ambiguity of structure and (c) ambiguity of function.

a. Ambiguity of Interest. It is obvious that the primary association which is made with local civil defense is that of major interest in nuclear emergencies. The extension of their interest and involvement into other emergency situations is perhaps not seen as strange, since there are obvious continuities, but the particular role that the local agency would play in other types of emergency is not clear to others within the community.

b. Ambiguity of Structure. Regardless of the emphasis placed on "local" civil defense, the local office is seen as being a local representation of a national program. The identification with a national program and the partial support provided from outside the community tends to reduce strong identification with the program. There seems to be a difference between local emergency actions as might arise from flooding, tornadoes, hurricanes, etc., and the concern with an agent which is external to the community and national in scope. Most other emergency organizations, such as the police, fire departments and hospitals, are concerned with more immediate day-to-day activities which result more readily in the generation of community pride and identification. Thus, the local civil defense office is seen as somehow being apart from these collective community efforts.

c. Ambiguity of Function. Because of the continuity of day-to-day operations of most other community emergency organizations, each develops within the community certain images concerning their usual tasks. In other words, it is not difficult to project the utility of the daily activities of the police department into a more widespread emergency situation. The local civil defense office, however, is perceived with a great deal of ambiguity, in part because its potential involvement in the future has no clear day-to-day reference. The images which are usual, center around its role in emergency planning and as a focus for carrying out tasks which are not the clear responsibility of other more traditional emergency organizations. For example, when organizational officials were asked what organization had responsibility for disaster planning, the usual response, in the absence of definite knowledge, was "I guess civil defense does." In addition, the local civil defense office was usually seen as the operating agency for tasks that were not clearly the responsibility of other organizations. For example, when asked whose responsibility it was to compile a list of missing persons, a common response was "I guess civil defense does." This suggests that there is a duality in the perceptions of officials in other community organizations that local civil defense was involved both in planning and in operations, particularly with tasks which were not clearly seen as the responsibility of any other existing organization.

There are certain common themes which run through the ways in which local civil defense is viewed by others. In general, it has very low saliency with the community. Its major association is with the possibility of nuclear threat and thus it is tied to national, rather than to strictly local, concerns. By this connection, it is seen as having something to do with other emergencies and it is often assumed

Nineteen percent who had heard something about the office associated it directly with tasks which were associated with nuclear emergencies. Another ten percent claimed that they had heard about civil defense earlier but that they had heard nothing in the past two years. For example, they may have been familiar with shelter programs in the early 1960s, but were not certain about the status of such programs or other programs of the agency in recent years. In this same survey, only one out of 25 made any association between local civil defense and their involvement in natural disasters.¹ This suggests then that local civil defense tends to be relatively unknown. When it is known, it is associated exclusively with nuclear situations and only infrequently is it associated with involvement in other emergency situations.

2. Community Influentials. There has been a tradition of research within the social sciences which attempts to identify community influentials. Such influentials are those who have greater degrees of social power and are able to have significant inputs into the decision-making processes within a community. One study in 1964, investigated certain questions concerning the attitudes and knowledge of community influentials concerning civil defense in a relatively small community in the Midwest.² In general, these community influentials had a number of positive attitudes toward civil defense. Their attitudes, however, were similar to those of a random sample of the community -- e.g., non-influentials. Even though they had somewhat positive attitudes, these influentials lacked knowledge about the civil defense program within the county. Approximately 70 percent of the community influentials did not know if the county (in which the community was located) had a civil defense director. In addition, the community influentials were even less likely than others to have knowledge of a continuous civil defense program within the county. Of course, the degree of knowledge among community influentials would vary over time and among communities. The time period and the location of the study quoted previously suggest that in this instance, local civil defense had an exclusive nuclear orientation in an area which was relatively disaster free. Therefore, in such situations the lack of knowledge among community influentials may not be so surprising.

3. Organizational Officials. Perhaps more important is the perception of civil defense which is held by those organizational officials whose own responsibility bring them in close contact with local civil defense. For these perceptions we draw on our own interviews among organizational officials in the twelve cities.

One major factor of importance in the perception of the local civil defense agency is the degree of confusion and unclarity among officials in other segments of the community. On one dimension, however, there is consistency about the confusion. This dimension is the consistency with which local civil defense is viewed as a separate entity. In many normative documents and statements, civil defense is intended to encompass "civil government in emergency." This means that every organization working in the emergency context is technically a part of civil defense. Thus, the police and fire departments are in their emergency roles "civil defense." On the other hand, in actual practice the local civil defense office (agency, director, etc.) is seen as having a scope of activity and responsibility all its own and somewhat separate from other community organizations.

to take care of emergency tasks which are not the responsibility of other more familiar community organizations.

Variation in the Ways Local Civil Defense is Institutionalized

How local civil defense is viewed within the local community is only one part of the total picture. More important are the ways in which the local office actually "behaves" in the local community. There are a number of dimensions on which they can be compared. Five key dimensions are suggested here on which there is considerable variation within communities. (1) There is considerable variation in the scope of the hazards with which local offices are concerned. (2) There is also considerable variations in the scope of the tasks that each has assumed in the local community. (3) There is considerable variation in the types of relationships the local office has with other organizations within the community. These we call horizontal relationships here. (4) There is considerable variation in the types of relationships which the local office has with organizations and units outside the local community. These we call vertical relationships. (5) Finally, there is considerable variation in the resource base which each local office has. Each of these dimensions will be further elaborated individually and then the various relationships among the dimensions will be discussed.

Scope of Hazards.

Local civil defense offices vary considerably in the scope of the hazards with which they are concerned. Some are completely focused on planning and the associated tasks dealing with nuclear attack. Others are primarily concerned with natural disaster hazards. Many are concerned with both but the degree of emphasis on one or the other will vary. A smaller number show a range of concern with a wide range of hazards -- man-made, nuclear, natural disaster, etc.

Scope of Tasks.

Local civil defense offices also vary considerably in the scope of tasks they assume. Some may be involved solely in the maintenance of a shelter system. Others may focus activity around the development and maintenance of an Emergency Operating Center. Others may be heavily involved in the organization and maintenance of volunteer groups. Some may be concerned with extensive public education and/or publications' campaigns. Others may be involved in the development and implementation of disaster drills. Some might be involved in microfilming valuable municipal records to be stored in a secure place. Others may be involved in natural disaster planning. The variations and the combinations of such diverse activity is almost endless.

Horizontal Relationships.

Local civil defense offices also vary in the degree to which they have ties with other units within the community. Some have close ties with the mayor's office while some are completely isolated from it. Some have close ties with police and fire departments while some others have ties with a much more extensive number of municipal agencies, the mass media, the medical sector of the community and the voluntary organizations within the community. Some are integral parts of the complex network of emergency planning within the community while others are on the periphery, seemingly not relevant to current community problems.

Vertical Relationships.

Local civil defense offices vary in the nature and types of relationships they have with organizations outside the community. These include contacts they have with nearby communities. A part of this would be contacts which urban communities have with their dependent suburban communities. In addition, local offices have different types of relationships with state, regional and national levels of organization within civil defense. Some have very close contact, utilizing advice and assistance which is provided by these units. Others ignore these sources of assistance, sometimes because of apathy and other times because they feel that the type of assistance and the orientation of their higher levels of organization are irrelevant to local priorities. Again some local organizations have extensive contact with state and national agencies, utilizing them as resources. Some have extensive contact with nearby army and national guard units, while others ignore them.

Resource Base.

There are considerable variations in the nature and size of the resource base. Most of the local offices we studied had relatively small staffs -- frequently a director, deputy director and one or two clerical staff, although one had over 40 persons. Some of the offices had extensive volunteer programs in effect. In addition, they had office space and equipment. Many of them were stocking a number of shelters. Some owned extensive surplus equipment. All maintained what was designated as an EOC but the nature and type of facilities varied. There was a very close relationship between staff size and budget. Most of the budget was expended on staff salaries and very little was available for the initiation of new programs. Over time, almost all of the local offices had experienced a decline in funding.

These five dimensions and some of the possible variations are displayed in Figure 4. It would be possible to develop a profile of each of the local offices along these dimensions, and it is likely that each of the local offices would reveal a distinctive profile. Individual variations, however, are less interesting than looking for typical patterns which would characterize several local offices which might on the surface seem quite different. In general, two different patterns seem to emerge.

One pattern centers around the variations in the left hand columns of Figure 4 which we will designate as the traditional pattern. A second pattern, not as frequent, but still discernable, would center around the variations in the right hand side of Figure 4. This we would designate as the adaptive pattern. In terms of our actual cases, slightly more of our communities would fit the traditional patterns but we did have several communities that clearly exemplified the adaptive pattern. The inter-relationships within each of these patterns will be discussed below. The discussion will exaggerate and sharpen the distinctions more so than they are seen in reality.

Traditional Pattern.

The traditional pattern reveals a primary concern on the part of the local office for preparation for nuclear hazards. Thus, the scope of the activities of the local office is centered around traditional tasks, which were usually focused around maintaining equipment, supplies, and programs which were acquired or initiated much earlier in time. These offices, in their concern for nuclear hazards, maintain rather close vertical ties with state and national Civil Defense. These ties are a continual source of legitimation for the continuation of their emphasis. Within the community, these offices maintain their relationships with police and fire departments and have minimum contact with other organizations. The office's relationship with the mayor's and city manager's office is formal and legal. Perhaps with the construction of an EOC some distance out of town and because of the continuing problem of space needs for growing municipal services, the local office has been moved out to the EOC. Since the budget for local civil defense efforts has been declining over a number of years, resources for the initiation of new programs are not available and the primary emphasis is on the maintenance of programs, facilities and equipment.

Adaptive Pattern.

By contrast, some local offices evidence a quite different pattern among the various dimensions. These offices are likely to be concerned with a number of different hazards. Some of them have had a long history of concern for local disasters and added concern for nuclear attack on top of this long standing interest. Others initially organized around nuclear concerns, have gradually given attention to a wider range of hazards. In certain instances, these local offices initiated action and planning on the part of other community agencies. In other instances, the involvement of the local office in planning efforts for these other hazards resulted in these offices assuming new tasks for the community. The reason for these new "assignments" often was that the local office had maintained extensive relationships with a wide range of local organizations. Their acceptance of new tasks continued these relationships and often extended them.

Somewhat ironically, many of the adaptive offices would best be characterized as having a "local" rather than a "national" orientation. Several local directors suggested that, over the years, they have resisted

the exclusive nuclear orientation on the part of the National Office of Civil Defense. While they often used them as a resource in the nuclear preparations area, much of their effort on the local level was directed toward concerns for other hazards. Some dislike the term and concept of "civil defense" and preferred and used such terms as emergency planning or safety to describe what they were doing on the local level. A few local officials also expressed some criticism of state level civil defense programs. Since our communities were large urban communities, some felt that the state programs had become preoccupied with rural communities and consequently were of little value in assistance to the larger communities. In any case, the underlying theme for these offices was that they considered themselves to be an integral part of the local community and its planning efforts. This meant focusing attention on those types of hazards and tasks which were relevant to that community. In these communities, the resource base of the local office tended to be somewhat stabilized and in the exceptional case, actually increasing.

These two patterns exemplify different variations on these dimensions. As stated here, they present a somewhat static picture. The dynamics of the situations, however, may be uncovered if one attempts to understand the processes which resulted in these patterns.

Two Different Patterns of Organizational Evolution

In examining the history of the various local civil defense offices, it is possible to identify two quite different paths of development. These two different paths have led to two quite different results. We will first discuss the traditional stance and its pattern of development before identifying the other adaptive response.

The traditional path of development has taken a direction somewhat as follows. In the early 1950s, most of the communities were in the process of developing plans for the possibilities of nuclear attack. At that time, the threat was salient and meaningful to most communities, particularly large urban ones. Planning in these directions was initiated in most communities and local civil defense offices were established with local civil defense directors. While there was considerable variation in the way in which these roles were defined within the community, we can still discern in several of our communities a residue of hostility toward the local office for what is perceived by other community organizations as its attempt to "take over." The initial planning for nuclear attack did, at the time, involve extensive contact with a wide variety of community organizations. Initial civil defense programs were initiated -- volunteer programs, warning systems, communications equipment, etc.

In the early 1960s, increasing emphasis was placed on shelters. The shelter operation, however, did not involve many other elements in the

Figure 4

Variations in the Degree of Institutionalization of Local Civil Defense

Dimensions	Variations
Scope of Hazards	Single Agent _____ Multiple Agent Nuclear _____ Natural Disaster _____ All hazards Narrow _____ Broad Maintenance _____ Initiating
Scope of Tasks	Isolated _____ Extensive Police, Fire _____ Municipal agencies _____ Voluntary, Medical, Other governmental jurisdictions National Orientation _____ Local Orientation
Horizontal Relationships	Declining _____ Stable _____ Increasing
Vertical Relationships	Declining _____ Stable _____ Increasing
Resource Base	Declining _____ Stable _____ Increasing

community. It involved primarily the identification of shelter space in public buildings and stockpiling them. It also attempted to encourage the construction of shelters in private homes. In large part, the emphasis was on survival of populations as an end product rather than organizing a unified response to threat on the part of other community organizations. At that time, some of the other program emphases inadvertently isolated the local civil defense office from on-going community activity. The building of Emergency Operations Centers, designed to withstand blast, were usually put in locations away from the normal contacts of most other community organizations. The development and the presentation of EOC facilities often underscored, perhaps unintentionally, the single nuclear purpose, centralized "control" and command post approach to the ultimate "crisis." Increasingly, the local civil defense became isolated from other community organizations, many of whom were becoming involved in planning for other types of community emergencies. The isolation was often illustrated in our communities by instances when a local community would be affected by natural disaster, and in the subsequent impetus toward planning for future threats from the same disaster agent, local civil defense would be ignored as the locus of local planning within the community. With its exclusive nuclear image, it did not appear to have the interest or skills necessary to accomplish these tasks. When other sources of disaster planning emerged, local civil defense offices often responded by reaffirming its nuclear stance and therefore justifying its exclusion on the basis that they had more important planning to do.

This lack of involvement often led to increasing isolation and to increased specialization. The attention of some local offices tended increasingly to be given to the maintenance of existing programs. With decreasing importance within the local community, decreases in funding usually followed. With cuts in funding, attention was often focused on the simple facts of organizational survival. One common technique for organizational survival was to decrease visibility and activity within the community. "Excessive" visibility might mean that the office could become a target for further budget cuts in the future. The traditional path then has followed a singleness of mission and has resulted in increasing isolation and decreasing relevance from other types of emergency planning within the community. Within many communities, the decline in relevance and the increasing importance of other types of emergency planning has increasingly isolated the local civil defense office. As a consequence, this isolation has led to a primary preoccupation with organizational survival in which salience within the community is sacrificed.

At the other extreme, there is a quite different path of development which we have identified as "adaptive." This path usually had the same starting point as the traditional path: The initial establishment of local civil defense offices and the initial impetus to community wide planning for the nuclear threat. In a few communities, particularly those in disaster prone areas, they may have already initiated disaster planning so the emergence of a new threat and the new availability of federal funds provided the opportunity to extend their already existing planning effort.

In other communities, natural disaster threats provided the opportunity to extend their initial planning for nuclear situations so they moved more in the direction of a more comprehensive planning effort. This move kept them in closer contact with other organizations within the community concerned with emergency planning and tended to inhibit the segmentalization of effort. In turn, local civil defense began to be seen as having some generalized abilities, interests and capabilities which represented a planning resource within the community. It became something that had day-to-day utility and not something that might have some use at some increasingly distant future. By possessing skills and capabilities that had more immediate utility, such offices became integral parts of the municipal structure. When additional planning tasks emerged, the local office was thought of as a logical place to facilitate the process. Again this adaptive response was cumulative; providing a useful community function facilitated the local civil defense office's integration into the municipal structure. Once well integrated, it became the locus of other activities which increased its utility within the municipal structure. Part of this process can be seen from the following description of an actual case study.

The local civil defense office carries out the usual functions and tasks suggested by the national office, but the director defines the role of the local office as being involved with safety and defense. He is involved in local teaching efforts in first aid, fire safety, and disaster drills in schools. He also teaches in the police and fire academy for new recruits such topics as bomb threats, civil disturbances, natural disaster preparation, etc. The local office has taken over the municipal answering service at night. This allowed some saving in manpower when CD can dispatch emergency street crews, park service police, etc. The local office also assists the hospitals in disaster planning and drills. The local offices have also played a part in the development of plans for bomb threats and civil disturbances. More recently, the office added an environmental specialist to deal with toxic chemicals in the air, in particular on city work sites.

The EOC is used for meetings of various groups involved in planning. The office operates with an advisory committee composed of the Police Chief, Fire Chief, City Engineer, Health Director, Superintendent of the Water Department and City Manager. The office has periodic contact with a variety of other municipal agencies, voluntary organizations and with other close-by jurisdictions.

The office from the beginning has had a natural disaster focus in which other types of safety and planning concerns have gradually become a part. The office began with a staff of two and has increased to 16 in a period of ten years.

A Concluding Note of the Saliency of the Local Civil Defense Office

In looking back at the inter-relationships among the various dimensions, it is possible to identify which of the dimensions were more important in the development of saliency for civil defense within the local community. Three of the dimensions are linked together very closely. One of the dimensions seems almost tangential and the other seems to be more of an outcome and consequence of the other three.

If local civil defense is salient within a community, it is likely to be involved in a number of tasks. The number of tasks is, in part, dependent on the scope of the hazards with which the local office is involved. With a greater range of hazards of concern to the local office, there are more possible tasks with which to be involved. The greater the scope of the tasks with which the local office is involved, the more likely the local office is to be involved in extensive horizontal relationships. The more involved in extensive relationships, the more salient it is within the community. This suggests an ordering somewhat as follows:

Multiple Hazard-→-Broad Scope-→-Extensive Horizontal-→-High
Concern of Tasks Relationships Saliency

Vertical relationships seem, in many ways, somewhat irrelevant to the outcome. This is perhaps because certain types of strong vertical ties may imply a restriction on local interests. On the other hand, strong vertical ties which are extensive might reflect a broad scope of tasks which is normative within the community.

High saliency of the local office within the community generally leads to a stable or increasing resource base. On the other hand, there were offices, in our sample, that had a large resource base and very low saliency. Our interviewing occurred at a particular point in the history of these local organizations. If a longitudinal study were done on these same communities, it is likely that now a closer relationship between saliency and the extensiveness of the resource base might be found. There is likely to be a time lag in the relationship between these two dimensions. Some offices might be able to maintain an extensive resource base while their saliency declines. Some offices may be increasing their saliency but their resource base might not reflect it for several years. Among our cases, those local offices which had the highest saliency were those which had stabilized or increased their resource base.

In effect, then, the key dimension which explains differences in saliency among local civil defense offices is the office's involvement in a broader range of tasks. This more extensive involvement usually emerges from a concern with a greater range of hazards-- in other words, in moving away from an exclusive nuclear orientation. This broader concern results in more extensive relationships among the various community organizations which in turn leads to a greater saliency for the local office within the community.

FOOTNOTES

1. Pearl B. Cohen, The Public's Perception of Local Civilian Defense Efforts and Facilities (March 1970) AD 710302, p. 3.
2. Joe W. Bohlen, Community Power Structure and Civil Defense (Ames, Iowa: Iowa State University, 1964) AD 451013.

CHAPTER V

THE LEGITIMACY OF LOCAL CIVIL DEFENSE

The functioning of any organization at any time is dependent upon the larger context of the other organizations within the community. While every organization has some degree of autonomy, organizations are interdependent. Interdependence is most obvious in emergency situations, but that manifestation is simply an extension of interdependence which is evident on a day-to-day basis. The nature of this pre-disaster interdependence is affected by many different factors among the various organizations. Here we wish to focus on one organization -- local civil defense -- and to look at the implications of organizational legitimacy on civil defense's relationship with other community organizations. It is first necessary to discuss the idea of organizational legitimacy in general terms and then to discuss it in terms of its application to local civil defense.

Organizational Legitimacy

Organizations differ in the degree of legitimacy they are accorded within the community. Legitimacy is not to be equated with legality. Legitimacy implies acceptance by the community of an organization being a valid institutional form for carrying out a particular course of action. When issues of jurisdiction, power and authority are raised in the course of relationships among organizations, these issues are usually resolved on the basis of the legitimacy of particular organizations.

Legitimacy can be seen as an organizational resource much in the same way that the status of an organization can be. Both are like currency. Status and legitimacy are given to organizations which in turn allows the organization to make claims on those who have provided the status and legitimacy. If an organization acquires legitimacy, the sources of that legitimacy will give the organization more than they receive from it in any direct, intangible way. Most organizations are involved with quid pro quo exchanges with its environment, paying for what it receives and receiving that for which it pays. An organization which has legitimacy, however, can act to acquire resources without direct compensation. Thus, it has "credit" with the various elements in its environment and this provides a greater capacity to act and also greater stability.

Special Problems Involved in the Legitimacy of Local Civil Defense

Local civil defense has certain characteristics which create a number of problems in the acquisition of legitimacy. Unlike the business corporation, a governmental organization has only an indirect economic relationship with its "publics." The potential recipient of the services which might be rendered is usually not the immediate funder so it is

often difficult to discern a clear linkage between governmental expenditures and the benefits which might come from activities of an organization. Some public organizations, of course, can show a close tie. On the municipal level, a public works department or a sanitation department seldom face problems of legitimacy since they deal with activities which are basic to public well-being and operate visibly on a day-to-day basis.

By contrast, local civil defense offices are usually more concerned with planning, which presents no daily operational visibility, for a future event, which is seen by others to have varying degrees of probability in the future. If the probability of the future threat is perceived as declining and if the planning effort is seen as having decreased importance, legitimacy may be withdrawn from an organization. Some of the various factors which have undercut organizational legitimacy of the local civil defense office will be elaborated below.

It seems clear that in the initial stages, local civil defense offices developed considerable legitimacy. Coming out of World War II, the need for civilian preparation was still obvious as there was the immediate continuity to wartime experience. There was the new nuclear environment which provided a visible and "real" threat. Over time, however, some of these conditions eroded and changing political, economic and social conditions tended to undercut the initial plausibility structure on which the local office was built.

Factors Undercutting Legitimacy

1. Changes in Organizational Purpose. The initial goals of an organization are usually closely linked with the reasons behind its creation. The initial assumptions, however, have changed. Some of the change has come about because of changes in assumptions about the ways in which nuclear technology developed. Other changes have come about because of political and administrative assumptions about the responsibilities of the local office.

With passage of the Civil Defense Act in 1950, the United States undertook the development of programs designed to carry out non-military defense functions which would minimize, repair and recover from damage resulting from attack. Within this overall mission, there have been several different emphases. Until 1955, civil defense was engaged primarily in the process of creating civil defense organization at all levels of government and developing a program for it. Public Law 81-920 limited the Federal role in civil defense to that of an advisory and coordinating service and gave operational responsibility to the States and local governments. (In 1958, however, amendments to the Federal Civil Defense Act made civil defense a joint responsibility of Federal and State/local governments.) By 1955, increasing stockpiles of nuclear weapons and improved delivery systems prompted a reappraisal of civil defense concepts. The decreased warning time available with new delivery systems caused a greater reliance on the development of fallout shelters. The fallout shelter program received a boost in the 1960s, subsequent to the Cuban missile crises.

In the discussions prior to 1950, it was assumed that the activities of the Federal government in the natural disaster areas would be transferred to the civil defense agency, and they were for a period of time.

On the basis of those assumptions, many states and municipalities passed laws which located State and local natural disaster preparation in the civil defense. Federal responsibility for this function was transferred, however, in 1961, to the Office of Emergency Preparedness, and more recently to the Federal Disaster Assistance Administration. The consequence of these actions has meant that local and State civil defense programs have often emphasized an approach which included community preparedness for all types of hazards, including natural disasters, while at the Federal level, nuclear concerns and a heavy emphasis on the development of a fallout shelter system were the major preoccupations.

To a certain degree then, changes in perception of nuclear risks undermined the initial legitimacy of the local office while political and administrative factors have inhibited it in its ability to redirect itself toward broader and clearer goals dealing with emergency planning. Such a shift would allow the local office to relegitimate its existence. As it stands, the initial basis of legitimation has been considerably undercut while the mandate for new direction is ambiguous.

2. Perceived Need for Services. There is no doubt that if threats are not actualized, it becomes increasingly difficult to maintain legitimacy. Most emergency organizations which attain a high degree of legitimacy deal with more "regular" emergencies. Fire departments may not respond to fires on a daily basis but fires are predictable enough to provide a solid basis for their legitimation within the community. If an organization is highly specialized around a specific threat, it finds its legitimacy reduced if the event does not happen or if the probability of the event is seen as decreasing. In areas of the country which are disaster prone, it is much easier to develop legitimacy for a local civil defense office.

3. Decline in Resources. In our sample cities, almost every city had experienced an overall decline in resources. If an organization has declining legitimacy, this makes it vulnerable to decreases in resources which in turn undercuts its legitimacy which increases its future vulnerability. This decline may have little to do with actual or potential performance of the office. Any municipally-based organization has to compete with other organizations for a delimited budget. What might have been seen as a justifiable expenditure at one time may later be seen as latent resources for other segments of community activity which are more viable at that time.

4. Poor Performance. In certain situations, a poor performance of a local civil defense office may lead to a decrease in legitimacy. The evaluation of poor performance may come about in several different situations. In particular it could occur if a local office is seen as failing to perform in certain areas which are subsequently assumed by other community organizations. Also it could occur in situations where the emergency organizations are seen to have performed effectively and visibly while the local office is seen to have played a minor tangential role. In both of these situations, the utility of the local office is dramatically undercut since the perennial justification for the existence of the office was its utility in emergency situations. Its ineffectiveness in such emergency situations then undercuts the primary justification for its existence.

5. Changing Salience of the Military Model. The initial model which was used for civil defense, both at the local and national levels, was the military model. In that initial context, the use of that model seemed relevant and justified since civil defense was the other side of the coin to military defense. Therefore, strategies, "doctrine" and terminologies borrowed from the military realm were appropriated and introduced. Notions of "command" and "control" centers and of command and control functions were introduced. Notions about taking "over" from civilian governments and putting government on a different basis in emergency situations were elaborated. Not only did the initial context seem to justify this but also the initial staffing of various civil defense agencies encouraged this transfer. If the military discourse was relevant, those who had had experience in this discourse would be logical candidates for implementing these quasi-military plans.

Whether these initial assumptions were valid will not be assessed here but, over time, the declining salience of the military model to civilian life also affected the status of the local civil defense office. Its application to nuclear situations often conveyed a sense of unreality and inappropriateness to other types of emergencies. The military might be seen as a potential resource for the local community in emergency situations but the traditional forms of municipal government, and perhaps even its traditional inefficiency, was seen as being appropriate to the range of problems including emergencies. While the military context of local civil defense may have provided common ground with police and fire departments, the two municipal agencies which followed most closely the military model, it also erected barriers to many of the voluntary organizations within the community and also seemed contradictory to the traditional political bases of power within the community. Some local civil defense offices insisted on the military model as a device to increase their legitimacy within the community. In doing so, they often only emphasized its inappropriateness.

Characteristics of Local Offices Which Have Legitimacy

Perhaps it is important here to make certain distinctions concerning legitimacy of the local civil defense office. Of major concern here is to attempt to focus on the local office as having a broad base of legitimacy for emergency planning. It seems clear that, because of its previous history, the local office is seen as having or perhaps, more accurately, having had legitimacy in relation to nuclear planning. In this area, legitimacy is less problematic than questions of current capabilities and competence. On the other hand, in looking at local offices which have developed legitimacy which extends beyond nuclear planning, the following characteristics seem to be important. These factors can be discussed in terms of four major areas: 1) Environmental Factors 2) Structural Factors 3) Relationship Factors and 4) Output Factors.

1. Environmental Factors. A legitimate organization is much easier to build in an environment which poses a persistent threat. There are locations where seasonal threats exist which present repetitive problems.

By their very nature, however, certain types of emergencies are very infrequent and, with low levels of probability, it becomes a "luxury" to maintain an organization for such specialized and infrequent usage. In such situations, there is a tendency to overemphasize the threat as a technique to maintain some degree of legitimacy. This technique may be effective in the short run but its impact erodes over time.

Another alternative is to extend the concern over a wide range of emergencies. Within this wider range of emergencies, there may be considerable differences in the scope of involvement as well as the nature of emergency but the emphasis is placed on the utility of the service that might be rendered rather than the uniformity of the agent. Some local civil defense offices have found that becoming involved in a wider scope of emergencies provided them with actual experience in the performance of certain tasks as well as certain visibility of their services.

2. Structural Factors. Two major factors can properly be described as structural. First is the location of the civil defense office within local government. Second is the choice of the local governmental unit. On both of these factors, there are probably as many actual arrangements as there are local offices.

In various normative prescriptions, the local civil defense director was seen as being a chief of staff for recognized municipal officials, particularly the mayor. This "location" was predicated on the idea that mayors were the locus of traditional political power and therefore would have to be utilized as symbols of continuity in emergencies. This was based on the idea that the social and political organization of a community tends to disintegrate during emergency situations. This location, however, often removed the civil defense office from the day-to-day activity of the rest of municipal government and, in addition, in emergencies, the role of the mayor was often ambiguous. The actual operations within a community in an emergency are handled by the traditional structure, a structure in which the local director is often not well integrated prior to the emergency. Thus, some communities have, over time, developed patterns which better integrate the local civil defense office into the on-going activities of municipal government. This restructuring, of course, is facilitated if the office has day-to-day functions and if the command-post orientation of some emergency operations centers has not moved the civil defense operations out of the sight of other municipal activities. The major point here is that the local office acquires greater legitimacy if it is integrated into the regular day-to-day activities and into the on-going structure of the local governmental unit.

The second point concerns the location of office within the governmental structure. Here a dilemma is posed. On the basis of certain types of logic, it is best to plan for a larger geographical unit since emergencies seldom respect political boundaries. This is particularly true if the planning view which becomes normative is a national one. If an accounting is made of existing units, the establishment of county units provides a more "secure" feeling of the extensiveness of coverage. On the other hand, from our cases, it seems that the establishment of civil defense at the county level comes at a high cost since this location will make it much more difficult to establish relationships with organizations in urban areas which, in effect, become the viable units

of "civil government in emergency." The dilemma is to choose between the larger geographical units and the viable community. Sometimes these coincide but from our experience, the choice should be with the viable community if legitimacy is to be achieved.

3. Relational Factors. One important factor in acquiring legitimacy for local civil defense is the extensiveness and the quality of their relationships with other organizations. Local offices reveal considerable variations along these lines. A few are isolated even within the structure of local government. Many more have close ties primarily with the traditional emergency organizations such as with police and fire departments. Others have extensive contacts throughout other municipal agencies. A few have extensive contact with health and welfare organizations which are often outside the municipal structure. One can argue that the more extensive the relations inside and outside the local government structure, the more legitimacy is provided to the local office. This is almost by definition since by its very nature a community-wide emergency is one which will involve a wide range of organizations. The involvement of these organizations would be facilitated if pre-disaster contact and relationships had been established. The fact that a wide range of organizations do become involved is an indication of legitimacy attributed to the local office.

4. Output Factors. Of course, a major factor in developing legitimacy for local civil defense rests on the question of the "products" of the office and how useful they are to other organizations. Planning and coordination frequently are presented as claims to be imposed on other organizations rather than resources which will be of assistance to other organizations. Two potential products, planning and coordination, which might come from local civil defense are intangibles and therefore difficult to apprehend. In addition, it is obvious from discussions of officials in other community organizations that they have felt that planning efforts on the part of local civil defense offices often were perceived as a potential resource.

The same could be said about coordination as a potential resource. Efforts to coordinate the activities and resources of a variety of community organizations which might become involved in emergencies require a high degree of legitimacy for those involved in the coordination. The very act of entering a coordinated relationship involves some loss of organizational autonomy, so that the locus of the coordination should have a high degree of legitimacy within the community. Thus, many organizations have seen attempts at coordination as a potential loss of autonomy by their organization to a structure of coordination which lacked legitimacy. While these outcomes may have been usual, in some communities local civil defense was seen as a potential resource in the realm of planning and coordination.

Local civil defense offices often provide other outputs for the community. Most notable has been the development of EOC's (Emergency Operations Centers). Most useful have been the types of EOC's which provide a location for the collection of information about disaster impact as well as being a repository of knowledge about existing community resources. As a by-product of this focus of information and knowledge, such EOC's often become the center of coordination for emergency operations. On the other hand, some EOC's are neither visible nor useful to a community when primary emphasis has been given exclusively to "command post functions" and simply a center for communications equipment.

Seemingly the most useful output in developing legitimacy has been the involvement of local civil defense offices in the on-going day-to-day activities of the municipal government. This may involve assuming a role in dealing with various aspects of daily emergency services such as fuel shortages, power failures, major transportation accidents, etc., within municipal government, beyond police and fire department involvement. It may involve being ready and being defined as able to handle some new emergency task, such as dealing with bomb threats or with new environmental threats. In effect, the local office must continue to demonstrate its usefulness to the community on a day-to-day basis and not rest on its potential usefulness at some distant future point.

CHAPTER VI

THE ROLE OF THE LOCAL CIVIL DEFENSE DIRECTOR

There are greater variations as to how the role of the local civil defense director is defined within communities. In a number of communities the local director is someone designated with this responsibility who has other administrative responsibilities, perhaps a fire chief, a member of the police department or an employee in the safety department. This may be the typical pattern in most small communities. Our sample, however, was composed of large cities where the circumstances dictated a full-time position and the available resources were sufficient to allow this. Even within this more restricted universe, there was considerable variation in how the role was defined and also in how various directors behave in relation to these definitions. Three sources of this variation will be discussed here. First, there seem to be two different major role conceptions which exist within the communities. This difference affects the selection process for those who fill the role and also structures, in large part, what the director will be able to do. Second, there is considerable variation in the definition of the scope of the tasks with which the local director is to be involved. Third, there are considerable differences in the styles in which the directors actually carry out their tasks. Each of these three dimensions will be discussed further.

Major Role Conceptions

Within the cities we studied, there seems to be two distinctive patterns which defined the role of the local civil defense director. These patterns are somewhat self-perpetuating, since they define the types of individuals who should fill the position and also define the types of activity and the types of involvement which are expected of him. The two patterns are to be described as (1) professional and (2) political.

The professional pattern is usually characterized by recruitment which aims at the selection of a person who has had relevant experience in other organizations related to emergencies. One source for recruitment generally is from within the municipal government, perhaps from the fire or police department or from the service wing -- public works or engineering. A second source is from persons with extensive military experience. The nature of the military experience seemingly is considered as being somewhat irrelevant. In other words, it is generally assumed that having served in the military in almost any capacity serves as a sufficient basis for emergency planning.

The particular source of recruitment has further consequences for the activities of the director. In general, those recruited from within the municipal structure continue to have their major contacts as well as major impact within those organizations with which they have had previous contact. In addition, those with military background seemingly have more extensive contact with military-related organizations. On the other hand, this basis of recruitment and experience seemingly precludes extensive integration with the political aspect of municipal government.

The second type, the political, also seems to be composed of two variants but, in both cases, closely tied to the political structure of the community. The local civil defense director's position becomes one which is considered to be a part of political patronage within the community. The selection process in filling the position generally emphasizes political factors but this does not mean that the person who fills the position lacks any other qualifications. It is often the case that the person chosen does have some of the experience labeled "professional" in the other pattern. The other variant is that the local civil defense directorship has certain uses as a political stepping stone for other political offices, particularly for mayor. Sometimes it is seen as a location by which mayors can groom candidates who might succeed them. The office can provide visibility and the grooming process can be justified by the existing definition of the civil defense director as being, administratively, an integral part of the municipal government. Even without the tacit support of the mayor, the office is sometimes used as a location from which to build a future political base. The scope of contacts which are necessary, provide the opportunity for using the contacts for other than planning purposes and the public relations skills useful for the job can be used for other results.

This recruitment pattern and the political definition of the role often results in the local office being well-integrated into the top political structure of the government but sometimes this integration does not result in more effective planning for emergencies. In addition, there is always the possibility that the political direction of the office might move in ways so that it would be excluded, especially if other municipal leaders saw it being used to develop an independent power base.

Orientation

Even within these two major role conceptions, there is considerable variation as to the scope of the tasks which are seen to be the responsibility of the position. The various communities would fall along a continuum between:

Exclusive	Concern for
Concern for	All-hazards
Nuclear Planning	Planning

No community could be accurately placed at either end of the continuum but most clustered around the middle. There were differences. No community or local director was willing to place emphasis exclusively on nuclear attack. The closest approximation to this emphasis came from a few who argued that, while the concern of the office should be with a more extensive list of disaster agents, the primary focus of planning should be with nuclear agents which would be the most extensive threat. With preparation at this level, other types of threats would be "covered." The predominant pattern within the various communities in defining the role was one which saw the role as being related to a wide range of

emergency tasks. Because of the historical association with nuclear attack, this dimension was the one on which there was the greatest agreement. On the other hand, the association with other types of emergency tasks was less clear. In these other areas, other organizations, such as police departments or hospital federations, had taken the lead in initiating planning and had continued their initiative. In these situations, the local civil defense director was expected to be involved, but how and in what ways tended to be unclear. Local directors also expressed this ambiguity.

In a few of our cities, the task orientation of the director moved very closely toward an all-hazards orientation. In such situations, there was a tendency for the local director to have minimal ties with state and national levels of civil defense, except as these levels might be of local assistance. In other words, there was a predominant concern with the local community and its needs and unless the concerns of extra-local agencies furthered this local orientation, they tended to be ignored. In these situations, there was a pattern of mutual reinforcement for extending the range of concerns. If the local director had a broad task orientation, he often sought to be of assistance in a wide variety of situations. On the other hand, knowing that the local director had an extensive orientation, other community organizations would seek his help and assistance in an increasingly broad range of tasks.

Behavioral Style

In addition to the ways in which the role of local director is defined within a community, there are also variations in the ways in which local directors behave. There are certain characteristic ways in which this behavior is directed, however. In large part, the behavior is conditioned by the dominant role conceptions which exist within the community and also by the prevailing task orientation. A particular local director may emphasize more than one of these styles at any one time or may shift over time. In effect, these styles represent varying approaches or models of the conceptions of the tasks with which he is involved.

- a. Maintenance Model. The emphasis here is on maintaining resources which have been developed over time, such as facilities, supplies and budget. This requires relatively low visibility within the community and therefore, developing new and innovative programs may risk what has already been accomplished.
- b. The Military Model. In this, the emphasis is on the necessity for military organization to cope with emergencies. The implicit assumption is that the day-to-day civilian community is incapable of meeting an emergency so that some types of civilian-military stance is necessary for such potential emergencies. The emphasis is often given to developing operational tasks for this possibility. This model is often preoccupied with developing "command" facilities and strategies.
- c. The Disaster Expert Model. The emphasis here is on a particular type of expert resource within the community. Sometimes, this expertise centers around radiological measures, knowledge of blast effects and other nuclear effects. At other times, the expertise centers around the

planning process. In a world increasingly characterized by specialization, it is not unusual for a community to need such skills, just as it would utilize legal, medical and engineering skills.

d. The Administrative Staff Model. The emphasis here is on organizational skills rather than expert knowledge. The local director acts as a staff resource to the mayor in the organization of emergency services. The director acts as a mediator and link between the mayor and traditional emergency organizations.

e. The Derived Political Power Model. The emphasis is on the necessity for coordination in emergency planning but the motivation for emergency planning is derived from the "imposition" of the mayor's authority which is channeled through the local civil defense director. The local director is the agent of the mayor.

f. The Interpersonal Broker Model. The emphasis here is on contacts and informal relationships among personnel in various emergency organizations so that the friendship network which is developed can be utilized in emergency operations.

g. The Abstract Planner Role. The emphasis here is on the development of planning based on a knowledge of various contingencies that might affect the community. The model emphasizes a consideration of abstract considerations but with little actual involvement on the part of the organizations that might become involved in actual operations.

h. The Community Educator Model. The emphasis here is on overcoming community apathy toward planning. The form of the attempt to overcome the apathy may take several directions -- the utilization of the mass media, the introduction of materials in the public education system, the seeking out of key groups to receive information, etc. The basic idea behind this model is that the primary barrier to effective planning is the lack of understanding on the part of citizen groups. With increased understanding, more effective planning would be easy to implement.

i. The Disaster Simulation Model. The emphasis here is on the rehearsal of disaster plans. In part, this is a reaction against the abstractness of much disaster planning. The attempt is to enlist various segments in the community to engage in simulated disasters so that plans can be tested and problems can be identified.

Many local directors use a variety of behavioral styles. There are some, however, who develop one style, feel comfortable with it and perpetuate it. In these instances, the local civil defense office is seen as narrow and over-specialized.

Concluding Thoughts

In a discussion of different aspects of the local director/coordinator role, the question emerges as to which of the various dimensions are more effective. Effectiveness is an extremely difficult criterion to measure. In terms of the major role conceptions, we observed effective local directors in our sample who had a professional orientation and others who had a political orientation. Evidently, both paths can lead to effectiveness. In one situation, both patterns were evident in the same office. The director was politically oriented but he was supplemented by a professional as a deputy director. Both of these men were valued within the community for their different skills.

It does seem clear that the more effective directors had a task orientation which moved toward a concern for all-hazards planning. Many of them did not evidence this completely in their programming but they were open to making the office useful in a variety of situations. In reference to differences among the varieties of behavioral styles, there seems to be no clear choices, except clearly the maintenance model is a defensive reaction. Possibly the most effective repertoire centers around those styles which focus on becoming a part of the life and programming of the various agencies in the community, both municipal and private, which would become the elements in an effective emergency response.

CHAPTER VII

THE FUTURE ROLE OF LOCAL CIVIL DEFENSE IN DISASTER PLANNING

Taking the current status of the involvement of local defense offices in disaster planning and projecting it into the future, certain patterns become apparent. There are certain to be some continuing problems but there may also be opportunities for strengthening its involvement.

Throughout the preceding chapter we have indicated certain problematic aspects and there is little use to recapitulate them here. It is true that the historical association with planning for nuclear attack and the continued reinforcement of this primary task has created, in some communities, the conditions whereby the local civil defense office has been excluded from interest and involvement in other types of emergency activity. In large part, this exclusion came about when other organizations saw what they interpreted as disinterest and went on with planning tasks which they felt were necessary. In several instances, this lack of involvement will be difficult to reverse.

It is perhaps more useful here not to continue to identify problematic aspects but to concentrate on some of the conditions which might lead to a more effective involvement by local civil defense in a wider scope of emergency tasks -- while still being able to maintain its capabilities to respond to its original mission.

Perhaps the best overall generalization which can be made concerning the successful involvement of civil defense organizations is that their degree of success is dependent upon their ability to provide the local community with resources which are necessary for emergency activity. These resources can be in the form of the skills and knowledge of personnel, in the form of equipment and facilities, or in the form of planning. Concentration solely on planning will not be sufficient.

The conditions which are most likely to be productive of successful local civil defense involvement are as follows:

1. that local civil defense will develop experience in handling a variety of community disasters. There are two aspects to this. First, the fact of previous involvement, in most instances, indicates the accumulation of experience in the definition of responsibility, the identification of tasks, and the practice of coordination. Second, disaster experience provides the opportunity for other community emergency organizations as well as the general public to see the utility and competence of local civil defense.
2. that municipal government provides a structure which accepts and legitimizes the civil defense function. As we have indicated, local civil defense directors are found in different governmental units and in different "levels of importance" within these structures. This is due to the fact that

there is considerable diversity in municipal administrative forms. For example, some directors are organizationally isolated from the major daily activities of a municipal government. This rather marginal position could perhaps be justified from the viewpoint of efficient municipal administration. A position which has responsibility only for those events which are both problematic and in the future is not as organizationally important for municipal administration as those offices concerned with continuous daily municipal responsibility -- e.g., the maintenance of public order, the collection of garbage, the maintenance of streets, the provision of public utilities, etc. By contrast, if the position of civil defense director is structured so that the person is involved in the daily on-going process of municipal administration, this tends to create a situation in which his function is both appreciated and utilized when emergencies do occur. Attempts to integrate his function into municipal operations become very problematic during an emergency when operational demands are pressing. If this integration has already taken place through previous involvement, then the operational demands can be more easily handled.

3. that the local civil defense director has the ability to generate significant pre-disaster relationships among those organizations which do become involved in emergency activities. In large part, this condition is more easily achieved as an extension of the previous one. If local directors are structurally integrated into municipal administration, they are more likely to develop the contacts which are necessary to develop effective coordination. In certain instances, however, local directors through their long tenure, active involvement, emergency experience, previous community contacts and/or individual abilities are able to develop a network of personalized relationships with persons in other community agencies which serve as a basis for the development of coordination in future emergencies. The development of coordination is perhaps most directly related to the importance given the civil defense position within municipal government but, in certain instances the development of these personal relationships provides a secondary basis upon which coordination can be built.
4. that emergency-relevant resources, such as an Emergency Operations Center, be provided and the knowledge of the availability of these resources is widespread through the community. There are certain resources which are normally not a part of any emergency organization within a community. These resources may be considered to be luxuries in the sense that their infrequent use does not justify their maintenance in terms of the central organizational goals. There are other resources which are not necessary to any one organization but are significant in any type of overall community effort. Local civil defense can provide such resources as a part of the overall community effort. One specific example of relevant resources would be the development of emergency operations centers. EOC's can become the center for coordination of the complex brokerage systems which usually develop in widespread disasters. If

such facilities are made available and are used by communities in actual emergency situations, they generally demonstrate their usefulness. Sometimes, however, these EOC's are seen primarily as locations for technical communications facilities and the space necessary for becoming a logical center of activities is not available. Consequently, they can become the mere location of the technical transfer of information without being utilized to guide and coordinate activity. In any case, the provision of community-relevant resources such as a fully functioning EOC is one of the important ways in which civil defense can increase its legitimacy.

These are some of the major elements which would insure the involvement of local civil defense offices in a range of emergency activities.

APPENDIX A

CASE STUDY: CITY A*

*Case Study A and B were selected for reasons other than their typicality within our sample. Both are somewhat "negative" cases. More "positive" illustrations will be found in The Implementation of Disaster Planning, forthcoming.

CASE STUDY: CITY A*

I. Descriptive Characteristics of City A

In providing general background features of City A, particular general characteristics are related to disaster-relevant features where appropriate. For example, since City A is a port city through which over one million tons of cargo moved in 1970, one would expect that ship disasters present a very real possibility.

City A is one of the larger cities in the United States, with a 1970 population of over 600,000. This is approximately one-half of the population of the county in which it is located. The density of the population is over 2,000 people per square mile. The ethnic composition is mainly white, with small Negro and Mexican-American minorities.

The first major population growth occurred as a result of World War I when a military training facility came to the area. At this time the population was about 40,000. The most rapid growth in City A began during World War II when several large manufacturers located in the city. In fact, until the latter part of the 1960s, aircraft and aero-space production was the mainstay of the economy. Today, aero-space production accounts for over 6 percent of the total employment. The major sectors of the economy are services, government, and trade, each of which accounts for approximately 20 percent of the total employment. These three areas are expanding while manufacturing is on the decline. The government provides over \$400 million in resources through payrolls. The military population is estimated to exceed 100,000. The services and trade segments of the economy are to some extent the result of the tourist industry which is the third largest source of revenue for City A (over 300 million dollars).

Looking at the political structure of City A, we can characterize it as having a weak mayor-council form of government with an appointed administrator. The county it is in has an elected board of supervisors who appoint the county administrator. Other elected positions include sheriff, all judges, district attorney, county clerk, assessor, tax collector, treasurer and recorder. In general, predominant political control for both the city and county is Republican. The political relationship between the county and the city is unknown from the type of data collected. However, it appears that cooperation between the two is somewhat informal since they are distinct and separate political units. To some extent the data reported in part IV with regard to the relationship between the Office of Civil Defense (CD) and the city indicates that CD tends to look to county government for guidance. This, of course, is due in part to legal lines of authority, i.e., CD is organizationally located within one of the agencies of county government.

*In order to insure anonymity, neither City A nor City B is named. Moreover, the statistics and qualitative characteristics used to describe City A and City B have been approximated and generalized.

To round out this description of City A, let us review safety and medical characteristics. City A has over 800 sworn policemen and 200 civilians contributing to police manpower. This amounts to about 1 sworn officer for each 650 persons. Along with this manpower, the police department is equipped with over 100 patrol cars and 100 investigative cars. The fire department manpower is over 600 sworn officers and 10 civilians, or about 1 fireman per 1,000 people. City A has a dozen hospitals with over 3,500 beds. This total bed capacity includes a large military hospital. There are ten ambulance services. Emergency ambulance service can be provided by emergency fire vehicles, but also is provided by several 24-hour private services. The ratio of physicians to community population is a little less than 1 physician for every 1,000 persons. This figure applies to the entire city/county area.

II. Disaster Vulnerability of City A

This discussion is based on scientific and historical information about the probability of occurrence of various disaster agents, and data on organizational perceptions of the probability of the occurrence of various agents. Organizational perceptions will be compared with historical and scientific data.

Historically, there have been few disaster episodes in the City A area. In the last 20 years, minor earthquake disturbances have occurred with little damage. The most disastrous situation seems to be forest fires. There have been a considerable number of small brush fires that have usually been handled by the United States Forest Service. (There is a large amount of forest park land surrounding City A.) From the data in our interviews, it also appears that forest fires are considered the most likely disaster event to occur in this area. As can be seen in Table 1, forest fires ranked first in highest probability, both for the community sample and for the civil defense sample, with the civil defense mean (4.66) slightly higher than the community mean (4.41). The second most probable disaster event according to the community sample is an airplane crash in the community (mean 3.74). As can be seen in Table 1, the city defense sample ranked earthquake as the number two threat (mean 3.83). City A is located in a major damage area on earthquake seismic risk maps; an earthquake with an intensity of VIII or higher on a Modified Mercalli Intensity Scale would cause major damage. It appears then that the high ranking given to earthquake probability by our respondents is in substantial agreement with scientific data concerning earthquake probabilities in this area. Also, considering the large number of small forest fires that have occurred in the last twenty years and a major forest fire in the last five years, we must conclude again that organizational perceptions are in substantial agreement with the historical record of occurrence of forest fires.

Table 1 also presents a contrast between civil defense's perception of probable disaster agents and the community perception of these same agents. The total community sample consisted of 31 respondents from various key organizations in the community, including civil defense respondents. The civil defense rating was based on 6 respondents.

Table 1

RATING OF COMMUNITY DISASTER PROBABILITY *

Agent	Community n=31		Civil Defense n=6		Direction of Difference in Means **
	Rank	Mean	Rank	Mean	
Forest fire	1	4.41	1	4.66	+
Airplane crash	2	3.74	3	3.66	-
Earthquake	3	3.67	2	3.83	+
Major Automobile crash	4	3.64	6	3.16	-
Major Fog episode	5	3.45	7	3.00	-
Drought	6	3.29	5	3.33	+
Ship disaster in harbor or coast	7	3.22	7	3.00	-
Smog episode	7	3.22	5	3.33	+
Major water main break	7	3.22	7	3.00	-
Oil Spill	8	3.12	7	3.00	-
Chemical Contam- ination or spill	9	3.08	4	3.50	+

*The respondents were given 36 events to rate on a scale from 0 to 5 (0 meaning not applicable to my community and 5 representing a nearly certain probability).

**CD Mean - Community Mean indicates difference.

Since the means computed for the community include civil defense respondents, the difference between the civil defense means and community means indicates the difference in perceptions. It should be noted that since the sample is relatively small the direction rather than the actual difference in the means is more significant. With regard to the directions indicated, civil defense ranked five of the top eleven disaster agents higher than did the community, and ranked six lower. Both the civil defense respondents and the community respondents had the same top eleven grouping, but individual agents were ranked differently. From the above two observations, viz., similarity in the top eleven groups and a neutral pattern in mean differences, we can conclude that the civil defense respondents are neither more nor less sensitive to disaster agent probabilities than outside community organizations.

III. History of Disaster Planning in City A

Disaster planning trends in the 1960 to 1970 period were reviewed for the city and county areas. The first general observation is that what disaster planning as did occur in this decade was primarily generated from the civil defense office. However, after 1970 the major community disaster planning appears to be located in a newly formed emergency medical services organization. This will be discussed more fully in parts IV and V. In developing a chronology of disaster planning in the 1960s, the major emphasis must be placed on changes originating from the civil defense office.

In City A the civil defense office is located in the county government structure and as such its jurisdiction includes both City A and the surrounding county. Unlike many other areas of the country, there is not a distinct city civil defense office. Rather, the county office includes all the cities within the county as part of their overall responsibility. This was not always the case. Prior to 1961, there was a separate city civil defense office and a county office. In 1961 a "unified" county-wide civil defense office was formed consisting of thirteen member cities and the county. The major effect of this organizational change in terms of planning has been a more coordinated set of disaster plans. Instead of fourteen disaster plans, one plan was developed which in theory at least is applicable to the entire county.

From the early 1960s to very recently, the primary focus of this civil defense plan was nuclear. As one informant stated, the "heyday of civil defense in City A occurred following the Cuban Missile Crisis in 1961." According to our informants this emphasis on nuclear disaster planning with all the attendant particular programs (radiological monitoring, shelter management, and warning) continued unabated until quite recently. In fact, it is uncertain from our data whether there has actually been any substantial change even recently. Of course, recently there have been CD programs aimed at developing plans for natural and technological disasters in the area. However, the extent of these efforts is unclear from our data. A tentative impression is that these efforts in no way approach those devoted to nuclear disaster planning in the 1960s.

A related subject for examination is the amount of interorganizational capabilities associated with the county-wide plan. From the evidence accumulated it appears that at most there existed limited interorganizational planning. This is suggested in an examination of the most recent significant disaster to occur in the area, a large forest fire in the last five years. Respondents from several relevant organizations declared that a new disaster planning organization was begun after the fire as a response to the apparent lack of coordination in combating the fire. Specific problems were mentioned, including lack of a central point of decision making, i.e., various decision makers were located at different points and did not have the means of communication and therefore sometimes ordered conflicting actions. From this one could imply that the civil defense plan either was not used or, if used, did not provide a method for coordinating decision making. Our data suggest that although the plan was never formally activated, parts of the plan (especially those dealing with fire fighting, public safety, and emergency medical care) were presumed (by CD respondents) to have been helpful. The point remains, however, that whether the plan was actually used or not, there was a lack of maximal coordination of decision making. This coordination is one of the prime responsibilities CD envisions for itself. The respondents from the fire department also reacted in the aftermath of the fire by urging that the fire departments throughout the county formalize specific mutual aid pacts. These basically call for cooperation among the various departments in the county's thirteen cities under certain conditions. After the forest fire, attempts have also been made to furnish the means for communication between fire vehicles and police vehicles in the field. The initiative seems to have come from the police departments. After the fire the hospitals also modified their emergency plans including planning for more communication between hospitals in the area. Yet, this planning did not extend to outside organizations to any great extent. That is, in the later part of the 1960s and in 1970 planning appeared to be quite localized and ex post facto. There was no widespread community planning until 1971 and 1972 when the emergency medical services organization began this task.

The key planning organization in the 1960s was civil defense. Its planning was primarily nuclear oriented with the impetus for this planning primarily provided by the national goals of the Office of Civil Defense, viz., programs such as shelter management, training of volunteers, radiological monitoring, etc. All were motivated by a perceived nuclear threat to the United States. Moreover, the type of planning that existed in the 1960s tended to not adequately emphasize overall community coordination. This impression is tentative, since civil defense fortunately never needed to activate their nuclear disaster plan. Perhaps it is more advisable to say that since it presently appears that civil defense in this area does not effectively provide overall community planning with regard to natural disaster, they may not have provided overall community planning for nuclear disasters in the 1960s. However, we do not have adequate historical data to assess this possibility.

IV. Current Overall Disaster Planning in City A

We shall now turn to an examination of the community organizations involved in disaster planning, what their responsibilities and tasks are, and what consensus there is about the planning. Fourteen disaster tasks are presented along with which organization(s) our informants said were responsible for each task. Where appropriate we shall include the amount of consensus or lack thereof regarding organizational responsibility for certain tasks.

Pre-disaster overall community planning. Over one-half of the informants reported that civil defense was responsible for pre-disaster community planning. However, both the police and the emergency medical services organization were also mentioned. It must be noted that the local civil defense does indeed have a written overall community plan; however, the question is whether this plan is known, how it is thought of by other community organizations and so forth. A key to this is found in the manner in which the informants who picked CD as the responsible organization for pre-planning answered; that is, the extent to which their answers appeared to be simply pro-forma. A tentative impression is that many of these informants had simply assumed CD was the overall community disaster planner and had no actual experience with CD. Much of our interview data supports this impression. For example, several informants stated that although they knew CD was supposed to be an overall community disaster planner, they either did not think that this function had been fulfilled or thought that the plans that did exist were not operational.

Warning. Responsibility for warning was split evenly among CD, the police department, and the county sheriff's department. Of course, each of these organizations saw themselves as the primary warning agency. Most of the informants saw the police or sheriff as the organization operationally responsible except in the case of nuclear warning, in which most informants felt CD had operational responsibility. It is our view that warning would come from either police or sheriff because these two organizations have day-to-day responsibilities in this area and because these two organizations have more sophisticated communications systems than does CD.

Stockpiling emergency supplies and equipment. A large proportion of our informants reported civil defense to be the primary organization responsible for this task. This was usually seen as a pre-disaster activity and several informants mentioned CD's emergency hospital supplies or the resource book which contains lists of material that can be used in a disaster situation (e.g., sand bags, canned food, etc.). Knowledge of the availability of emergency supplies and equipment is one of the goals set by the national CD office, and, as such, does exist at the local level in City A. This is apparently well known to the other community organizations.

Search and rescue. Search and rescue was believed to be the responsibility of the police and sheriff's office. A small number mentioned civil defense. In this area most respondents did not separate

planning responsibility from operational responsibility, so we can perhaps assume that the informants saw the sheriff's office and police department performing both of these functions. Civil defense informants, however, felt that coordination of search and rescue efforts would be handled by them. Informants from community organizations did not share this view. Both the city police department and the county sheriff's office assumed that since they performed this task in normal times, they could continue to do so in disaster times. Neither were aware of any formal specification of this responsibility in CD's disaster plan (though such specification does exist and does assign the local police and sheriff's office this responsibility with coordination to come from CD).

Evacuation. Evacuation responsibilities were split evenly among CD, the police, the sheriff, and the fire department, with the coast guard mentioned occasionally. Most informants again did not separate operational from coordination responsibilities. The CD disaster plan does provide for evacuation, and does assign itself coordination responsibilities with law enforcement agencies and military organizations assigned the operational responsibility. Most informants, however, seldom mentioned CD as a coordinator in this area.

Missing persons. Most informants mentioned the police or sheriff's office as being responsible for compiling lists of missing persons, although a few thought that Red Cross would be responsible for this task. Most, of course, saw this as a post-disaster task and did not see this as necessarily a formal responsibility of the police or sheriff but more as an informal responsibility.

Care of the dead. Almost all of our informants felt that the county coroner would be responsible for this task in a disaster situation, although a few mentioned that CD would coordinate this responsibility. Few thought or knew this responsibility was specified in the CD disaster plan.

Maintenance of community order. Maintaining order was seen as both a pre-disaster and post-disaster responsibility of the city police department and the county sheriff's office. Again CD was not mentioned as a coordinator of this function. In fact our data tend to reveal that the police and sheriff would coordinate this responsibility along with the local city and county elected officials. Most informants thought this to be law enforcement's everyday function and hence their function in disaster.

Housing. Housing disaster victims was thought by almost all informants to be the responsibility of Red Cross. This is perhaps surprising considering the large number of shelters CD has arranged in response to nuclear bombardment. Nevertheless the Red Cross was seen as primarily responsible for coordinating and operationally providing housing to disaster victims. Again few thought this to be specified in the disaster plan; rather this simply appeared to be the business of the Red Cross.

Food and clothing. As with housing, providing food and clothing was almost universally thought to be a responsibility of Red Cross. CD respondents, however, saw themselves as coordinating this activity and also providing some food and clothing.

Pass system. With regard to establishing a pass system during a disaster, CD informants reported that they shared this responsibility along with law enforcement agencies. Law enforcement agencies and most other informants saw the police department and the sheriff's office as the responsible organizations both in terms of planning a pass system and in executing the system. Most informants saw this as a normal function of law enforcement and were not aware of any special CD plans in this area.

Ambulance services. Providing ambulance service was usually not thought to be a special responsibility of any public organization, perhaps because ambulance service is provided by private concerns in the City A area. A few informants, however, assumed that either the police department or fire department would coordinate this activity in a disaster situation.

Disaster simulation and drills. Most assumed CD was responsible for conducting simulations and drills, although few had any actual knowledge of any simulations having taken place under the coordination of CD. In fact, several informants reported that a newly formed organization, the emergency medical services organization, was planning several disaster exercises. The emergency medical services organization was founded in 1968 under state law for the express purpose of coordinating emergency medical services throughout the city and county. It appears from our data that this organization has interpreted emergency medical services broadly; their planning includes not only coordinating hospital emergency rooms, but also planning for adequate emergency transportation, hospital coordination and communication systems that link fire, police, hospitals, and their staff together as well as the mayor and county executive. In other words, it appears that this organization is the most viable disaster planning organization in the area, even though it has not attended to such matters as stockpiling emergency non-medical supplies. The local CD director, in fact, stated that he thought that disaster planning was shifting to this organization. He thought this was perhaps due to the nuclear orientation of CD which (he felt) many thought precluded CD from effectively planning for non-nuclear disasters. He reported that until he insisted, the emergency medical services group had not even included a CD member on its advisory committee. It appears that the few disaster simulations directed by CD were of an in-house nature. That is, few representatives from outside organizations were even included in the actual simulation. The emergency medical services organization, in contrast, has received considerable cooperation from representatives of hospitals, police, fire, Red Cross, sheriff's office, and elected officials in planning for simulations and they have participated in the actual simulation exercises.

Overall coordination of disaster response. The task of overall coordination of disaster response was thought to be the responsibility of elected officials. Since no disaster of any magnitude has occurred

in the City A area we have only the supposition of our informants. This is, of course, true with regard to other task areas previously mentioned. Generally, our informants felt that the mayor and county executive would coordinate a disaster response. CD informants thought otherwise, though even they generally felt that ultimately the elected public officials would coordinate with advice from CD staff. It is our impression that coordination with some advice from CD would probably occur in an actual disaster situation. It is interesting to note that City A has to some extent duplicated the CD emergency operating center by providing an emergency operating center in downtown City A. This center was built partly in response to the forest fire in which criticism was leveled at public officials for failing to coordinate fire departments and police departments. The center became more sophisticated (additional communications equipment added, a procedure for which public officials are to be present, etc.) in response to an impending national political gathering. It is interesting to note that CD seldom participated in the planning sessions for this emergency center and its operations. Rather, the primary planners appeared to have been government officials (primarily the mayor) and police and fire department officials. It was noted several times by informants from various organizations that should a natural disaster ever occur, the city's new emergency operations room would be the primary area where communications and decision making would be coordinated (thus circumventing the CD emergency center).

Considering all of the above tasks, it seems apparent that there is consensus on some tasks with regard to the responsible organization. There appears a considerable amount of consensus that law enforcement will coordinate and operationally execute search and rescue, evacuation, compilation of lists of missing persons, maintenance of community order, establishing a pass system, and provide coordination for emergency ambulance service. There is also consensus that Red Cross will provide housing, food, and clothing for victims and that the coroner will care for the dead. There is less consensus on which organization is the pre-disaster community planner. Emergency medical service, police, and CD all see themselves as community emergency planners. And although CD was more often mentioned in terms of this function, few informants seemed convinced as to CD's effectiveness. Also, few informants had any opportunity to base their answers on past experience since no major disaster had occurred recently. In fact, it appeared that many informants based their answers on what they thought was reasonable rather than what they knew to be the case as specified in some plan. It is our impression that community organizations are not sure as to whether pre-disaster overall community planning exists, let alone whether CD is the organization which actually performs this function. It is also our impression that the emergency medical services group is becoming the more visible planning organization though it has not yet surpassed CD as the most visible disaster planning organization.

V. Position of Civil Defense in the City

The material and non-material resources available to the local civil defense will be examined. We will also assess how important and integrated civil defense is in community disaster planning and what factors affect its influence within the community. We also will attempt to delineate the future influence that the civil defense office will have in disaster planning.

The resources available to CD are varied in terms of both material and non-material assets. There is a total of eight staff members including the director. Of these eight, four are "coordinators," i.e., non-clerical, three are clerical, and there is one director. The staff number was reduced in the last two years as budget cuts required that two coordinators resign. The budget has declined by 15 percent in the last three years. The explanation for this was that there had been a county-wide push to cut the budget as a result of increased expenditures in other areas, i.e., welfare. The CD budget, as is usual elsewhere in the country, is composed of shares computed on the following basis: 50 percent from the federal government, 25 percent from the county, and 25 percent from the cities located in the county. Since the budget cuts, the remaining two coordinators have been assigned additional responsibilities. The four major task areas for which these coordinators are responsible are: shelter management, radiological safety, fiscal planning, and training and personnel recruitment. There is no public information officer, his tasks being assumed jointly by the remaining coordinators. Also, since the budget cuts, less emphasis has been placed on training and shelter inspection.

There are a few volunteers associated with this CD office. There is a ham radio operators group which regularly volunteers communications people and equipment for CD use. There have been trained volunteers, radiological monitors, shelter inspectors, etc.; however, this volunteer training has declined with the decrease in the CD budget. Moreover, it has been a policy of this local CD office to deemphasize volunteer programs since it is felt that such volunteers are really not that useful in a disaster situation.

The building which houses the CD staff adequately provides office space. However, the building is rather old and is located 15 miles from the major population center in the county and as such does present commuting problems for CD staff who frequently visit City A organizations. The location of the CD office, like so many other CD offices in the country, was purposefully chosen to reduce the possibility of destruction should a nuclear strike occur in nearby population centers. The geographic isolation that resulted has certainly presented communications problems with outside organizations in the City A area. In addition to the building housing the staff, there is an Emergency Operations Center (EOC) building which can be used as a communications center for the entire county. The communications network can provide hookups with all hospitals, police department, sheriff's office, state highway patrol, and state division of forestry. However, there was reported concern as to the number of communication lines available. That is, although CD could communicate with all of the above organizations, there did seem

to be concern as to the adequacy of the number of communication channels. The EOC building also provides office space for all CD staff members and county officials in case of disaster. The EOC has, however, never been used for this purpose. In the recent forest fire, CD did not bring decision makers together at the EOC. In fact, one of the criticisms of CD after the fire was that adequate decision-making coordination did not exist. Apparently, the CD communications equipment was utilized; however, communication with local government officials was handicapped since CD was often unable to locate these people.

Perhaps one reason CD did not respond adequately in the forest fire was that most of CD's planning has been oriented to nuclear disaster. The CD staff intimated that natural disaster planning has just begun. The director voiced some ambivalence over whether CD should in fact become involved in natural disaster planning.

CD does have an overall disaster plan with appendixes that specify particular types of plans for specific organizations, e.g., hospitals, utilities, police, fire, and local governments. However, the bulk of this planning is nuclear oriented. There are not plans specifically oriented to large forest fires, earthquakes, floods, etc. Rather when the CD plan does discuss natural disaster planning, it does so in the global sense of all natural disasters. Moreover, again the emphasis in these plans remains on nuclear disasters. Most of the task areas that the CD staff work on reflect this nuclear emphasis. The training programs that have involved volunteers are oriented to shelter management training and radiological monitoring training. Also, the training that CD offers to local police and fire departments is almost solely associated with understanding the nature of radioactive substances and how to deal with them.

As we have noted, an EOC has been set up which houses the emergency communications equipment. Also, procedures have been developed for notifying key government officials in case of a nuclear attack. Incidentally, the EOC is an underground installation in accordance with policies set when a nuclear threat was the major concern. With the reduction of the CD budget, less emphasis has been placed on the public information program. Our CD informants stated that although CD's relationship with the local media was satisfactory, CD was not very successful in "getting its message across to the public." All information released to the media must be filtered through the county public relations office. This is perhaps one reason CD has not been very effective in increasing its public visibility since it must compete with other county departments for the services offered by the county public relations staff. It is obvious, however, that some attempt has been made to improve CD's image. When the CD reorganization occurred in the early 1960s, CD was renamed the Office of Emergency Activities. According to local county government officials, this was an attempt to separate CD from its old nuclear image. This perhaps implies that city and county officials envisioned that CD remains nuclear oriented in planning and retains its nuclear image regardless of this name change.

One of the major factors affecting CD's influence in City A is its structural location in the county government. Although CD is a county-

wide organization having jurisdiction within both the county and city area, it is structurally a department within the county government. It must seek budgetary allowances from the county board of supervisors and the county executive. These elected officials must rule on CD's budget and general policy orientation. In addition, the direct supervision of CD administratively originates from the deputy county executive. This has been a recent change. Prior to 1967, the civil defense director was organizationally under the county executive. This is but another indication of CD's declining influence.

Since CD is located within county government, it has less than maximal access to City A's government. CD informants said that contact with the City A mayor and chief administrator is infrequent. Moreover, it is perhaps indicative of CD's influence with city officials that City A has recently completed its own EOC. This operations center is to serve as the principal communications and decision making center in emergency times (according to the police, fire, and governmental informants), regardless of whether the emergency is a natural disaster or civil disturbance. The CD does make frequent contact with City A's police and fire departments. This is usually in the form of some kind of training exercises, e.g., training in the rehandling of radioactive materials or educational exercises, e.g., simply acquainting police and fire departments with CD's disaster plan. However, police and fire department informants did not consider CD a coordinator of police and fire activities during or prior to a disaster situation. In fact, the police department especially and the fire department to a lesser degree usually thought of themselves as coordinators of activities in disaster or emergency situations. The other key planning organization, the emergency medical group, is not influenced by CD's disaster plans. In fact, as we stated earlier in this discussion, the CD director was not even asked to join its advisory committee. Only after repeated requests by the CD director to several different members of the committee over several months was he asked to join the committee as an advisor. Moreover, the emergency medical services group has organized disaster simulations and developed emergency plans with little advice from CD staff members. Several informants reported that CD was not brought into the emergency medical services planning for two reasons: the nuclear orientation of CD and a lack of confidence in the director's and the staff's competence. Several informants repeated a specific disenchantment with the CD director, particularly regarding his personality characteristics. At any rate, it appears that the CD director and staff are not highly regarded as natural disaster planners.

It seems apparent from the above discussion that CD is gradually becoming isolated in terms of community influence in natural disaster or emergency planning. To some extent, CD recognizes this. Several CD informants speculated that the emergency medical services was gradually assuming more responsibility in emergency planning and natural disaster planning. The director of CD thought that CD's salvation could only occur if a nuclear threat became important again.

CD's insistence on maintaining nuclear-oriented goals has resulted in its isolation within the community. There seems to have been some choice involved in maintaining the nuclear emphasis. Although we do

not have satisfactory data on the early 1960 to 1965 history of CD in City A, it superficially appears that there was local governmental motivation to change CD's emphasis to include non-nuclear emergencies (note the name change of the organization). Yet, for whatever reason, the shift was not made.

However, CD does not have adequate resources to launch a major revision of its program. The limited number of personnel probably does not allow CD to continue a nuclear planning program (at least in its present form) while at the same time launching a new program in research, training, and education oriented to natural disaster planning. Even if these resources were available, the identification of CD as a county (not a city) organization makes its integration with city-oriented organizations (such as the emergency medical services group) difficult. It was suggested by several CD informants that its own survival could perhaps occur if it became more closely associated with emergency medical services since this organization had viable organizational connections with the most significant organizations in the city. (The board of the group consists of top level representatives from the hospitals, police and fire departments, mayor's office, county executive's office, and others.) It seems likely, however, that CD will simply be in charge of one area of disaster planning, viz., nuclear, and as such its planning will be fed into the more viably organized emergency medical group. At least this appears to be the present tendency.

The new EOC located in the city also threatens CD's future. This more sophisticated center with specified procedure for gathering all the key decision makers in the city within one large room certainly may result in the studied non-use of CD's EOC. Moreover, the planning for this operations center was done by police, fire, and city government representatives with little advice from CD.

In conclusion, we can perhaps speculate on the chief factors associated with CD's isolation in disaster planning. The list of factors should certainly include:

1. Its separation from City A policy makers due to its location in county government;
2. Its nuclear emphasis;
3. The emergence of a state supported organization which has coopted much of its efficacy as a disaster planning agency;
4. The emphasis within the city to coordinate all emergency planning, perhaps as a result of the lack of coordination in the forest fire disaster and the impetus provided by the "threat" connected with the possible arrival of a large political gathering.

There are certainly other factors, one probably being the lack of any large-scale natural disasters in the area for the last twenty to thirty years and the lack of any disaster threats. The exception to this last statement is, of course, the forest fire. However, this threat of large-scale disaster primarily provided an impetus for more mutual-aid fire department agreements and more police and fire cross-communications equipment, as well as providing the impetus for a city EOC. The fire did not seem to provide any impetus for a large-scale reordering of CD's priorities. If anything, the fire has resulted in CD becoming more and more isolated.

APPENDIX B

CASE STUDY: CITY B

CASE STUDY: CITY B

I. Descriptive Characteristics of City B

City B, with a population of nearly 500,000, is in a metropolitan area covering two counties with a population of over one million. The populace is about 90 percent white and 10 percent Black. The ethnic population mix includes a large number of Polish and smaller numbers of Italians, Germans, and Canadian citizens. (City B has been considered one of the more "ethnic" cities in the United States.) A great population surge occurred after World War I with the completion of a large power complex and again after World War II when shipping facilities were completed. City B covers 40 square miles of semi-hilly land, near a large body of water.

Politically the city is Democratic while the county government is traditionally Republican. City B has a strong mayor form of government with a nine member city council. The county has elected "legislators" (or commissioners) and an elected county executive. The city and county governments are strictly separate.

Economically, City B is a heavily industrialized town with manufacturing accounting for over 30 percent of the total employment. Other large employment sectors are wholesale (nearly 20 percent), services (over 10 percent), and government (about 15 percent). The largest single employer is the auto industry followed by steel companies and state universities. Manufacturing has declined in employment opportunities primarily due to the rise of other power sources in the country, making the power source near City B less valuable. City B has a large port facility and a large chemical manufacturing complex. Both of these have obvious disaster potential. There are National Guard units of all three services and Coast Guard stationed in the area.

There are nearly 3,000 public safety personnel in City B or about one sworn officer for every 350 people. There are over 1,000 sworn firemen or one fireman per 375 persons. There are nearly 20 hospitals in City B with about 7,000 beds. This includes two veterans mental hospitals with nearly 3,000 beds. There are about 1,400 doctors in City B or one for every 1,000 people. Emergency ambulance service is provided by the city fire department and about a dozen private ambulance services dispatched by the police department.

II. Disaster Vulnerability of City B

In this section we will review scientific and historical information about the probability of the occurrence of various disaster agents and data on organizational perceptions of the probability of various agents striking City B. Scientific and historical probability refer to scientific measures of the chance of occurrence or an actual number of agents that have struck in the past 20 years.

Historically there have been few disaster episodes in City B's history and these that have occurred have been minor in scope of damage, loss of life and property. Most frequent agents have been snow storms and blizzards; however, these have not occasioned major damage. City B is prepared for frequent heavy snow falls. Adequate snow removal equipment is available. The population does not define frequent snow storms as disasters. Perhaps this is due to the preparation that has minimized damage or the threat of damage.

There have been several small flooding episodes, ice jams near the port facilities, and ice storms. None have caused major damage. According to seismic risk maps, City B is in an area that could have major damage in an earthquake with an intensity of eight or above on a Modified Mercalli Intensity Scale. No earthquakes of this intensity have occurred in recent times nor is the fact of a possible damaging earthquake well known in the area. Our respondents ranked this agent among the least probable. As can be seen in Table 2, both community and civil defense respondents ranked blizzard or massive snow storm first among possible agents. (A total of 36 disaster agents were presented to them and each was ranked on a scale from not applicable to my community (0) to nearly certain (5).)

Table 2 presents the ranking and means for the top thirteen agents shown for community plus civil defense respondents, and only civil defense respondents. This division was made to show which respondents (community or CD) were more sensitive to particular disaster agents and to disaster in general. The community figures include both community and CD respondents. Nevertheless, a comparison of the direction of mean difference is valid since if we simply compared community and CD respondents we would get different community means, but the direction of mean difference is more adequate for the data we have gathered.

As can be seen in Table 2, the top thirteen agents were the same for both CD and the community and, in general, there is not substantial difference in the rankings. However, Table 2 shows that CD ranked ten of the top thirteen agents at a higher probability of occurrence than did the community. (If we had removed CD's ratings from the community ratings, the community means for each of the ten would have been lowered.) This suggests that CD is a bit more sensitive to these agents, as one might expect. However, it is our impression from other data that the above generalization has its exceptions. For example, CD informants did not seem as aware of various industrial disasters (e.g., chemical fires, chemical spills, etc.) as did disaster chairmen for each chemical plant. CD was unaware of rather extensive mutual aid disaster planning among several major industries in the area. Nevertheless, from Table 2 we get the impression that CD is somewhat more sensitive to disaster probabilities than the community officials surveyed.

III. History of Disaster Planning in City B

The history of disaster planning in City B for the years 1960-1970 will be reviewed, emphasizing planning oriented toward natural disaster

Table 2

RATING OF COMMUNITY DISASTER PROBABILITY *

Agent	Community n=20		Civil Defense n=7		Direction of Difference in Means **
	Rank	Mean	Rank	Mean	
Blizzard or massive snow storm	1	4.00	1	4.30	+
Freezing Ice Storm	2	3.95	2	4.00	+
Major Frost or Freeze	3	3.84	2	4.00	+
Major Industrial Explosion	4	3.28	4	3.57	+
Flash Flood	5	3.11	3	3.71	+
Major Hail Storm	6	3.10	5	3.43	+
Massive Auto Wreck	6	3.10	7	3.00	-
Water Pollution	7	2.95	4	3.57	+
Plane Crash in Community	8	2.89	6	3.14	+
Oil Spill	8	2.89	10	2.29	-
Major Water Main Break	9	2.85	6	3.14	+
Chemical Contamination or Spill	9	2.85	8	2.86	+
Electrical Power Blackout	10	2.74	9	2.71	-

*The respondents were given 36 events to rate on a scale from 0 to 5 (0 meaning not applicable to my community and 5 representing a nearly certain probability).

**CD Mean - Community Mean indicates difference.

rather than civil disturbances. Perhaps the most general feature that characterizes disaster planning in City B is that there has been very little such planning. Several informants stated that no overall natural disaster plan existed for the city. Most of these informants knew of CD's efforts in this direction but did not consider them worth discussing. City B is a large city and it is surprising that there doesn't appear to be any large-scale natural disaster plan. The following discussion focuses on the limited planning that did occur in the 1960s and suggests possible reasons for the lack of planning.

Since there has been little or no community-wide disaster planning, the discussion must focus on the major segments of the community which did have disaster planning. In the 1960s, our data suggests that disaster and emergency planning occurred at CD, the fire and police departments, and among a group of industrial firms. Naturally, this list is not definitive; rather, it appears that these were the major agencies involved in some kind of disaster planning.

The emphasis at CD was on nuclear planning. Only recently (within the last six to twelve months) has there been any natural disaster planning. CD has monopolized the nuclear planning in the area. CD's declining budget reflects the diminishing community support for CD. Our informants also indicated a decline in CD visibility since the Cuban Missile Crisis. CD had difficulty getting organizations to actively cooperate in mock disaster exercises. Hospitals and doctors do cooperate since hospital licensing regulations demand annual disaster drills. In general, the community organizational support of CD and its nuclear planning seems limited.

The fire department was another major planning agency in the city. However, this planning was primarily oriented to control of fires and search and rescue. The fire department also cooperated with Red Cross in seeing that fire victims who had lost housing were provided with temporary food and shelter. The department also cooperated with a group of industrial plants in its planning with regard to large-scale technological disasters, e.g., fires, gas leaks, etc.

Many of the major industrial firms of the city had joined together over twenty years ago in developing a mutual-aid disaster plan that involved the local fire department. The initiative came from within one of the large oil refineries. The result was a fairly comprehensive mutual-aid plan. The plan involves a list of who is to be notified in case an individual plant cannot handle the emergency, internal warning systems, provision for ambulance service, provision for rescue services and, in addition, provision for the use of one firm's volunteer fire department. The plan also carries specific instructions on what the city fire department should do in the event they are called. These last instructions were felt to be necessary since the city fire department does not have the expertise in handling large chemical fires. The specific directions are aimed at preventing the possibility of the fire department rushing in without knowledge of what kind of chemical is burning and thereby creating even more disastrous consequences.

These plans are updated yearly by each firm's safety director. These safety directors also meet informally on occasion when more adequate provisions are added to their mutual safety plan. Also, informants from these firms report that parts of the plan involving group cooperation have been utilized in recent years, though there has been no major disaster with large-scale consequences.

The last agency or organization involved in disaster planning has been the police department. The focus of their plans has been on civil disturbance and are not unlike many large city police department plans for this event.

In general, it was found that priorities in terms of the particular disaster agent depended on which organization was the focus of analysis. There did not appear to be any community priority on agent. Nor did there seem to be much community-wide disaster planning coordination. Rather, it seemed that individual organizations or small groups of organizations have specific and separate plans.

The legal responsibility for City B's disaster planning rests with civil defense. CD is located within county government and derives its budgetary support from the county board of supervisors and the county executive. Each city within the county, however, has the legal responsibility of appointing (with the CD Director's advice and consent) a city CD director. These city civil defense directors are normally men whom the county CD director has suggested and are normally volunteers who serve without pay but with a small budget derived from the county CD. In effect, they are basically volunteers who serve to extend CD's influence to the smaller cities. They have little authority and are completely dependent on the county CD for fiscal support and material support.

The county CD has recently experienced a cutback in both fiscal resources and personnel. This was an apparent attempt by county government to shift some of CD's operating monies to the welfare department. Such a shift occurred in other county departments with the welfare department being the beneficiary. CD has lost \$120,000 in the reduction of the staff from 28 to 17 people. This has resulted, of course, in the reduction of many services CD performs.

City B has never experienced any large-scale disaster affecting large segments of the community. This may be the key to the lack of overall community planning in City B. Heavy snowfall has been the most frequent inconvenience. Snow storms are not defined as disasters in City B, but merely as inconveniences. Apparently adequate snow removal operations exist.

Planning in City B has been segmentalized in part because no organization defines itself as responsible for large-scale community disaster planning. CD with its focus on nuclear disaster planning provided no impetus for overall community planning. Also, since CD's viability as a functioning organization has recently been threatened by political considerations, one does not expect CD to be active in community-wide disaster planning involving extra expenditures and staff time. CD has emphasized nuclear planning. The CD director has no authority in deciding

which communities in the county receive CD aid following disaster. This authority rests with the county sheriff who receives requests for aid from the executive head of a city and instructs the CD director whether to aid that city. We can suggest that this arrangement handicaps CD's ability to deal with cities since it is too tightly fitted into the county line of authority. This may contribute to the explanation for the lack of overall disaster planning by CD. Its structural location within county government limits its visibility as a planning agency for city disasters.

In sum, there was little if any community-wide disaster planning during the 1960s in City B. The planning that did exist was organizationally specific where the prime disaster agent envisioned varied depending on the particular organization. CD did not emphasize community-wide planning except for nuclear disasters and, even in this area, the existence of community-wide support and cooperation for such planning appears to be on the wane. The reasons proposed for the lack of community-wide planning are the lack of any large-scale disaster that might have unified disaster planning, and CD's nuclear emphasis which prevented planning for natural or other types of disasters. Also of importance is CD's declining budget due to political considerations. This severely handicaps any CD attempt to broaden its planning areas.

IV. Current Overall Disaster Planning in City B

We will now review the community organizations which are involved in disaster planning and the nature of their involvement. This discussion will be structured in terms of disaster planning tasks. While there is some overlap regarding organizational responsibility for planning tasks, the emphasis will be on the major planning tasks assumed by individual organizations. Those tasks on which there was a lack of organizational consensus on who is responsible for them will be presented first.

Pre-disaster overall community planning was divided between civil defense and the mayor's office. There was a large minority of informants who either did not know who was responsible for this planning or thought there was no responsible organization. A majority of our informants reported a lack of any effective overall community planning, often with some apparent embarrassment. Civil defense does have a written overall disaster plan which emphasizes nuclear disaster planning.

There was a lack of consensus as to which organization is responsible for establishing a pass system. Most informants stated there was no pass system planned; some said this was done by civil defense, sheriff's department, and/or local National Guard. Few informants had specific knowledge of the pass system. Operational rather than coordinative responsibility was emphasized. Apparently there is no organization which coordinated this planning. CD informants indicated that their pass system consisted mainly of CD armbands.

There was also little consensus on the organization responsible for overall coordination of disaster response. About one-third of the informants simply stated that they did not know who would coordinate response.

The remainder assigned the responsibility to the mayor of City B, the county executive, or civil defense. When asked about political responsibility for the response, our informants either mentioned City B's mayor or the county executive. (Normally those organizations within the city named the mayor; those organizations in the county -- either geographically or governmentally -- named the county executive.) Again, planning for overall coordination was usually reported as not existing in City B or the county. It is our impression that few informants considered nuclear disaster planning as an example of overall community disaster planning.

There was a lack of consensus concerning the responsibility for disaster simulations or drills. About one-third of the informants were not aware that any disaster drills had occurred in recent years. Most informants, however, reported disaster drills conducted by CD, sheriff's department, and the Red Cross. Many informants questioned the effectiveness of these drills. For example, many reported CD drills to be "unrealistic" since the disaster contingencies they provided were too "vague." Also, many informants questioned the usefulness of such drills since they were often internal, that is, concerned primarily with the effectiveness of the sponsoring organization and not the disaster preparedness of many external community organizations. The drills organized by the sheriff's department (with CD help) were usually considered the most extensive in organizational scope since they often involved CD, police and fire departments, and local hospitals. However, the general impression is one of sporadic and unrealistic drills with little coordination and few participants.

There is considerable consensus about the remaining disaster tasks: warning, stockpiling emergency supplies, search and rescue, evacuation, compiling lists of missing persons, care of the dead, maintenance of community order, providing food and shelter, and ambulance service. The consensus usually concerns consensus about operational responsibility not coordinative responsibility, though, infrequently informants tied an organization to a particular task both in terms of coordinative and operational responsibility. However, the data compiled did not adequately distinguish those two types of responsibility and hence our assumption that informants were usually referring to operational responsibility is somewhat speculative.

There was considerable consensus that the police department and the sheriff's department were responsible in their jurisdictions for warning (though occasionally CD was mentioned), search and rescue, evacuation, compiling lists of missing persons, and maintaining community order. Most of our informants did not state that these responsibilities were specified in some disaster plan; rather they tended to imply that it was official organizational knowledge. There was also considerable consensus that the Red Cross and Salvation Army would be responsible for providing housing, food, and clothing to disaster victims. This does not seem to be the result of a disaster plan, rather it appears that most informants simply assumed this would be the responsibility of these two organizations. In this case, many informants tended to mention both an operational and a coordinative function. That is, most informants stated that these organizations coordinate responses in these task areas, as well as operationally providing food, housing, and clothing. In the

Case of Red Cross, there appears to be close ties to CD. For example, the county CD director is on the district Red Cross board which, in the same manner as a corporation board, sets general district-wide Red Cross policies. The CD director also stated that in his opinion the major coordinating organizations for overall community planning and response were the Red Cross and CD. Our data tends to contradict this. However, it does appear that Red Cross is fairly active in terms of disaster planning in the area, though it certainly does not function as a super planning and coordinating organization.

Stockpiling emergency supplies and equipment was usually reported as a responsibility of civil defense. And although many informants questioned the usefulness of some of these supplies (especially "out of date" medical supplies and equipment), most informants seemed to consider the planning for this task adequate. Most informants implied that this was a function of CD specified in the disaster plan, and a normally assigned task for any CD office.

The coroner was generally assigned the responsibility for the care of the dead. This task responsibility was usually seen as natural since the coroner usually takes care of this function. Moreover, this task seems to be organizationally official knowledge since it is not specified in the CD disaster plan.

The final task, provision of emergency ambulance service, is carried out by private carriers which are dispatched by City B's police department. This is specified in the disaster plan and it is generally well known that the police handle this function. However, there is some movement to shift this responsibility to the fire department, apparently because the police department feels it can no longer handle this dispatching task.

It appears that, in general, there is considerable consensus on operational responsibility for most of the disaster tasks. However, there is little, if any, consensus on the key problem, viz., who is to be the major pre-planning organization, and who is the overall coordinating organization. In effect, we see remarkable agreement on operational responsibilities probably based primarily on common sense assumptions. Most informants appeared to base their answers on past experience (i.e., experience of what these organizations do normally) and then simply assumed they would continue to carry out these same functions in a disaster situation. There seemed to be little reliance in the CD plan in answering the questions, possibly because the CD plan for natural disasters is very general and does not specify precise responsibilities for particular organizations nor how diverse responsibilities of organizations are to be coordinated.

V. Position of the Civil Defense Office in City B

We will now examine the civil defense office in terms of how well integrated in the community it is and what factors influence this position. Vertical factors, those originating outside the community (primarily

national civil defense policies), and horizontal factors, those originating from the local community, will be discussed.

Until recently, the CD office had a staff of twenty-eight. Due to budget cuts of over \$120,000, this staff is reduced to seventeen. This cut in budget reflects political considerations, viz., shifting county funds to the welfare department. Both clerical and non-clerical staff positions have been eliminated. The four non-clerical positions dropped are: assistant to the director, public relations officer, assistant radiology officer, and shelter management inspection officer. These task areas will be de-emphasized as a result. The public relations function will be shifted to the county government public relations office, meaning that all CD public relations and public education programs will be filtered through non-CD personnel. This may result in an even less visible image of CD in the community. The CD funds are provided by the federal government (50 percent), and county government (25 percent), and the cities in the county (25 percent).

There are over 50,000 volunteers associated with this CD office (the policy being to push for a strong volunteer program). The volunteers include those given short training sessions in the managing and inspection of CD shelters, and those trained in radiological monitoring. Also, there are large contingents of volunteer auxiliary firemen and policemen jointly trained by CD and fire and police departments. The auxiliary firemen are used in a limited fashion by City B's fire department, usually in terms of hauling hoses around and other unskilled areas. These auxiliary firemen are not allowed on ladders. It is evident from our fire department informants that the usefulness of this type of firemen is being questioned. The auxiliary policemen are primarily used for directing traffic during major social events, e.g., football games, baseball games, etc. The CD director feels that these auxiliary firemen and policemen not only provide a service to the community but also help CD's public visibility since all must wear CD armbands during their volunteer assignments. (Although this may do just that, it is debatable whether such CD volunteer strength improves CD's relation with other community organizations in terms of improved cooperation in community planning. For example, both the police and fire departments tended to define CD's relationship to them solely in terms of these auxiliary personnel.) There are two volunteer groups also associated with the CD, viz., the civil air patrol and a ham radio group. The latter serves as a back up communications system while the usefulness of the civil air patrol is limited since it has gradually become almost a defunct organization.

Civil defense is located in new facilities built five years ago at a cost of \$750,000. This building provides office space for CD staff and functions as the only emergency operations center for the county. There is communications equipment hooked into the county sheriff's communications system, with all hospitals, and a few city government offices. However, the sheriff's department has a more extensive communications system which has direct contact with all police cars, city and county, as well as communications with the city fire department. CD is responsible for coordinating the nuclear warning system and as such serves as the base communications center for the northwestern part of the state.

The nature of civil defense programs and its planning orientation reflect national CD goals, at least in the past. Recently, an appendix to the general nuclear-oriented disaster plan was published which deals with natural disaster planning. However, this small supplement is very general. The only specific details included are lists of the manner of notification of city and county officials.

We have previously mentioned most of the task areas CD is involved in. These include setting up emergency lines of communication (primarily through the county sheriff's office), establishing an EOC, and setting up of programs with local voluntary associations. In addition, CD has a small-scale program for training the fire and police in the handling of radioactive materials. CD also has an emergency notification program both for nuclear and natural disasters where key governmental officials are informed. And, as has been mentioned, there is a large volunteer program. It is apparent that CD's major goals are consistent with the national CD goals and program orientation. It is our impression that CD's adherence to these national goals historically has to some extent resulted in CD's reduction of community influence in disaster planning, and perhaps indirectly was a key reason for CD's budgetary difficulties. This was even suggested by some CD informants who argued that CD was not seen as a natural disaster planning organization which made it easier for county government officials to cut their budget. The assumption was that the county officials no longer saw much need for nuclear disaster planning. In addition, other organizational informants (fire, police, emergency medical services) noted CD's nuclear emphasis and felt this emphasis precluded CD attempts at natural disaster planning, the result being a lack of enthusiasm by these other organizations for cooperation with CD if the planning was just nuclear oriented.

Civil defense is located within county government. A "county emphasis" has become even more obvious since CD relocated in an underground building in an isolated area ten miles from town, leaving their city hall offices in City B. This has reduced the number of personal contacts with City B organizational officials. CD does have systematic linkages with police and fire departments primarily through the auxiliary fire and police program. Contact with City B's mayor is limited, however. This contact is usually made by the county executive or the deputy executive on behalf of CD. The CD director himself has only infrequent contact since the relocation. Before the relocation the contact was quite frequent and usually of an informal nature since the CD office was previously located in the city hall next to the mayor's office.

The CD director and his assistant have been in their positions for over twenty years, enough time, one suspects, for them to become steeped in the nuclear ideology. Again, perhaps this long nuclear oriented work record has contributed to CD's relative inability to convert its resources so that they are more oriented to natural disaster planning. Both individuals have previous work experience in the military. In fact, one of them is active as an officer in a local National Guard unit. This has contributed to the frequent contact and good relations with the National Guard units in the area. Also, one of the two men has close personal relations with the county sheriff, again perhaps explaining the "county emphasis" of CD. Adding to this "county emphasis" is a political split in the area. That is, City B is traditionally Democratic (both the mayor

and the city council are Democratic) while the county government has traditionally been Republican.

Although we have emphasized the "county orientation" of CD, this is not meant to imply that City B's organizations are actively hostile to CD. Rather, it is more a matter of CD not being thought of in terms of natural disaster planning for City B. Having very little political accountability in City B, the CD simply cannot be easily defined as the city disaster planner. It is our impression that CD does not adequately recognize this handicap. It does not recognize the definition of itself as a non-city organization nor the implications that follow from this designation.

City B does seem to be gradually becoming more conscious of the necessity for overall community coordinated planning. For example, a recently formed emergency medical services committee located within the county health department and having representatives from hospitals, City B government, county government, and the fire and police departments on its advisory board, has begun studying the problem of coordinated emergency medical care planning. The organization hopes to institute the plans after the research phase is completed. CD has little contact with this committee. Although this new organization is located within local county government it is funded non-locally and perhaps this is one reason it has not taken on a non-city designation. At any rate, this committee offers the possibility for broad based community support for community-wide disaster planning since its advisory board is made up of county and city representatives, though perhaps its present support is due to its relatively non-threatening study nature. That is, one can always study something without necessarily changing environmental features. Also, the present support may simply be due to its newness.

In general, it appears that CD is not seen as a legitimate natural disaster planner. (However, it may be legitimate for organizations in other ways, e.g., as a repository for "retired" politicians.) Moreover, this lack of legitimacy may be a direct result of CD's inability to adapt its programs to local areas. In City B, CD's adherence to nuclear planning has made it extremely vulnerable to shifting public attitudes regarding the probabilities of nuclear threat. Moreover, it is our impression that there is internal CD inertia regarding a change to new planning programs. This inertia is partly due to CD's national character, and also to the continuation of CD staff members who have in the past oriented their thinking toward nuclear disaster planning. CD also does not seem to recognize that they must offer a product to other organizations that these other organizations think they might need. For example, CD has made few attempts to help coordinate emergency fire procedures and other disaster procedures for various industrial plants even though these plants are apparently interested in this type of disaster planning (as evidenced by the mutual aid pact that exists for several industrial plants). In general, vertical factors seem more important in influencing CD resources and its role in planning. CD is not defined as a natural disaster planning agency. CD's classification as a "county" organization also limits its planning role. Civil defense must offer something that City B organizations think they need. Disaster planning does exist in City B as is demonstrated by the segmentalized disaster planning among organizations. If civil defense could develop an expertise oriented

toward planning for various emergencies or disasters, it might be able to tie into a number of organizations in the area and provide a valued service.

APPENDIX C

RESEARCH INSTRUMENTS

DISASTER PREPAREDNESS STUDY

1. Introduction
2. Interview guide
3. Ratings of community disaster probability
4. Organizational responsibilities in disasters
5. Tasks in disasters

Organizations to be contacted (modifications might be suggested by disaster plans)

1. City civil defense office (all personnel possible)
2. County civil defense office (all personnel possible)
3. City police department (responsibility for planning, operations - 2/3)
4. City fire department (responsibility for planning, operations - 2)
5. Safety director's office (1)

6. Mayor's office (aide with emergency responsibilities - 1)
7. City manager (or aide - 1)
8. Medical society (1)
9. Hospital association (1)
10. Hospitals (largest 3-5 in area - 2 each)

11. Public health department (1/2)
12. Utilities: both public and private - electric (emergency planner - 1)
13. - gas (emergency planner - 1)
14. - water (emergency planner - 1)
15. - telephone (emergency planner - 1)

16. Red Cross chapter (disaster committee chairman, exec. sect. - 2)
17. Salvation Army unit (disaster responsibility - 1)
18. Sheriff's department (1)
19. Pollution or environmental agencies (?)
20. Coroner's office (1)

21. Public works department (engineering, streets, sewers, sanitation - 1/4)
22. Ambulance services (might overlap other groups - ?)
23. Local National Guard units (1-3)
24. Harbor or port department (1)
25. State police local post (1)

26. Local industrial plants (security officers 1-4)
27. Airport department (1)
28. Building/housing department (1)
29. RACEs clubs (2)
30. Mass media groups (radio, television, newspapers, wire services - ?)

RATINGS OF COMMUNITY DISASTER PROBABILITY

1. How would you rate the probability of the following events in your community within this coming decade?

Please rate them in terms of the following six point scale by circling the appropriate number.

- 0 - Not applicable to my community
- 1 - Not probable
- 2 - Low probability
- 3 - Moderate probability
- 4 - High probability
- 5 - Nearly certain

AVALANCHE.....	0	1	2	3	4	5
BLIZZARD OR MASSIVE SNOWSTORM.....	0	1	2	3	4	5
CHEMICAL CONTAMINATION OR SPILL.....	0	1	2	3	4	5
DAM BREAK.....	0	1	2	3	4	5
DROUGHT.....	0	1	2	3	4	5
EARTHQUAKE.....	0	1	2	3	4	5
ELECTRIC POWER BLACKOUT.....	0	1	2	3	4	5
EPIDEMIC.....	0	1	2	3	4	5
FLASH FLOOD.....	0	1	2	3	4	5
FOREST OR BRUSH FIRE.....	0	1	2	3	4	5
FREEZING ICE STORM.....	0	1	2	3	4	5
HURRICANE.....	0	1	2	3	4	5
MAJOR FROST AND FREEZE.....	0	1	2	3	4	5
MAJOR GAS MAIN BREAK.....	0	1	2	3	4	5
MAJOR HAIL STORM.....	0	1	2	3	4	5
MAJOR INDUSTRIAL EXPLOSION.....	0	1	2	3	4	5
MAJOR WATER MAIN BREAK.....	0	1	2	3	4	5
MASSIVE AUTOMOBILE WRECK.....	0	1	2	3	4	5
METEORITE FALL.....	0	1	2	3	4	5
MINE DISASTER.....	0	1	2	3	4	5
MUD OR LANDSLIDE.....	0	1	2	3	4	5
OIL SPILL.....	0	1	2	3	4	5
PIPELINE EXPLOSION.....	0	1	2	3	4	5
PLANE CRASH IN COMMUNITY.....	0	1	2	3	4	5
RADIATION FALLOUT.....	0	1	2	3	4	5
RIVER FLOOD.....	0	1	2	3	4	5
SAND/DUST STORM.....	0	1	2	3	4	5
SEVERE FOG EPISODE.....	0	1	2	3	4	5
SHIP DISASTER IN HARBOR OR NEARBY COAST..	0	1	2	3	4	5
SMOG EPISODE.....	0	1	2	3	4	5
SUDDEN WASTE DISPOSAL PROBLEM.....	0	1	2	3	4	5
TORNADO.....	0	1	2	3	4	5
TSUNAMI OR TIDAL WAVE.....	0	1	2	3	4	5
VOLCANIC ERUPTION OR FALLOUT.....	0	1	2	3	4	5
WATER POLLUTION.....	0	1	2	3	4	5
WATER SHORTAGE.....	0	1	2	3	4	5

2. Let's go on now to finding out what you think of the following. On this card (give respondent card) there is a list of tasks that might have to be carried out in connection with a disaster. Would you tell me for each one what organizations or groups in (X city) would have the major responsibility for the task. Let's take the first one. What organization or group in (X city) would have major responsibility for pre-disaster overall community emergency planning? (Indicate to respondent that it is possible that no one would have the responsibility, on the other hand, he can name as many groups as he wants to if he feels that they have major responsibility.)

(Start with number 1 and work down through number 12)

DRC List # 2

Which organizations or groups in your community, if any, have major responsibility for the following tasks in connection with a large-scale disaster?

1. Pre-disaster overall community emergency planning
2. Warning
3. Stockpiling emergency supplies and equipment

4. Search and rescue
5. Evacuation
6. Compiling lists of missing persons

7. Care of the dead
8. Maintenance of community order
9. Housing victims

10. Providing food and clothing to victims
11. Establishing a pass system
12. Overall coordination of disaster response

GET BACK CARD FROM RESPONDENT WHEN FINISHED

3. Let's go on now to the next question. We have another card (give respondent card). It lists a number of federal, state and local organizations. I would like to know what major tasks or responsibilities each organization has in preparing for and responding to a large scale disaster in (X city). If they have no major task or responsibility, would you please indicate that.

(NOTE: You must take into account what the respondent has already said about any of the organizations. However, even though respondent may have already mentioned them, get a full answer here again, even though there is just repetition. If respondent is from organization listed, indicate that the matter will be discussed later in a different question.)

The first one is the city police department. What major task or responsibilities do they have in preparing for and responding to a large-scale disaster?

(Start with number 1 and work down through number 10)

DRC List #3

What major tasks or responsibilities do the following organizations or groups have in preparing for and responding to a large-scale disaster in your community? If they have none, so indicate.

1. The city police department
2. The local civil defense office (city, or city/county if joint)
3. The Mayor's office
4. The public health department
5. The local National Guard units

6. The city/county medical society
7. The sheriff's department
8. The state civil defense agency
9. The State Adjutant General's Office
10. OEP (the federal Office of Emergency Preparedness)

GET CARD BACK FROM RESPONDENT WHEN FINISHED

4. Finally, before turning to questions about your organization, there is one last general question I would like to ask: What can you tell me about overall disaster planning and preparations in this city? For example, what organizations have taken the lead in overall disaster planning in this community?

PROBE: Key organizations perceived as involved?
How they have taken the lead?
What they actually did?
Why they have been successful?
Whether the planning seems to be effective or not?

INTRA-ORGANIZATIONAL ASPECTS

5. Let's turn now to your own organization. Does (X organization) itself have any kind of disaster plan?

If NO,

- PROBE: (a) what would seem to be reasons for lack of disaster plans?
(b) what would likely guide actions and behaviors in case of a disaster?
(c) would any particular organization(s) be turned to for help and guidance if a disaster occurred?

If YES,

get copy of plan now or later and go to question 6.

If can not get copy at any time, PROBE:

- (a) task or responsibilities organization would have at times of disaster?
(b) how different lines of authority and coordination would differ from normal times?
(c) in what way is plan activated?

6. Has any other organization helped your group in developing its disaster plan?

PROBE: (a) which organization(s)?
(b) in what ways did they help?
(c) who took the initiative in obtaining the assistance?

7. (if not mentioned) Has your organization had contact, for example, with such a group as the local civil defense organization in developing its own disaster plan?

If NO,

PROBE: (a) why were they not contacted?
(b) would they have anything to offer in terms of disaster planning?
(c) would they have anything to do in a disaster response?

If YES,

PROBE: (a) nature of contact?
(b) frequency and recency of contact?
(c) evaluation of value of contact
(d) general evaluation of perception of civil defense, and
(e) its personnel

INTER-ORGANIZATIONAL ASPECTS

8. Apart from the plan for your own organization, does (X organization) have a part in any written or formalized disaster plan involving cooperation with other organizations in the area?

(If NO, see if any informal agreements or understanding.)
9. (If YES, what organizations are involved in the plan?)
10. Which organizations will your own organization work most closely with under the plan?
11. Doing what?
12. Under the plan, will some organization or group:
 - (a) assume authority and make overall decisions?
 - (b) attempt to coordinate activities?
 - (c) try to provide general information?
13. (ONLY IF CIVIL DEFENSE HAS BEEN MENTIONED IN ANSWER TO QUESTIONS 8-12, ask) To make the operation of the plan clearer in my mind, what, for example, would go on between your organization and civil defense?

BACKGROUND OF DISASTER PLANNING

14. As far as you know, does some organization or group have legal responsibility for overall disaster planning in (X city)?
15. Who?
16. On this overall disaster plan, would you happen to know when it was last revised?
17. Which organization took the initiative in making the revision?
18. Has the overall disaster plan recently been tried out or rehearsed?
19. Who took the initiative for the rehearsal?
20. Apart from rehearsals, have there been any formal or informal meetings about the plan in the last several years?
21. What organization was responsible for calling the meetings?
22. As far as you know, when was the plan actually last used?
23. How did the plan work?

Finally, in conclusion, just four more questions.

24. Can you tell me anything at all about the history of overall disaster planning in (X city)?

If YES,

- PROBE: (a) sources of support and resistance? (local and otherwise)
(b) nature of arguments for and against?
(c) general public attitudes on disaster planning?

25. What experiences with disasters or other large-scale community emergencies have you personally had?
26. What experiences with disasters or other large-scale community emergencies has your organization had?
27. What experiences with disasters or other large-scale community emergencies has (X city) had?

That's about it. Is there anything we have not covered that you think might be helpful to us in learning about disaster anticipation, disaster problems, disaster planning, or disaster preparations in (X city)?

What about any particular person(s) we should talk to who might be helpful along these lines?

THANK YOU

HAVE YOU CORRECTLY HANDLED RATINGS OF COMMUNITY DISASTER PROBABILITY SHEET? (including identification on sheet)

GOTTEN BACK EACH CARD?

HAVE YOU OBTAINED COPY OF DISASTER PLANS?

TABLE OF ORGANIZATION?

RATINGS OF COMMUNITY DISASTER PROBABILITY

1. How would you rate the probability of the following events in your community within this coming decade?

Please rate them in terms of the following six point scale by circling the appropriate number.

- 0 - Not applicable to my community
- 1 - Not probable
- 2 - Low probability
- 3 - Moderate probability
- 4 - High probability
- 5 - Nearly certain

AVALANCHE.....	0	1	2	3	4	5
BLIZZARD OR MASSIVE SNOWSTORM.....	0	1	2	3	4	5
CHEMICAL CONTAMINATION OR SPILL.....	0	1	2	3	4	5
DAM BREAK.....	0	1	2	3	4	5
DROUGHT.....	0	1	2	3	4	5
EARTHQUAKE.....	0	1	2	3	4	5
ELECTRIC POWER BLACKOUT.....	0	1	2	3	4	5
EPIDEMIC.....	0	1	2	3	4	5
FLASH FLOOD.....	0	1	2	3	4	5
FOREST OR BRUSH FIRE.....	0	1	2	3	4	5
FREEZING ICE STORM.....	0	1	2	3	4	5
HURRICANE.....	0	1	2	3	4	5
MAJOR FROST AND FREEZE.....	0	1	2	3	4	5
MAJOR GAS MAIN BREAK.....	0	1	2	3	4	5
MAJOR HAIL STORM.....	0	1	2	3	4	5
MAJOR INDUSTRIAL EXPLOSION.....	0	1	2	3	4	5
MAJOR WATER MAIN BREAK.....	0	1	2	3	4	5
MASSIVE AUTOMOBILE WRECK.....	0	1	2	3	4	5
METEORITE FALL.....	0	1	2	3	4	5
MINE DISASTER.....	0	1	2	3	4	5
MUD OR LANDSLIDE.....	0	1	2	3	4	5
OIL SPILL.....	0	1	2	3	4	5
PIPELINE EXPLOSION.....	0	1	2	3	4	5
PLANE CRASH IN COMMUNITY.....	0	1	2	3	4	5
RADIATION FALLOUT.....	0	1	2	3	4	5
RIVER FLOOD.....	0	1	2	3	4	5
SAND/DUST STORM.....	0	1	2	3	4	5
SEVERE FOG EPISODE.....	0	1	2	3	4	5
SHIP DISASTER IN HARBOR OR NEARBY COAST.....	0	1	2	3	4	5
SMOG EPISODE.....	0	1	2	3	4	5
SUDDEN WASTE DISPOSAL PROBLEM.....	0	1	2	3	4	5
TORNADO.....	0	1	2	3	4	5
TSUNAMI OR TIDAL WAVE.....	0	1	2	3	4	5
VOLCANIC ERUPTION OR FALLOUT.....	0	1	2	3	4	5
WATER POLLUTION.....	0	1	2	3	4	5
WATER SHORTAGE.....	0	1	2	3	4	5

OK, let us now talk about the civil defense organization and its disaster planning. So I can have a clear picture in my mind, perhaps we ought to clarify a few points about your own job and exactly what your duties and responsibilities are.

ROLE AND PERSONAL DATA

2. What is your official title?

3. What are the duties and responsibilities of this job?

PROBE: (a) specific duties-particularly contact with other people?

(b) specific responsibilities-particularly those involving contacts outside the organization?

4. Have these duties and responsibilities changed in any way since you have been in your position? (Keep duties and responsibilities separate)

If YES: In what way?

5. How long have you held this position?

PROBE: (a) did person come from previous position within or outside the civil defense organization?

INTERNAL STRUCTURE AND FUNCTIONS

6. Would you happen to know if this civil defense organization has a written charter?

PROBE: (a) Legal basis of organization?

7. What is the legal jurisdiction of the civil defense organization -- that is, what area does it cover or encompass?

8. What is the table of organization of this group?

Get or obtain table, chart or make diagram of agency.

PROBE: (a) duties and tasks of different positions so overall picture is clear

(b) establish which are full and part time

(c) salaried or non-salaried?

(d) civil service or not? (for all positions)

9. To whom is the civil defense organization responsible?

PROBE: (a) lines of authority including possible multiple ones?

(b) nature of authority, i.e., financial, setting of policies, appointments, etc.?

(c) budgetary position and how annual budget requests are handled?

10. Does this organization have any control or supervision over any other group?

If YES,

PROBE: (a) what groups?

(b) nature of controls?

11. What about volunteers? Do you have volunteers in this group?

12. Is there an advisory group or committee of any kind for the civil defense organization?

If YES,

PROBE: (a) what is nature of such committee?

(b) kind of advice they give, e.g., policy, goals or what?

13. As you see it, what are the major goals or objectives of this civil defense organization?

14. What is being given the highest priority at this time?

15. What sort of resources do you have?

PROBE: (a) personnel if not already established

(b) facilities

(c) equipment

(d) budget

16. Which, if any, of these resources have changed in recent times?

We want to look now at some of the contacts civil defense has with other groups in the community.

INTER-ORGANIZATIONAL ASPECTS

Would you please look at this card (give card). It simply lists a number of organizations all the way from the federal level, through state ones to local ones. It is, of course, possible you may not have much or any contact with some of these groups.

17. Would you tell me what kind of contact, if any, you have with each of these organizations? The first one is the city police department. How much contact does civil defense have with the local police?

(Start with number 1 and work down through number 12)

DRC List # 4

How much daily contact, if any, does your group have with any of the following organizations? If there is none, so indicate.

1. The city police department
2. The city fire department
3. The Mayor's office (or city manager)
4. The local National Guard units
5. The local utilities
6. The local hospitals

7. The sheriff's department
8. The state civil defense agency
9. The State Adjutant General's Office
10. Region DCPA
11. DCPA (the national Defense Civil Preparedness Agency)
12. OEP (the federal Office of Emergency Preparedness)

- PROBE:
- (a) not only frequency of contact, but also content of contact?
 - (b) who seems to be initiator of contact?
 - (c) if general meetings, who calls and what groups attend meetings?
 - (d) particularly probe informal contacts

18. Finally, just one more time. Looking at this list again, which of these groups would you characterize as being more favorable or more positive towards your organization? Which would seem to be less positive or favorable?

- PROBE: (a) what is basis of favorable or unfavorable view?

GET CARD BACK FROM RESPONDENT WHEN FINISHED

19. Before discussing the civil defense role in natural disaster planning and preparations, let me find out what you can tell me of the following.

DISASTER PLANNING AND PREPARATIONS

On this card (give card) there is a list of tasks that might have to be carried out in connection with a disaster. Would you tell me for each one what organizations or groups in (X city) would have the major responsibility for the task. Let's take the first one. What organization or group in (X city) would have major responsibility for pre-disaster overall community emergency planning? (Indicate to respondent that it is possible that no one would have the responsibility, on the other hand, he can name as many groups as he wants to if he feels that they have major responsibility.)

(Start with number 1 and work down through number 12)

DRC List # 2

Which organizations or groups in your community, if any, have major responsibility for the following tasks in connection with a large-scale disaster?

1. Pre-disaster overall community emergency planning
2. Warning
3. Stockpiling emergency supplies and equipment
4. Search and rescue
5. Evacuation
6. Compiling lists of missing persons
7. Care of the dead
8. Maintenance of community order
9. Housing victims
10. Providing food and clothing to victims
11. Establishing a pass system
12. Overall coordination of disaster response

GET CARD BACK FROM RESPONDENT WHEN FINISHED

20. Now, more specifically about your own organization. What kind of disaster plan do you have?

(GET COPY OF PLAN NOW OR LATER)

Since we can get details about the plan from the copy later, I'll just ask about some things that might not be detailed in the written plan.

21. When was this plan last revised -- that is, what is the date of the plan?
22. Did you get help from any organization or group in developing the last revision of the plan?

PROBE: (a) which organization(s)?
(b) in what ways did they help?
(c) who took the initiative?

23. Have you had a chance to help any other group or organization in developing their own disaster plans for their own organization?

If YES,

PROBE: (a) which group(s)?
(b) in what ways did they help?
(c) who took the initiative?

If NO,

PROBE: (a) reasons involved?

24. To what extent is your disaster plan rehearsed and exercised?

PROBE: (a) nature of exercise?
(b) other organizations?
(c) problems involved?

25. Has the disaster plan ever been used in an actual disaster or emergency?

If YES,

PROBE: (a) when?
(b) for what kind of emergency?
(c) how did it work?
(d) revisions made as a result of use?

If NO,

PROBE: (a) what would be probably the weakest part of the plan?

COMMUNITY CONTEXT

26. In general, how does the community at large, the man-in-the-street, here in (X city) view the civil defense organization?
27. Do they understand its activities?
- PROBE: (a) public knowledge of civil defense involvement in natural disasters?
28. What about the different mass media groups -- radio, TV, newspapers -- what seems to be their attitudes towards the civil defense organization?
29. Do any of the mass media groups ever run stories on local civil defense activities?
- If YES,
- PROBE: (a) what were the stories about?
(b) favorable or unfavorable emphasis?
30. Is civil defense viewed by people in general in a different way than other emergency organizations, such as the police and the fire departments?
31. If so, how?
32. Why?
33. What seems to be the general public attitude about
- (a) the probability of disasters in (X city)?
(b) disaster planning in general?
34. Do elected public officials reflect the public view?
- PROBE: (a) possible political influence on civil defense activities?

