

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



US Army Corps
of Engineers
Engineer Institute for
Water Resources

Research Report 81-R01
January 1983

ADA 129816

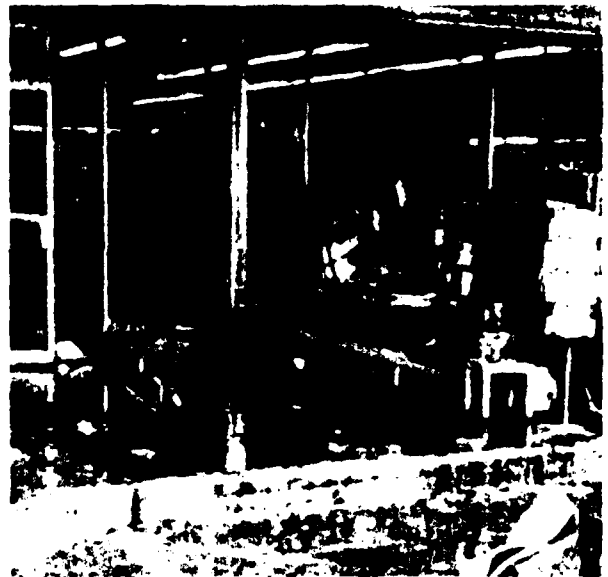
12

Relocation As Process:

A Social Psychological Perspective

DTIC

JUN 27 1983



DTIC FILE COPY

83 06 27 052

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER Research Report 81-R01	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Relocation as Process: A Social Psychological Perspective		5. TYPE OF REPORT & PERIOD COVERED Research
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Annabelle Bender Motz, Ph.D. Professor of Sociology The American University, Washington, D.C.		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS Institute for Water Resources Water Resources Support Center U.S. Army Corps of Engineers		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Institute for Water Resources Water Resources Support Center U.S. Army Corps of Engineers		12. REPORT DATE January 1983
		13. NUMBER OF PAGES 65
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Relocation, flood plain, sociological-psychological perspective, nonstructural, flood protection, community identity, flood insurance.		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The purpose of the report is to assess the relocation process from a social-psychological perspective. The author's intention is to examine the process of relocation as involving at least three sets of people: (a) those who define and implement relocation; (b) the people who are most directly and immediately involved--potential relocatees and the network of businessmen, neighbors, and others with whom their lives are interwoven; and (c) the larger community. Each of the chapters of the monograph is devoted to investigation of the social effects of relocation policies on the prevailing groups.		

DD FORM 1, JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

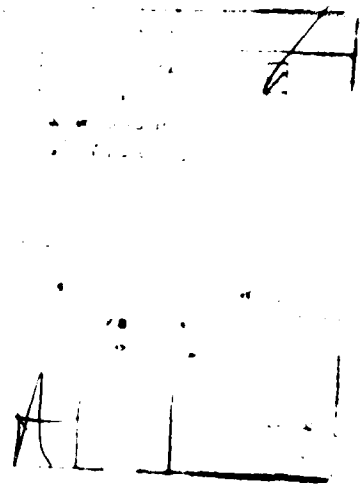
UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

RELOCATION AS PROCESS:
A SOCIAL PSYCHOLOGICAL PERSPECTIVE

by

Annabelle Bender Motz, Ph.D.
Professor of Sociology
Visiting Scholar
Institute for Water Resources
Water Resources Support Center
Ft. Belvoir, VA 22060



January 1983

Research Report 81-R01

Copies may be purchased from:

National Technical Information Service
U.S. Department of Commerce
Springfield, Virginia 22151

This report is not to be construed as necessarily representing the views
of the Federal Government nor of the U.S. Army Corps of Engineers.

FOREWORD

This document was written by Dr. Annabelle Bender Motz in 1978 when she was a visiting scholar at the U.S. Army Corps of Engineers Institute for Water Resources. The critical issues identified in this document are particularly timely because non-structural measures have become increasingly important to the Corps in recent years. In November 1982, the Corps of Engineers held a major policy seminar on nonstructural flood reduction measures which was an important part of a study to evaluate the Corps' role in the implementation of these measures. The Corps of Engineers, St. Paul (Minnesota) District recently completed the post-audit of a landmark relocation project in Prairie du Chien, Wisconsin. Interest in flood warning has been furthered by the publication of three Institute for Water Resources reports on the evaluation and implementation of flood warning. Nonstructural flood control measures are also being given closer attention as financial limitations make structural projects increasingly difficult to implement. Therefore, publication of this report contributes an important orientation to the subject.

The purpose of the report is to assess the relocation process from a social-psychological perspective. The author's intention is to examine the process of relocation as involving at least three sets of people: (a) those who define and implement relocation; (b) the people who are most directly and immediately involved — potential relocatees and the network of businessmen, neighbors, and others with whom their lives are interwoven; and (c) the larger community. Each of the chapters of the monograph is devoted to investigation of the social effects of relocation policies on the prevailing groups.

The basic resources for this study are: social science literature, pertinent Federal regulations, personal interviews, site visits, and governmental documents and reports on relocation.

On the basis of her analysis, Dr. Motz proposed the following:

1. A speeding up of the relocation process by the Corps and an improvement in the interagency cooperative efforts relocation requires.
2. An accumulation of more knowledge concerning relocation as part of non-structural flood plain management.
3. The establishment of a relocation office in the Corps.

The author recognizes that these recommendations are likely to be very costly in terms of traditional cost/benefit analysis. However, it is important for society to consider the cost to human beings in terms of personal trauma and community disruption that natural disasters and displacement may inflict. Each flood prone situation must be considered in relation to the impact of change, both on individuals and communities. Only by emphasizing the social costs can the quality of life in our society be improved.

The author acknowledges with appreciation the cooperation and contributions to the study made by the IWK staff, personnel of the Corps of Engineers, numerous interviewees in various government and nongovernment agencies and organizations, and flood plain occupants. IWK welcomes any comments or questions regarding this document.

TABLE OF CONTENTS

	Page
Introduction	1
Actors and Impacts	9
Institutional Settings and Relocation	15
People in Flood Plains: Moving In and Staying	21
People in Flood Plains: Phases of Relocation	29
Phase I: The Process Starts	30
Phase II: The Move	37
Phase III: After the Move	42
Conclusions and Recommendations	49
Appendix	59
Bibliography	61

Chapter I: Introduction

On the stage that is the setting for life society must always perform a kind of balancing act--it must balance the needs and interests of one individual vis-a-vis another individual, of individual against group, or group face-to-face with another group. Although needs and interests may be complementary, all too often they are in opposition to one another. What is defined as good for the one may not be good for the other. And what may be considered good and/or desirable at one point in time may later lose favor in the eyes of the same individual or group.

The process is further complicated by the fact that individuals are constantly influencing themselves and others and being influenced by them. The simple notion that a stimulus evokes a response may be tested in laboratory situations, but in real life situations there is an on-going, dynamic interactive process wherein each individual influences and is influenced. Responses may be stimuli and vice versa. Nothing is static.

It follows then, that the diversity of evaluations by individuals and groups is ever-evolving as a result of their interactions. The constantly changing conditions in relation to a problem challenge persons confronted with making decisions (even as their own participation contributes to changes). In theory at least, the concept of "Pareto optimality" may serve as a guideline. It refers to the criterion that the solution that provides the greatest good to the greatest number without penalizing those who do not gain by it should be the basis for decision-making. It has been interpreted to mean adopting that decision which benefits most people and recompensing those who may suffer from it.

In the case of flood plain management, discerning the greatest good for the greatest number over the longest period of time--and recompensing those who benefit least--becomes a major task of assessing social impacts of various alternatives.

One alternative for assuaging the hazards of flooding is for people to move out of the flood plain, but the proposal's simplicity belies its complexity.

What Does Relocation Mean?

A dictionary definition refers to relocation as movement to another location. That is essentially the way the term is used in the literature on the subject. The English speak of "rehousing." I personally like the term better because it conveys through implication the subtleties of hearth and home; the social meanings that the physical structure has for the inhabitants. From the Housing Act of 1949 to 1965 the Federal policy concentrated on the physical aspects of residency. In contrast, the Model Cities Program (1966) viewed housing as embodying the entire nexus of health, social, and emotional problems attached to a physical locale. It is this comprehensive approach that must become an important part of the thinking of people who discuss the relocation of populations from flood plains.

In addition to the emphasis on the "rehousing" aspect of relocation, the term, as used in this paper, is concerned with its relationship to water problems. Firstly, I will address permanent relocation only in contrast to temporary relocation which occurs during and/or immediately following a crisis. Permanent relocation has three distinguishing characteristics: (a) it is planned over a period of time, regardless of whether a crisis has occurred; (b) the departing individual or firm has no intention of returning; and (c) the land is converted to other uses (providing protection from flood damage) so that return is highly unlikely.

Secondly, I will try to relate current knowledge about relocation in general in a variety of situations to removal of people and firms from coastal and riverine areas.¹ The designation of flood plains is important because the receipt of Federal dollars for local projects is dependent upon a community's agreement to require flood protection and zoning in accordance with state and Federal regulations.

And thirdly, I will limit our usage of the concept "relocation" to refer solely to the movement of people considered essential for their own health and safety. In this way, relocation differs from removal necessitated by the need for land for some kind of a structure (hospitals, locks and dams, roadways, or new housing and office complexes). The presumed beneficiaries of relocation for health and safety are the individuals who would themselves suffer from a natural hazard (whether or not the actions of human beings played a role in augmenting it).

Differences from other forms of relocation²: In modern America highway construction has necessitated the removal of numerous people and structures to make way for the automobile. This is not necessitated by a natural phenomenon. Rather, highway relocation illustrates a type of managed mobility which is presumed to benefit the larger community. Individuals in the path of a proposed highway are expected to vacate their buildings in order to improve the quality of life of the greatest number of people. In turn, it is expected that they will be repaid in a way that will compensate for their inconveniences.

Similarly, the location of reservoirs has necessitated the removal of people from the territory to be flooded. The rationale is that the land flooded will protect the property of other people who are suffering from flooding. Interestingly, the people who must relocate to make way for a flood control project may themselves never have experienced flooding. And, unlike the highway dislocatees, who may find the new highway useful to them, many of the water projected relocatees do not directly and personally benefit from the flood control program.

Basically, however, the difference between environmental changes accomplished through technological projects and relocation that occurs because an individual lives in a flood plain is that the health and well-being of the flood plain occupant is presumed to be improved by his movement out of the flood plain, to an extent that benefits the larger community as well.

In subsequent pages some of the reasons why people continue to live in flood plains are presented. There are perceptual differences with regard to whether or not movement out of a flood-prone area marks an improvement in the relocatee's quality of life. This means that under certain circumstances people perceive relocation as forced under programs of flood plain management.

The Symbolic Aspects of Housing

The imagery people have of a place is what gives meaning to their activities. (Strauss, 1968; Lippman, 1922) How people "see" the spaces in which they move about not only leads them to behave in particular ways, but also evokes particular sets of emotions. Thus, one's "home" --whether it is squalid or affluent--is a given space that one associates with a whole series of activities and network of people. One invariably has some kind of an emotional attachment to it: favorable when certain memories fleet through one's mind; unfavorable with other reminiscences; mixed and variable with still others. Some people define their homes as refuges from the cold world outside; others, as stepping stones marking their progress up the social and economic ladder. Some infuse it with the souls of their ancestors who inhabited it; others see it as a temporary haven until the next month's rent falls due. The very same housing is to one man "a losing piece of property"; to another, "the best home I've ever had." Frequently, for women, it is their workplace; for small children, their playground; for the elderly, their source of identity.

But home is something besides the highly personalized network of associations with family or friends. It is symbolic of two other facets of life as well. The first is closely related to identification: it expands it to the individual's association with the larger society. Home provides the baseline from which the individual's other activities fan out. His world extends from home to his place of work, the schools of his children, the shop where he procures his basic needs, the initial point from which he travels. In his mind's eye, he measures spatial and temporal distances from home.

The second symbolic interpretation of home is more impersonal. One communicates to others where he fits into the scheme of things. How others respond to his home helps him know his status in the larger community. It is the reference point for all kinds of interactions that the individual has with the world. Thus, virtually every application form first requests one's name and then, one's home address. That bit of information evokes an image in the mind of the reader: "never heard of the place," "what a strange address;" "I thought he'd live in a place like that;" or simply, "that means it will take regular postage." Of equal importance, however, is the fact that the address also provides a clue as to the section of the community in which the individual lives. This in turn reveals what his socio-economic status may be: "it's an upper class area" or "he lives in slums" or "that's a nice middle-class

neighborhood" or "he must be Irish because he lives where all the Irish in this city live." And the resident himself is well aware that his neighborhood is different from "those people over there." In brief, then, one's house is an unobtrusive indicator of one's style of life.

What does this discussion of the symbolic meaning of housing have to do with the Corps' program to relocate people? Overall, it means that the impacts of relocation basically are dependent upon the meanings that the various persons involved with the situation give to it. More specifically, it means that:

a. Persons working on the relocation of others, are likely to view the relocation in terms of their personal position in an organizational structure and the role assigned or taken on by their organization.

Example: Political figures will see it in terms of election possibilities; budget officers, in terms of balance sheets; and moving companies, in terms of business opportunities.

b. Potential relocatees will vary in their perceptions of the part that such aspects of housing as physical amenities, costs, and social relationships play in their lives.

c. The community at large will see the relocation as improving their community or as a waste of its money or as an inequity.

It is possible that some persons, whether relocators, relocatees, or others involved may share similar perspectives. However, because of the particular relationship that each has to the social system, the chances are that his images and his overt behavior will not be in accord with that of persons whose roles in the system are different from his. Or, what is likely to happen, is that he will share a perspective with a person in another position, but the requirements of the total situation may make him behave in quite a different way.⁵

Example: A local planner may have a great deal of feeling about having to relocate an elderly person and really want to refrain from doing so, but given the demands of the situation, he has to carry the relocation plan through. (If he shows his sympathy and then proceeds to act according to the rules, he may be called "two faced" or a liar.)

Sources of Information

This report is based on several months of familiarization with alternative forms of flood plain management. The basic resources for the discussion of relocation were: (1) social science literature on relocation and on social psychological and sociological theory; (2) pertinent federal regulations;

(3) interviews with Federal officials, Corps personnel, and interested parties; (4) site visits (Ellicott City, Atlanta, and Charlotte); and (5) governmental documents and reports (both in-house and contracted) on relocation associated with projects of the Corps and other agencies (e.g., hydroelectric power; nuclear plants).

The sizable body of literature on relocation has little written on relocation in connection with non-structural approaches to flood plain management. There is a bibliography on forced migration (Donnermeyer, 1975) and another entitled Bibliography on Relocation of Families as a Result of Government Acquisition of Property (Cook, 1975). Among the approximately 300--400 references, approximately a dozen deal with relocation in relationship to water projects. As might be expected, these are studies of relocation because of reservoir construction.

It appears that the most pertinent study, one dealing with relocation as a non-structural program in flood plain management, is The River's Reach, a report of the New England River Basins Commission. It discusses the appropriateness of structural and non-structural controls in the Connecticut River area and reports the feasibility of relocation (and flood proofing) in order to reduce damages in six cities. Although the authors comment generally about local resistances to relocation, they do not provide information about individual reactions.

Studies focusing on specific population groups of relocatees that reveal what relocation means to people in their daily lives are few. However, Sue Johnson and R. J. Burdge (1974) report on responses of relocatees in a reservoir situation in a small community. Accounts reflecting a high degree of sensitivity to relocatees in urban renewal settings offer a source of high insights. Mermin (1970) presents a vivid account of his experiences relocating low income residents. Thursz (1966) offers one of the very few follow-up studies of what happens to people who have been displaced through urban renewal. The writings of Gans (1962) and Fried (1963) are from a sociological perspective. Their works on citizen reactions to urban renewal in Boston's West End have become classics in the study of social change.

Much of the literature on relocation concentrates wholly on the effects of relocation on the persons who have to move. Much of it tends to sympathize with the relocatees. Some scholars challenge Federal policies that disrupt community patterns and stimulate a sense of loss akin to bereavement. There is no doubt that these accounts remind us of the human factor, that the goal of programs is to improve the quality of life for residents. But, this very preoccupation of many researchers with the social impacts of projects on the inhabitants of an area has directed attention away from the conception of the community as a total community and of the community as an entity within the larger society. Flood control programs must be recognized as affecting persons throughout the social structure - not solely the flood plain residents.

There is a need for studying the social effects of relocation upon all people within a community.

Toward a Comprehensive Perspective: It is the writer's intent to provide a comprehensive picture of the social effects of relocation. This will be accomplished by identifying and analyzing the social factors that impinge upon the acceptance and/or rejection of relocation by (a) defining the problem; (b) describing the actors and institutions that are involved in the process of relocation; and (c) by interpreting the social effects of relocation in relationship to Corps projects. From this perspective, relocation is viewed as part of a dynamic process involving a network of individuals and institutions operating within a societal setting, the United States within the past quarter of a century.

FOOTNOTES

¹The 100-year flood plain has become the generally accepted measure for regulation since the introduction of the Federal Insurance Program. State and local regulations may be more stringent in delineating flood prone areas. The floodway is that part of the floodplain in which structures alter the height of flooding due to hydraulic restriction of flood flows.

²Our attention is focussed solely on removal associated with natural hazards and technological changes.

³The usage of addresses for identifying credit risks among persons seeking credit cards was recently identified as a form of "red-lining," i.e., discriminating against persons on the basis of their presumed sharing of negative characteristics associated with a given neighborhood's population. Washington Post, August, 1977.

⁴In the Yankee City studies, Warner (1941) pointed out that working class people have an abundance of flowers in their front yards; upper classes have mostly shrubs and grass. My own observations are that one group has "yards" and the other "lawns." Also, I have noted that people who have picture windows looking out into a street, i.e., in a living room, are likely to have a different life style than those who try to hide themselves from seeing or being seen by others, i.e., want "privacy, by having picture windows at the rear of the house or obscured from the street by shrubs and from the street by shrubs and trees (and, in the instance of some, high brick enclosures). Sociological methodologists refer to their readily observable indicators of behavior as unobtrusive measures."

⁵The ideas presented may be illustrated schematically as follows:

	Behavior	
	Public	Private
Status in the Social System		
Attitudes		

Chapter II: Actors and Impacts

It is a truism to say that "life is a process." Yet in our striving for objectivity as scientists we frequently attempt to capture a point in time as if it were static. And people of practical affairs, people faced with getting something done within an allotted time with an allotted amount of money, are strapped to the calendar as if a particular day is a beginning and another is an end. Our attempts to draw boundary lines in terms of time and space apply, too, to our inquiries into our concerns with relocation. We are prone to consider relocation as involving "before-move, move, and post-move" stages. And we are inclined to isolate the relocatee as if he is the only actor involved.

Reality, however, is quite different: there are many actors; their lives are inextricably intertwined. And the actors and their settings are interwoven into a complex whole. The history of Corps projects attests to this kaleidoscope of forces, persons, and places. In the long interval that may exist between the suggestion of a project and its completion, the climate of opinion may fluctuate; personnel may change; technology may be improved; and societal values and governmental policies and regulations may be redefined.

This report is framed within this theoretical orientation viewing relocation as an interactive process relating actors, institutions, values, time and space.

Assumptions Regarding Relocation:

The impacts of flooding can be reduced in three ways: on the one hand, attempts may be made to curb unruly waters (whether riverine or coastal); on the other, it may "let nature take its course" and seek to minimize flood damage to people and their property; and third, it may combine elements of the first two. Relocation, as governmental policy, is aimed at protecting people by moving them out of the flood plain. It rests on several assumptions:

- a. The government has acted to maintain human life in the face of potentially hazardous situations.
- b. It is presumed that individuals want to protect themselves from natural hazards; if they do not want to, the government should offer a carrot and a stick.
- c. The eventual evacuation of flood plains is the ultimate (though utopian) goal of moving people out of the flood plain.
- d. Responsible local officials concerned with the well being of people and environment often see relocation as a viable alternative.

e. Each community should bear a major portion of the responsibility for making decisions with regard to flood mitigation and more specifically with regard to relocation.

f. The Corps is committed to identify and evaluate non-structural and structural measures for flood loss mitigation and to recommend actions which are feasible and implementable in all authorized flood control investigation studies.

This report starts with the assumption that, over a period of time, the Corps and a local community have become involved in planning procedures for reducing flood damage, that the state and local governmental officials have been in close interaction with the Corps and other agencies as necessary, and that relocation has been identified as a feasible alternative for managing water problems in accordance with the locality's needs.

It will be our task to focus on the effects of relocation as a policy decision on people and institutions that are in one way or another associated with the policy.

We are looking at the social impacts of relocation in the context of a social interaction systems approach. The most pertinent elements of the system are identified in terms of their responses to the process that impinges upon them. In the pages that follow, attention will be directed to three key actors in the system, and, where appropriate, to their institutional affiliations. I will describe and analyze how actors and agencies respond to the policy of relocating people and firms occupying the flood plain.

Personae: Who are the key actors? They are policy agents, relocatees, and the general community.¹ We will use the term policy agents to refer to those persons who are involved in the development of the local policy and those responsible for implementing the policy. (In some communities, the same individual(s) may be involved with the formulation of the policy and with its implementation.) Some persons may be involved as members of pressure groups advocating or opposing the policy; others may sporadically express themselves to opinion leaders. To the extent that they apportion their time and energy to the relocation process their behavior is affected by it.

The relocatees constitute the target group in the flood plain area. They are the subject of the policy and the policy agents' involvement whether they have been informed of possible displacement, requested it, are in process of moving, or have recently been relocated.

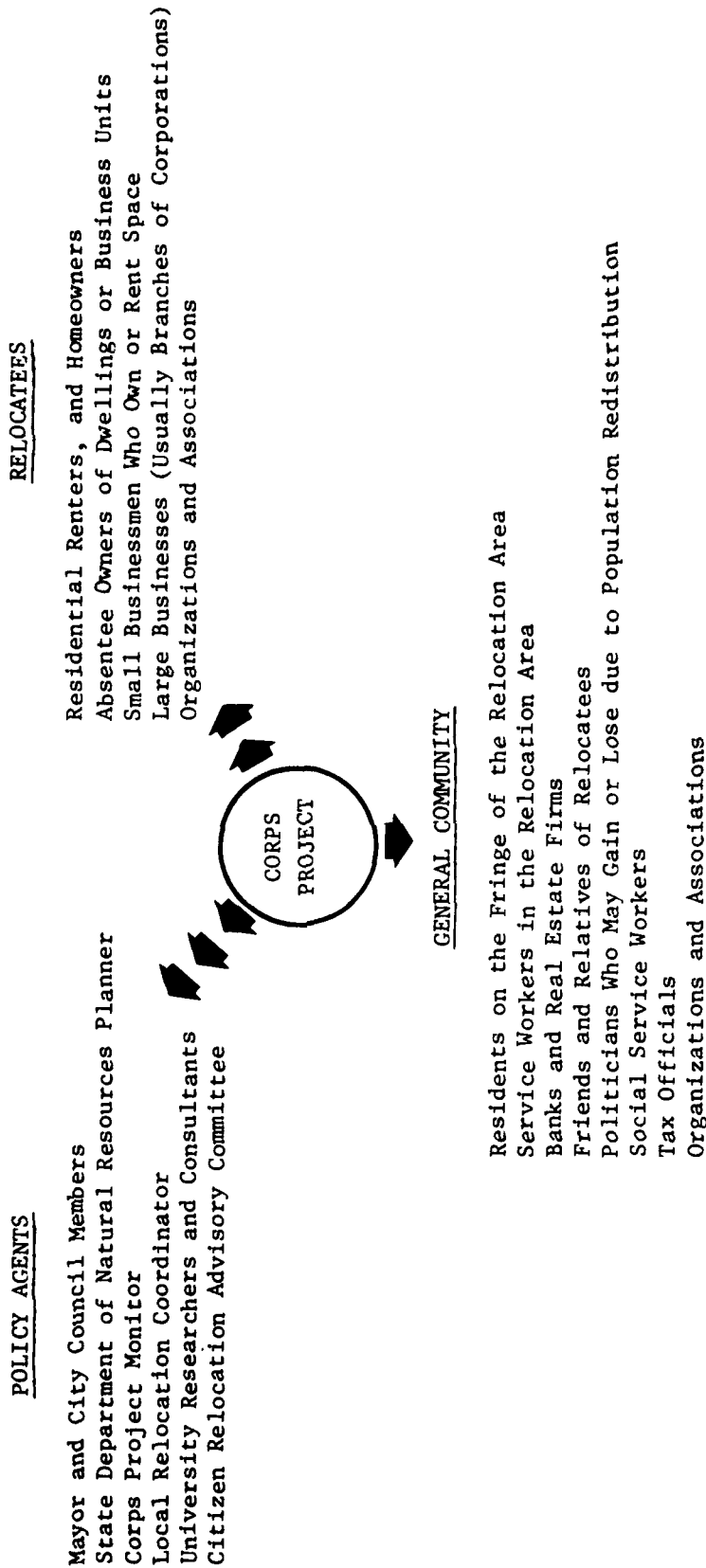
The third group of actors are those who constitute the community at large--the general community. In this study they are seen largely as a referent to whom other actors ascribe particular values or judgements with regard to the flood plain in general and relocation in particular. Thus, a public official may say that "the public doesn't want to pay for someone living in a flood plain," or a local resident might say "a different class of people is moving in here nowadays." The general community tends to be an image in the minds of other actors and is referred to by them to bolster their own perspectives or appraise the situation.

Agencies or social institutions as well as actors must be considered as being affected by the process of relocation. For an organization may have to adapt to its involvement with relocation. The nature of the adaptation will largely depend upon the type, extent, and nature of involvement with displacement. Firms within the flood plain that have to move, federal organizations funding removal, local political structures opening "relocation offices"--all have to modify their established practices in conjunction with relocation. The effects will be discussed in this report, particularly as they provide pertinent settings for the three classes of actors.

Types of Impacts:

Those who are more directly involved bear the primary impacts of relocation. Others are indirectly affected. Policy agents and relocatees are likely to experience effects by having to readjust their thinking and overt behavior most frequently and with the greatest intensity. Many segments of the general population may not even be aware of relocation taking place in their community; the impacts upon their lives may be more subtle and indirect. Nevertheless, at different points in time the same individual--whether agent, relocatee, or a member of the general public--may be affected in one way or another, or not at all. Further, he may or may not be aware of how any aspect of the relocation project impinges upon his life. Figure II illustrates the range of persons who are likely to be affected directly or indirectly, significantly or insignificantly, by a relocation project. It provides a basis for further systematic analysis.

FIGURE 1



FOOTNOTES

- ¹ A somewhat different classification of relocation participants is offered in *The River's Reach* (1976). The participants are: (1) elected and appointed officials; (2) individuals and groups concerned with the community's economic well-being; (3) those concerned with the preservation of the community's natural resources; and (4) those whose personal interests are affected. These categories are not appropriate for the more focused report herein.

Chapter III: Institutional Settings and Relocation

Major floods that take lives or destroy millions of dollars of property and completely disrupt communities tend to evoke the most humanitarian reactions from the American population--at the time. Yet after the crisis has peaked, most people forget about floods; flood victims return to the site of their homes; and efforts to relocate people before another hazardous event move slowly. Why don't we Americans show the same humanitarianism by evacuating people from the flood plain?

Part of the answer to this question is presented in the section entitled "People in the Flood Plains: Moving in and Staying." In these pages attention will be directed to the institutional settings and policy agents in relationship to flood plain evacuation.

Policy Agents in Institutional Settings:

The Federal Government: During most of this country's history, housing was viewed as outside of the ken of government. Private interests were given relatively free reign to build and destroy in the competition of the market place. In the Depression and in the 1940's the Government entered the housing market with assistance to local communities for public housing. FHA and VA loans provided assistance for middle and high income home buyers. During the Kennedy-Johnson era of the Great Society, Washington took a much more active role. At that time and in subsequent years, there was a tremendous amount of movement of people associated with the activities of the poverty programs and the high rate of mobility among persons working for federally-funded industries. The problems of relocation attracted Congress's attention as a result of continued problems from relocations in Urban Renewal, Highway and other Public Works programs. The Uniform Relocation Assistance and Real Property Acquisition Policies Act (PL-91-646) (URA) of 1970 set forth a Federal policy for all types of programs which require relocation. This law requires that people who have to move their home or business because of federally funded projects receive (a) a fair market price for their property if they are owners, (b) assistance to locate "decent, safe, and sanitary" housing, and (c) financial assistance to facilitate the process.

Even prior to the passage of the URA, the Corps has had a long history of helping people to evacuate areas needed for construction of structural projects. Most of the movement was in farm areas where land was available. The Corps recommended relocations subject to Congressional appointment and acted upon them with approval. The local people knew that the Corps had engineering expertise which they did not have, and that the outcome would be a structure which all could see. The situation today is different. The Corps still has to communicate with a number of the same agencies it cooperated with in the past; in addition, it is increasingly involved with HUD, HEW, and EPA. More importantly, however, the nature of the relationship is changed. Today, more and more of the decisions are made cooperatively in order to authorize relocation under a complex system of requirements and protective stipulations.

Interagency Concerns. Cooperation between agencies ranges from flood plain mapping to federal funding. For example, HUD* and the Corps are involved in the former. This mapping is essential for determining which structures are most likely to be damaged. Such information is crucial for HUD's FIA program. It is also essential for pinpointing who should be permanently evacuated.

Another branch of HUD, the Community Development Block Grant Office (CDBG), also may be party to the relocation plan. The Corps, the CDBG office, and the local government have to work out cost-sharing. (The law permits CDBG funds to be used to cover part of the community's required 20 percent contribution to flood plain management.) And the Office of Management and Budget (OMB) has an important role in the appropriation of funds for any project.

The relatively recent involvement of the Corps, HUD, and OMB, in cooperative decision-making implementation of projects requires adaptations on the part of all the involved groups. One interviewee stated that most agencies view the Corps as in the construction business that handles dams and channels. On the other hand, HUD is perceived as a social agency which probably would have difficulty handling the commercial aspects of relocation. The organizations have to change their ideas about themselves and also the images that others may have when it comes to something as new as cooperation on relocation. The agencies must concur on the usages to which the evacuated land will be put.

These changes in the Corps' role in relation to non-structural flood plain management reflect a new emphasis on more active participation of non-governmental groups and the inter-coordination of several agencies. This becomes a more complicated process of decision making and implementation than when the responsibility is borne by a single agency.

Aside from the effects that these changes have on the activities of the Corps itself, they have the cumulative effect of prolonging the process of authorization of projects!¹

Local Policy Agents:

Relocation is one way of coping with a water problem. Before it can be considered, the community leadership has to recognize that there is a hazardous situation and has to want to do something about it. Interestingly, Dynes and Wenger (1971) found in their study of several communities faced with annual flooding that leaders did not consider flooding to be a significant problem. Only five out of 55 leaders cited water-related problems as being major community problems. (Four had vested interest in water problems and the fifth had a waterfront home!)

* U.S. Department of Housing and Urban Development

This lack of awareness--or, more properly, of perception--of a water problem may be because community leaders themselves do not reside in the flood plain nor do their most vociferous constituents or pressure groups.² Therefore, they do not define actual or potential flooding as a high priority problem.³

Aside from an expressed interest, local policy agents must answer "what is a flood plain?" Here, there is little agreement, particularly in terms of the fringes of the plain. It is one thing for an engineer in his office 200 miles away from a community to identify where the waters are likely to cause damage with a fair degree of confidence; it is something else to be the person in the plain who is going to lose his home or business, especially when his building is on the edge of the plain and during his ownership there has been no flooding. I was told by a planner that local officials are strongly pressured by realtors to modify the definition of the flood plain, particularly in the fringe areas, in accordance with their special interests (e.g., to get the government to buy a house which they cannot sell or to provide greater freedom for selling in a potentially hazardous area).⁴ Another instance was cited by a Corps person who recounted the case of a homeowner who wanted to build a retaining wall to protect his garden. An inspector said it would be illegal because it was in the flood plain. (The man was told by the Corps person to check with the map makers, and then go back to the public official with the knowledge of whether it was in the flood plain.)⁵ In such situations, the policy agents may drag their heels in order to appease all parties.

Not only must the local policy agents know what portions of their communities lie within the flood plain, but they must also be aware of occupancy restrictions consistent with flood risks. It is one thing to map floodways, flood plains and flood fringe areas; it is another to identify which structures are to be more closely regulated. Since state and federal regulations may vary, there is no uniformity with regard to occupancy requirements in the flood plain. In some instances the floodway and the flood plain are viewed as coterminous; in others, they are not. Further, in any given local situation, cost-benefit analysis (and analysis of the impact of more serious floods than the .01 (100 yr.) flood occurrence) may result in the finding that relocation is justified only in the .1 (10 yr.) flood area. Because the terminology of the flood risk management is complicated and impacts are varied across the flood plain, political decisions are often based on judgment to a considerable degree, rather than a simple rule.⁶ The resulting ambiguity opens the door for a political decision. And, since local decision-makers frequently are realtors, businessmen, and professional members of the community, their decisions may be influenced by their personal interests as well as their concern for community well-being.

As guardians of the community, local policy agents invariably are concerned about the economic condition of their jurisdictions. Economic growth and taxes are two of the primary motives for their activities. These concerns affect their perceptions of relocation.

On the one hand, they may be desirous of maintaining existing settlement in the flood area because of the taxes paid. If there is little available land or housing elsewhere in the city or if the CBD is in the flood plain, the current usage of the area may be considered essential. It may not be feasible to evacuate the area because of a lack of funds for alternative usages. Furthermore, the removal of buildings for the protection of pipe lines, utilities, etc., in the open space may be too costly. Another consideration, is the pressure of organizations like the John Birch Society which strongly oppose "governmental interference."⁷ On the other hand, the policy agents might be desirous of clearing the flood plain of existing structures for several reasons:

1. The protection of services (trash removal, street repairs, etc.) may be more costly than in other sections of the city;
2. Tax returns are insufficient;
3. Alternative usage of the land may produce more revenue;
4. Alternative usage would increase the value of the land adjoining the flood area;
5. The costs to the community of assisting during flood crises is too great (even with state and federal help).

In addition to these essentially economic factors, the policy agents must take into account what relocation relative to other community actions might mean to their community status. As one interviewee said:⁸

"A local politician whose term is about up or who is running for reelection would much prefer getting money for a new bridge or sports arena to which his name can be attached. Every politician wants to have something named after him. What good does it do him to go through all the work of getting money in order to empty out a piece of land and move some people?"

And, as concerned as he may be for his personal fate, he is also concerned about the general public.

The General Community:

Policy agents are subject to the direct and indirect pressures of community members who may not be directly involved in the relocation issue. For instance, the values of the community are of utmost importance. If there is a sentiment that the community would be beautiful except for the structures in the flood plain which constitutes an eyesore--according to some people,--then, over the years there may be support for "cleaning the neighborhood up." Or, if it is known that there might be conflict as to where to locate displaced persons, then there may be a general consensus to let things be. For one of the issues that has surrounded the relocation process is whether relocatees should be housed in the same area or whether they should be dispersed throughout the community.⁹

There are people in the general community who would like to see the flood plain evacuated. Some of these people have been influenced by environmentalists who feel that the land must be protected for future generations. Others would like to see the land converted into parks and recreation areas open to the public. Closely related to this view is one that calls for a rejuvenation of the city and its beautification for general enjoyment and in order to make it more attractive for economic development.

Summary:

The aim of this section has been to provide a backdrop for the understanding of the framework within which the process of relocation takes place. Representatives of the federal and state governments, local policy agents, and the general community are involved with persons living in the flood plain and bring to bear their perceptions of the situation in their interactions. Needless to say, each is very much involved in his own mode of work and daily living. Therefore, in association with flood plain occupants, the degree to which perspectives are shared may affect the act of relocating. It should be stressed, as pointed out in the preceding pages, that people in different institutional settings frequently do not share the same perspective. Similarly, however, people in the same settings may also differ widely in their perceptions. In Chapter V attention will be directed to persons who constitute the target population in the relocation process.

FOOTNOTES

¹ Corps projects have always taken a number of years from initial authorization of the Corps to study a problem to project completion. It appears that despite the fact that no construction is necessary, the newness of the non-structural approach and the application of the same procedures for approval as in structural changes there are no difference in the time required.

² There is a need for national data which would indicate occupancy in flood plains, i.e., types of business, socio-economic characteristics of residents and businesses. I have asked approximately fifty people whether mostly rich or poor people live in flood plains. The majority of my respondents said, "About the same number." Some of the literature indicates that flood plains are occupied by poorer people, but there is little documentation. The writer has not been able to locate any systematic analysis which would provide national evidence of the socio-economic status of flood plain occupants. Her inquiries in specific cities provided no such information either. Although Census Data is available for many communities, it has not been plotted on flood plain maps. A flood plain map with census data superimposed would be useful.

³ A question that has yet to be answered by future research is "under what conditions does flooding become a community problem for which mitigation is sought?"

⁴ Interview Number 8.

⁵ Interview Number 22.

⁶ Interview Number 33.

⁷ In conversations with people from the Midwest and Southwest at the Asilomar Conference, Spring, 1977, a general opinion was that Birchites are opposed to federal aid for persons in flood plains. An informant said that they take the attitude that "if people are stupid enough to buy in the flood plain, then they should bear the consequences."

⁸ Interview Number 14.

⁹ Interview with HUD personnel, it was very apparent that there are these distinctive perspectives among them, too. Some believe that "affirmative action" means that people should be intermixed; others take the point of view that people are more comfortable in their own group.

Chapter IV: People in Flood Plains: Moving In and Staying

Although figures are not available as to the number of occupants of flood plains, the evidence suggests that there are millions of people and firms located in them. Two questions immediately arise, "Why did they move there?" and "Why do they stay there?" The answers may be categorized as knowledge, myths and beliefs; economic factors; and community identity.

Knowledge, Myths and Beliefs:

All of us learn to cope with life by creating mental constructs that support what we are doing or want to do regardless of objective conditions. These constructs are based on our knowledge--invariably limited--about the world in which we live. Some people live in a flood area because they do not know it is a hazardous location. No one has told them so. Landlords and real estate agents may ignore passing on this piece of information. Sometimes, if they do, they minimize its importance so that the potential customer or renter does not consciously register the information.¹

Other individuals may know that they are moving into a flood area but they do not comprehend the significance of it. A college student reported:

"My father wanted to go into business in X town. He talked to a lot of people there who made the place appealing to him. They told him it was in a flood plain, but they had had a sizeable flood a couple of years ago. So--it was unlikely that there would be another big one like that again for years and years. So far, there hasn't been any."²

Few people seem to understand the concepts "100-year flood, 10-year flood," they assume it means that flooding will occur once in a hundred years or in ten years.³ Therefore, they may feel safe if they know that a flood took place within the decade. Or, they may have a nonchalant attitude, thinking that life is full of risks and who knows where they will be in ten years? It may be remote in their concept of time. Obviously, it is very difficult to comprehend theories of probability.

There undoubtedly are many people who know that they live in a hazardous location and have very strong feelings about it. They are there because they moved into the area before it became hazardous! This has been the case of the long-time residents of Baytown, Texas. The land has been subsiding because of the withdrawal of ground water for agricultural, industrial, and municipal purposes. Approximately 2,000 people living in a scenic area that one described as "one of the most beautiful places I have ever lived," now find themselves regularly exposed to flooding. (For many, this knowledge is the basis of their desire to move out.)

So, knowingly or unknowingly, people find themselves living in flood areas. Once their roots are established in the community, other factors enter into their staying. Some make the situation more tolerable by discounting the potential hazards. They view any past major flood as "exceptional--a first" that is not likely to happen again. And they point out that there are other natural hazards that are potentially as dangerous, e.g., the San Andreas fault, which do not lead people to relocate. (Environmental Statement: Flood Protection on the Mississippi River, January 1977.) Such rationalizations help them to resolve their cognitive dissonance.

Economic Factors--Objective and Subjective Aspects:

Economic considerations play a highly significant role in why people move into flood plains and continue to live there. There is a general belief among students of flood areas that housing in the flood plain is cheaper than elsewhere.⁴ This probably is true in many instances, e.g., the case of public housing being located in flood areas. I don't know whether it is true in high status locations like Peach Tree Creek in Atlanta or the Museum area of Charlotte. (If the property is known to be flood damaged, it may be marketed at a relatively lower price than other property in the neighborhood, but its market price may still have multiplied because of inflation.)

Whether or not the housing is the least expensive in the area is really unimportant in the eyes of the renter or buyer. What is important is that he thinks it is the best house for his money or the least expensive place that he can find (given his time, energy, information sources, etc.). Thus, the son of a Corps engineer bought a house in a development located in a flood plain because "they loved the house--it had more to offer for the money than anything else they had seen."⁵ In other words, this case illustrates what is so often the situation--the occupant perceives the range of conveniences or assets available to him for the amount of money which he has to spend on housing. Convenience to work, schools, shops, transportation facilities, friends and relatives and organizations and churches are considered along with the price. Studies of residential patterns show that the cost of dwelling places may have been the same in the Italian, Polish, and other ethnic neighborhoods but that the people were attracted to their own ethnic group. Although cost may be the stated reason for a selected structure, it symbolizes a whole complex of other considerations.

Economic considerations enter into why home owners and renters stay too. Those who have worked over the years to pay off their mortgages, in many instances, simply cannot afford to start anew without some kind of help. It is my opinion that once a homeowner's monthly payments are primarily for principal rather than interest, his investment in the home is too great to warrant buying another home (unless he is well-situated financially). Inflationary factors and the local housing market must be considered.

T. M. Mills (1977), a University of North Carolina engineering student, conducted a study of the flood experience of black people by interviewing 25 homeowners and renters. He reports that the renters in a relatively low cost housing project were highly mobile. "Most feel that they can tolerate the hazards or if things become too rough they can just move out." (p. 3). On the other hand, "Nearly 100 percent of the homeowners would sell their property if they could get a decent price for it." (p. 1). This attitude is shared by other homeowners in flood plains who feel that they cannot get what they would like because of the location of their houses. Further, unless the Flood Insurance Act is modified, mortgage money from federally-involved banking institutions is unavailable to the buyer.⁶

Business firms locate in the flood plain for several economic reasons. In the first place, there are many communities which trace their early history to serving as a trade center on a waterway. The flood plain area has been the hub of the city's commerce and industry for generations (even though its pinnacle has passed). The firms that occupy the old buildings may have housed a particular business for decades. Secondly, later occupants may find that low cost accessibility of labor and transportation, and available space make flood damage bearable. The more successful businesses or industries, particularly corporate branches, may find that floodproofing or insurance make it feasible to be located in the flood plain. In one community that is planning to relocate flood area residents, a corporate firm has expanded its operations and will probably buy up more property as the relocation is implemented.⁸

Another group of businessmen who go into the flood plains in their search for a livelihood and profits are the real estate developers. They will buy agricultural land near a city and build tract houses. Thus, they are able to offer buyers more house for the money at favorably competitive prices. For example, a metropolitan Atlanta builder had no problem attracting buyers to his development. Some of these new home owners found their houses flooded between the time of final purchase settlement and their moving in!⁷

White (1958) noted that in Boulder, Colorado owners felt that "flooding is a calculated risk well worth taking. For example, the argument by the proprietor of a new supermarket and by the director of university plant development is that damaging floods are so infrequent that occasional damages would be more than offset over a period of years by the advantages of income or low cost attached to flood plain location." (p. 99).

It appears that the same viewpoint is echoed in Lyndon, Vermont, 18 years later:

Much of the land in the flood plain in Lyndon is prime land and provides some of the better business locations within the town. Because of this fact, profits tend to be higher for these businesses and allows them to assume the risk... and still remain competitive. (The River's Reach, 1976, p. 144.)

Thirdly, there is the small businessman who operates on the margin. It may be that he cannot afford to move out because he has built up his trade among the local people over the years. They would be unlikely to follow him to a new location; he cannot afford to spend years developing a new clientele. And finally, there is the absentee owner of a small building or a house or two which he rents. It well may be that he cannot sell it without repairing the property and he cannot afford to repair it because his income from it is too little.

Community Identity:

It is a common practice in the literature on relocation to identify specific variables that appear to be associated with positive or negative attitudes towards leaving one's place of residence. Thus, age, length of time in the community, sex, income, and organizational memberships are used as indicators. Frequently, research shows a positive association between these factors and reluctance to move. However, the opposite conclusion is also reached. These contradictory findings may be reconciled. In keeping with the theoretical orientation presented in Chapter I referring to the significance of one's home to one's identity, I would suggest that the explanation may be found through the analysis of another conceptual framework: (a) identification with community, and (b) orientation toward the world. The two are facets of the same coin. I have arrived at them through my interpretations of writing on relocation (Gans, 1959, 1962, 1973): Fried (1967), Burdge (1973), and others. Also, the social psychological literature contributed to this perspective. Rossi (1972), for example, points out that communities may be characterized on the basis of solidarity (i.e., identification of the residents with the locality) and integration (i.e., the ties that people have to one another).

(a) Identification with community. On the basis of my studies of communities, I have concluded that people have a deep personal attachment to a community in two senses. On the one hand, they have an image of a community which evokes strong emotions. Thus, many people who infrequently go back home to New York, "love the city." I suspect that most of us have a similar sentiment toward the community in which we were born. Strauss (1968) has written on the importances of such images in social relationships.

On the other hand, many people derive their sense of self-hood through their daily interactions within a particular physical locale. For example, Gans found that some residents of Boston's West End satisfied most of their personal needs within the local community: shopping, visiting, church-going and working. It was among these people that the desire to stay in the neighborhood was strongest. His study brought out that these tended to be women, elderly and less mobile, who had lived in the area a long time. From their perspective, their survival was fused with the survival of the community. Accounts about the residents in Baytown, Texas, and on the island in Prairie du Chien, Wisconsin, and Kaskaskia Island, Illinois, indicate that although some of the people go off to work in the city, their real "living" takes place where their homes are. To stay in their home communities means to maintain a life-style that is closely interwoven with their personal identities. A widow in Baytown expresses this point-of-view:

"I do not have a mortgage on my home, and do not need assistance from the government as so many of the people in Brownwood do. My husband and I worked very hard to clear our mortgage many years ago in order to live the remaining years after 60 years in peace and quiet.

My property is very privately located and many members of the community feel that by staying in my home as I have since the death of my husband has been one of the leading factors in my adjustment to widowhood." (1517-08)

(b) Orientation toward world. Whereas some people see the limits of their community as their "world," others see themselves as essentially "citizens of the world." Merton (1957) in his discussion of leaders, referred to two types, "locals" and "cosmopolitans." Whether classifiable as "leaders" or not, there are people who are not afraid of new places, of trying something different, of moving great distances. The literature suggests that they are people who feel that their position in life may be improved by the move; ergo, they are willing to take a chance. On the other hand, the "locals" know what they have and cannot see how their lives would be bettered by moving. Shaw (1975) cites a number of authors who point out that young, educated, professionals, married and without children tend to be mobile. (However, he does impose the caveat that economic opportunity, size of community, and other factors account for variations in study findings.) In relationship to relocation due to water hazards, I would like to posit the hypothesis that persons who have a cosmopolitan outlook on life--an awareness of a range of alternatives, a feeling of ability to cope which gives a degree of control over life, ergo, lesser fear of the unknown--are persons who are likely to be more willing to move out of the flood plain. Conversely, persons whose world is more circumscribed, who are locals, are less willing to leave.⁹

The foregoing suggests, then, that the persons who are likely to feel threatened by the prospect of relocation and to resist it are persons whose sense of identity and orientation to the world are tied to the particular place in which they live.

FOOTNOTES

- 1 Interviews Number 34 and 48.
- 2 Interview Number 21.
- 3 I spoke to a researcher who had directed a study involving the installation of a large technological project in a flood area. He said, "The Corps wanted to spend all that money just in case there would be a flood that might come once in a hundred years!" The precise definition of flood risk in terms of probability is that in any year, the chance of a flood event of a given magnitude is .01 or one chance in a hundred. This event could occur several times in any given year, or several times in any given 100 year interval. Its expected value, in the very long run is once per 100 years.
- 4 This is reportedly the case in communities that have been studied. However, since a limited number of communities have been studied, this has not been established.
- 5 Interview Number 29.
- 6 Interview Number 17.
- 7 Interview Number 10.
- 8 There are important research implications herein. Briefly stated, it is implicit that the indicators of these two dimensions may (a) differ from the usual ones tested, e.g., age, sex, race, and (b) be the same ones usually used but selected in terms of their ability to operationalize the two dimensions, or (c) require the identification of other variables.

Chapter V: People in the Flood Plains

Phases of Relocation

Many years ago, Gilbert F. White actively proposed that instead of protecting people from flood waters by controlling them, the behavior of people should be controlled. Over the decades he and his associates promoted the concept of flood plain management, i.e., the mitigation of flood damages through the adoption of one or more procedures.¹ One of the alternatives recommended is to keep people and structures out of a flood plain so that the waters may flow naturally. If they are already located in a hazardous area, the goal of communities should be to eventually evacuate occupants and return the land to its natural state or to parkland and recreational areas. In 1966, President Johnson presented to Congress "A Unified National Program for Managing Flood Losses," a report by a task force chaired by White.² Thus, the perspective that White had promoted was incorporated into national policy.

The 1966 program has provided new challenges for the Corps, including the area of relocating populations, even though moving people is not new to it. In order to achieve its mission of controlling flood waters, the Corps has had to evacuate people. Generally this has been necessary to flood unflooded lands for reservoirs. By and large, farmland has been acquired. Sometimes, households have been displaced; at other times, whole towns are moved, e.g., Hill, New Hampshire and Mannford, Oklahoma. This has given the Corps a great deal of experience in relocating people because of structural flood control plans.

Relocation as an alternative to structural controls (or to be accomplished in conjunction with other structural and nonstructural alternatives) is still in the planning stages. Several communities have come to my attention as involving the Corps in the planning process: Baytown, Texas, Tittawabasse, Michigan, Prairie du Chien, Wisconsin, Kaskaskia Island, Illinois, and communities in the Connecticut River valley. Since as of this writing none have actually conducted the relocation of people, the evidence about relocation in these instances is limited to what has taken place to date.

However, data on relocation is available from a variety of other sources: relocation in connection with structural flood controls and other technological changes; relocation with the assistance of nonfederal agencies; and urban renewal. I will introduce these materials as they appear appropriate to the subject at hand. First, attention will be directed to the ways in which people respond to the idea of relocation; second, to broader problems in relationship to evacuation; and third, to the anticipated outcomes of relocation (as suggested by other studies).

Phase I: The Process Starts

Theory Reiterated:

It is common for people attempting to find solutions for problems to seek the one, ideal solution as if it is applicable to everyone. Since that is an impossibility in any population, we must remember what was emphasized in Chapter I: individuals vary in their contacts with different people and groups and in different time frames. Further, the key concepts introduced in this report--policy agents, relocatees, general community; cosmopolitan/local orientations; self identity--will be utilized; and finally, emphasis is in terms of how I see relocation in relationship to Corps activities. I would like to further remind the reader that Corps projects--as well as those which look at evacuation in connection with hydroelectric or nuclear power and other technological changes, have generally been concerned with the removal of rural or agricultural people. Today, the concept of flood plain management is increasingly directed to regulation within urban areas. (It is here, perhaps, that there is the greatest need for information; it is here that we must rely primarily upon the literature of urban renewal.)

To facilitate the analysis of relocation as an on-going, dynamic process, the process will be differentiated into three stages. The first is planning and preparation; the second, the move; and the third, post-movement adjustments. These stages were identified by Dr. Ruth Mack (1975). I have adapted and expanded upon her ideas in the process of transposing them from structural to non-structural project settings.

Institutional Activities:

"I've been pushing this for 30 years!" These were the words of a woman who has been wanting something to be done to help out people in the hazardous community in which she lives. Why does it take so long? Part of the answer lies in the interagency cooperation that is needed both at the local and national level as described in an earlier section. Part of the answer may be explained by theories about social movements for collective action.

Officially, requests for assistance in coping with flood problems come from the local people who turn to their governments for help.³ The local government in turn appeals to the Congressional representatives in their jurisdiction. Congress has to authorize the Corps to study the problem. As the news of the proposal spreads, people who live in the flood plain may become eager or anxious depending upon their feelings toward flood protection. (Relocation as an alternative may not have been suggested at this point.) Approximately three years may pass before the Corps receives authorization from Congress to proceed with the plan.⁴

Once the Corps receives approval to study the problem, the long process of interagency cooperation starts. The local community must assure the Corps that it will meet project requirements with regard to easements, liabilities

and financial contributions. It may be difficult for the communities in which relocation is to take place to meet these requirements. Recently Prairie du Chien was awarded Community Development Block Grant funds by HUD to meet the local share of relocation expenses. Its receipt of the funds is dependent upon the processing of forms by the designated official. The plan to move people is expected to start shortly.

The situation in Baytown, Texas, was somewhat different. Due to the subsidence of the ground largely as a consequence of groundwater depletion that became marked in the 60's, residents sought federal help expecting some kind of structure to resolve the problem. However, by 1973, evacuation was the chosen plan and 334 of the families signed a petition favoring it with federal assistance. In May, 1974, the City Council offered its cooperation in support of relocation. However, as of this writing (Fall, 1977) local and federal groups are still working out arrangements for relocation!

Relocatee-Reactions:

Naturally, as pointed out in the introduction of the report, individuals and groups respond differently to the same situation at any given point in time and the same individuals and groups may respond differently from their initial responses at other points in time. This is important to remember in interpreting research findings.⁵

Leadership: Singh, (1975) in an attitudinal study of the responses of a small town's population to a proposed dam, points out that the local leadership became involved only after other communities had initiated activity.⁶ Something like this also may happen with regard to relocation. Part of the explanation may lie in the fact that those people who might be leaders may have taken the initiative to move out of the flood plain. The data from Baytown suggests that this may have been the case there. Similarly, the mayor of Prairie du Chien moved away from the flood area in which he grew up. Thus, it may be that persons with leadership qualifications who do not feel bound to the local neighborhood move away. The neighborhood of the relocatees may then have a shortage of persons with leadership attributes.⁷

Another group of people who might otherwise be involved in the relocation process also leave the community. They are persons who (a) feel that the threat or actual experiencing of floods is not worth their while, (b) have the means to improve their situation; and (c) have the opportunity to move and take advantage of it. This is exemplified by a Baytown resident's comments:

"We resided in the area from 1944 to 1974, and moved out only because in our retirement years we did not consider it wise to continue moving furniture, erecting seawalls, having dirt hauled in, etc., when the subsidence was continuing to make such efforts of no avail. Also, we considered that life is too short to be running the risk of drowning." (1715-08)

Groping: During the first stage, some of the people who may have to move may immediately make up their minds. (In the small communities which Mack (1975) studied, she found mostly negative reactions.) Others may take time to sort out their feelings about the prospect of relocating. As time goes on people start to raise specific questions: How much will they get for their houses or property? Where will they move? What will the effects be on members of the family, their jobs? When will the move take place?

As time passes, the individual may become more involved with neighbors, rumors may become rife, and the Corps and the community may hold public meetings. Mack notes the anxiety that is intensified as the homeowner receives correspondence about the move and deals with the appraisers of his property.⁸ It is in this period that there may be a spurt in the number of people moving out on their own. This seems to have been the case in Tittabawassee and Prairie du Chien.⁹

Definitions of the Situation: How people react during this phase--or any of the other--depends upon their "definitions of the situation" (Thomas, 1937). If they feel that moving out of the flood plain is for their own well-being, they may be satisfied to leave the area--especially since federal aid is provided to them. They may have wanted to leave but felt that they could not sell their homes nor could they afford to abandon them. However, they may nevertheless experience anxiety akin to that of persons who do not want to move.¹⁰ Both groups may be concerned that they will not get enough money to afford the change, their homes will not be appraised for the amount they would like to get or they cannot make plans or take action because of the vagueness of timing. The latter heightens tension because the process may take years. One cannot look for another place because no prospective seller (or landlord) will provide a contingency clause for an indefinite period. In addition, credit may not be available to him because creditors may not be able to accept his house as collateral (Drucker, et al., 1974). And one does not know whether to invest in the maintenance and repair of the property. Further, if one waits until other relocatees have their houses appraised and are ready to sell to the government, the local area may experience a housing shortage--or at least, an inflation of prices.

Then, too, the relocatee may wonder about his benefits: the amount of money that the relocatee receives for his house is augmented by a maximum of \$15,000 which may be applied to the purchase of a new home (including an allowable interest differential cost) or up to \$4,000 for renters. If the relocatee's home has been appraised at \$12,000, he may have difficulty finding another one for \$27,000 that meets federal standards and local codes. Assuming that he can find a home, he may be anxious as to whether he can meet the higher taxes and maintenance costs in the future! His anxiety may be increased if there are repairs that need to be made on the house.

Neighborhood Change: During this first period, the neighborhood may undergo change. With the departure of some of the residents, some houses may stand empty and abandoned, an invitation to squatters or vandals. Others may be subdivided for renters who are willing to lease on a short-term basis. The turnover in residents may be accompanied by increasing deterioration in the property (particularly if any flooding takes place and the owner is reluctant to invest in repairs). This may lead to the accelerated entry of a different population group into the neighborhood. Their life styles may be distasteful to the established residents. (Interviewee Number 39 expressed her displeasure with out-of-towners who were moving in and disturbing the quietness of the area.)

Grief: Time will take its toll on the community in other ways as well. The community will lose members through death as well as through moving; the absence of those who have left may break the bond others have for the community. They may be stimulated to leave sooner than not at all or later. Thus, normal grief that people are likely to experience as a result of separation from loved ones and familiar faces is compounded by the uncertainty of the time when one himself will move.

Marc Fried (1963-, 1965, 1967) contends that the loss of one's home due to urban renewal stirs emotions akin to those due to a loss through death. His perspective has influenced many researchers to attribute unhappiness to forced relocation. (Burdge, 1973; Donnermeyer and Korsching, 1976; Johnson and Burdge, 1974). It may be that during this initial phase of the relocation process, the indecision and uncertainties may be akin to what friends and relatives experience when a life is hanging in balance.

However, it must be borne in mind that the probability is that those people with a local orientation who closely identify with the community are the ones who are likely to experience the greatest suffering. Further, as John Moge (1974) has pointed out, one does not know how well-adjusted to their communities persons who experience intense grief were. There is the possibility that relocation becomes the focal point for their cumulated frustrations and anxieties.

Business Firms:

The businesses in the community that have catered to the local residents may either gain or lose during this interim period. For if some of their customers had been among the first to move out and they experienced loss at the time, the entry of other occupants may stimulate their business. However, to appeal to the new clientele, they may have to change their stock; this may drive away other customers. Whether he profits or loses during this period, the small businessman is likely to be extremely anxious at the contemplation of vacating his establishment. He may know that the Federal government will help him relocate. But, it cannot reimburse him for the good-will that he established over the years with his customers nor does he have any guarantee that they will follow him to a new location. And, he cannot sell the business that he had built up.

The following 1971 communication (1517-08) indicates some of the concerns of the small businessman who wants help in coping with flooding:

The state says that we must adopt a flood way zoning ordinance that is very stiff on regulations... We cannot repair property damaged more than 50 percent of its value...Who sets the value? Is it the tax-assessed value? No one answers these questions. No one can sell his property because no one can do a thing with it. You can't improve it or anything else, so what value is it?...I know of homes assessed at \$800; 50 percent of the value is \$400. Four hundred dollars is what the repairs can be, not \$410. Then you cannot repair or move back in. You just lost your home to the bulldozer...If the owner repaired the home by himself it would be much less than if several contractors bid on the job...We need your help and need it at once! Please!

The fate of an industry that is part of a national chain may be the same. However, indications are that, as the consuming population declines, it is more likely to close its doors. This, of course, means a loss of jobs for its employees and a curtailment of services for the residents of the area.

Two Cases:

The case of the residents of a Midwestern trailer community illustrates some of the factors that are noteworthy during this first phase. Interviewee Number 4 reported the following which I have paraphrased:

Nestled in an isolated valley and situated on approximately half-acre lots are 25 trailers alongside a spillway. The residents, mostly older, retired people, their married off-spring, and a few others, pay lower rentals than other camps require. They constitute a fairly cohesive community that developed over 20 years. Now they are being asked to move because of the potential hazard that exists should the dam overflow.

Several questions have been raised which make the citizens anxious. Retirees on limited incomes fear for their future because the URA provides a maximum of \$4,000 to be applied to rental property up to 4 years. They wonder how they will meet rising rents since they undoubtedly will have to pay more rent than they are currently paying. In addition, some own land and trailers, others own one and rent the other. They have questions as to how the law adjusts to this type of a situation.

And, they ask where can they go and have as private, inexpensive, and spacious homesites as they have. For since their community was opened, the city has zoned the area in a way which limits the location of trailers because they are considered less desirable than other homes. Therefore, the relocatees would have to--if there were space available--move into the city's other trailer park. It is large; the trailers are close together. The people who have enjoyed the space and neighborliness of

their present site don't want to move to the big camp. But, where should they go? And, they ask, "Why can't they stay where they are if they are willing to take the risks involved?"

Similar fears are expressed by citizens in another locale. They expect to be relocated in order to let nature take its course. A letter in the files (1517-08) states:

"I was born and lived here for 56 years. I have relatives, friends, and neighbors, some who have lived here ninety years. We bought or built our homes, raised them above any normal high water stage, and only once in the last ninety years did I have water enter our homes, and that was the 1965 flood, mostly caused by the stupid management of the locks and dams, the proceeding fall, even then we never asked or received any city, state, or federal aid...

"We like it here, we do not want to move and are not going to move, is not America a free country? Where you can live where you want to. A home is a man's castle.

My business is here a block from my home...to take care of my business, I have to live here, we are too old to start over some place else, and do not want to, this business is our living. Are they going to try and take that away from us too?"

Sixty-three others from the same community hired a lawyer to press their case. These elderly, life-long residents claimed that they were happy where they were, were willing to run the risks involved, and did not want any governmental help! Like the trailer camp people, they are afraid to start over again economically and socially.

The two communities have another similarity which it is important to note: in "voting" situations, the majority of the residents in both cases were not opposed to relocation. At a meeting of the trailer park residents, one-third opposed; one-third were willing to move; and one-third did not seem to care, according to the interviewee.¹¹ A vote taken in a community-wide election in the other area tallied 224 for and 62 against relocation.¹² So despite the anxieties associated with facing relocation there is evidence that many people may accept, if not anticipate, moving out of flood prone areas for their own protection.

Policy Agents and Relocation

Necessary Conditions: During this initial phase a great deal of activity impacting upon relocatees may be taking place among local policy agents. The agents must agree upon a plan of action to obtain funding, ascertain whether the city is financially able to provide its share of relocation funds and contribute to plans for the usage of the area that will be evacuated. However, such agreement is dependent on (a) awareness of the flood problem, (b) definition of it as a problem worthy of solution by them, (c) willingness to devote limited local resources to solving the problem, and (d) leadership and supportive personnel consenting and competent to work on it. (Evidence cited earlier suggested a lack of interest in flood problems by city officials. Persons outside of the flood plain are likely to have the same attitude--especially if city leaders do not live in the flood area.)

Of Time and Work: To accomplish all of the above, the policy agents need to devote their time and effort to the relocation process. They have to determine which federal and state agencies offer assistance¹³ Once they have learned what is available, they have to master the art of making application. They must maintain accord among themselves and be confident of community backing. This is complicated if some of the officials are lame-duck or too new to the situation.

Changes: These activities take a tremendous amount of time, causing delays that run into years. The local situation changes in terms of people involved, financial conditions, priorities. And at higher levels, the laws are constantly changed along with rules, regulations, and policies. For example, in May, 1977, President Carter issued a new Executive Order.¹⁴ The local agents will have to review the new regulations to determine whether pursuit of them will be to their advantage or whether to try to continue under the older ones--if they will be permitted to do so. This may cause further delay, redefinition of who should be included in relocation, choices to be presented to relocatees, and financial rearrangements.

During this initial phase, then, there is a dynamic process of activity going on among persons who may not be the ones to be relocated themselves but who must do the planning and decision-making. They are involved in networks of interaction with people within and outside the community. To the extent that their resources (time, energy, money) are preoccupied with the subject of evacuation of the flood plain, to that extent relocation is having an impact upon them.

The General Community and Relocation

People outside of the flood plain may be indifferent to the situation except when there is a dramatic flooding or when the area becomes a social issue with countervailing groups competing for public support. People who advocate city growth may oppose the suggestion that public parks replace existing businesses or limit space for new ones. Some people may be happy to have parts of the flood plain for open space with the understanding that in the fringe area they can build. They anticipate a more attractive community and increased tax income. (NERB Commission, December, 1976; Drucker et al., 1974.)

Sociological literature directs attention to the fact that recreational activities are social class-related, and that parks located in concentrated "green belt" areas are generally enjoyed by people who have transportation to reach them and who define park activities as recreational.

Although evidence shows that the poor do pay taxes (Caplovitz, 1968, Miller, 1960), many people think that the middle and upper socio-economic groups support the total society. They believe that tax monies should accommodate their needs. And they advocate usage of the flood plain accordingly. For example, in Scottsdale, Arizona, beautification was brought about through the construction of private golf courses, tennis courts, and recreation areas. Part of the land was dedicated to the city by large property owners in exchange for open space and high density zoning. (A clubhouse, information center, and a housing development enjoy the amenities of a park setting.) Other land has been purchased or condemned. Fifty families had to be relocated. Federal funds facilitated the process.

On the basis of my knowledge of the small cities in which relocation is still in the planning stage, there is little evidence that organized interest groups have vociferously attempted to get the general community's support for or against relocation. It may be that the problem is not perceived as worthy of open community conflict or else more indirect and personal methods of social control are employed.

Phase II: The Move

To the relocatee, the move may mean packing, transferring, and unpacking, having the utilities changed, and a myriad of details to be attended. Whether the physical move will mean more depends on other factors. But to the other people who are directly and indirectly involved in his move, their activities are seen quite differently.

The Policy Agents:

The chances are that many of the governmental policy agents view the paperwork and contacts in connection with the move as part of their jobs--another form to fill out, another phone call in response to a relocatee's request, another signature to procure. The relocatee is a folder in his file cabinet. The same may be true at the local level. However, it is more likely that some local councilman or Corps personnel may know relocatees personally and have a concern for them at the time of the move. But by and large, they too are performing their job.

The appraisers and real estate agents who may have been involved in seeing that the relocatee could be evacuated without condemnation procedures and resettled through the latter's help, may give a sigh of relief on moving day, a job completed. And the whole retinue of people who are provided with work by the move--movers, phone company installers, etc., may be happy at the additional work. In other words, a great many people besides the relocatees are affected by the move, and the larger the number to be moved the more they may like the effect of relocation!

Whether or not the community at large feels the effects of the move will depend upon whether traffic becomes snarled as a house is towed across town or the sudden demand for certain types of services interferes with the normal conduct of the community.

The Relocatees Move:

People invariably are apprehensive about entering into new situations. The importance of a change in housing location may be traumatic for reasons suggested in Chapter I. However, people respond differently and adapt at different rates.

Emotional Responses:

Drucker, Smith and Reeves (1974) make a very interesting observation that appears to me to be relevant to the discussion of the move. They note that relocation is not traumatic when people move within the same locale. Thus, if relocatees are able to maintain their usual way of life, they are keeping their "homeplace," though not their home. The data from the communities which they studied showed that most people moved within the same county and were able to continue to be close to the people whom they knew. Besides, they pointed out, people in small cities have become accustomed to changes that have been altering their ways of life for a number of years. It is more likely that relocatees will experience trauma when they have to leave a familiar place.

The implication of this to the move is that although people invariably have some degree of emotional involvement with a change in their housing situation, their ability to cope with the move will depend on their proneness to stress (Hill, 1965) and their habitual patterns of adjusting to change. These in turn, are interrelated to their experiences with communities.

Status Differences: Several writers note socio-economic class differences in response to the move. Thus, Finsterbusch (1977, 3) states, "The poor are more house-oriented and neighborhood-oriented while the rich and upper middle-class are more oriented to the larger community and the cosmopolitan society than are the lower class." Fried (1963) holds that higher status persons can cope more effectively with changing their location.

In keeping with the approach presented in Chapter IV where identification and orientation toward life were suggested as of prime importance in responses to relocation, I would note exceptions to the social class differences presented. For much depends on the definition of social class. If used sociologically to refer to persons who share a common perspective on life, then, of course, I would concur that there are social class differences. Nevertheless, "identification" introduces a psychological component. Degrees of identification may be more akin among some persons regardless of class. Income and wealth are indirectly associated. Highly mobile urban dwellers may accept the relocation move unflinchingly since mobility is part of their way of life. Mills pointed this out in the case of occupants in a low-income project (see p. IV-3). In contrast, the less mobile urban dweller who has never or rarely moved may react very differently. The distance--in terms of whether or not the move is likely to mark a turning point in opportunities to continue contact with people and places familiar to one--may be a crucial factor in how traumatic the actual process of moving is.

Moving as a Turning Point: Sociologists use the term "turning points" to refer to changes in life that can be more or less pinpointed to a given event. Thus, for many elderly people who have to move out of a flood plain the move is a turning point. For, instead of establishing another home in a familiar setting, they may move into the home of a child or to a retirement community. Seyffert (1977) reported that some of the people in the Towson community who were displaced used their relocation money to move to warmer climates.

Besides the elderly, leaving the flood plain may be the turning point for the owner of a small firm (Thiel, 1977). Many such people cannot start anew in a strange neighborhood, despite the assistance that they get in relocating. (The allowance does not cover the time it takes to attract a new clientele.) So emptying out the work place may mark the end of a career.

The Mechanics: Stresses of the actual move may be associated with the physical well-being, age, and immediate situational factors at the time (e.g., weather conditions, time). Mack suggests another possible factor: the nature of the relationship of the officials, realtors, and any others with whom the relocatee had to deal in anticipation of the move. If they were relatively positive, the move might be easier.

Since the law requires that the new housing be decent, safe and sanitary, people who are relocated usually move to houses that are physically in better condition than the ones they previously lived in. (Finsterbusch, 1977; Gans, 1962). This determination of the quality of housing is generally made in terms of middle-class standards. The places must meet the requirements of local codes.

Policy Agents and Post Relocation

The responsibilities of governmental officials, whether local or federal, do not end once some people have been relocated. In the first place, depending on the numbers moved, it is likely that people will be relocated in groups at different times. Those in most hazardous areas will be moved first (unless other considerations determine the procedures). Thus, the Prairie du Chien plan is to relocate 25-30 households initially.

The officials must monitor the relocatees in their new locations to see that legal requirements are met. They must compile and transmit records detailing financial transactions, conditions of housing, and the like and, because tax adjustments undoubtedly have to be made in order to maintain services in the evacuated area and to provide services to the relocatees, if they are in the same jurisdiction, local officials have an additional responsibility. Undoubtedly, the size of the city, the degree of specialization of government offices, and the centrality or differences of political power are important determinants of the extent to which the relocation affects governance. It has been suggested that preparation for evacuation may, in small cities, require a kind and degree of responsibility that is a new experience for local officials. It would be interesting to know whether their new roles persist when the land is evacuated and available for other uses.¹⁵

Since the development of the area (with floodproofed structures, recreation areas or parks) is likely to take a number of years--and the relocation may go on for some time, both policy agents and laws may change.¹⁶ The results may facilitate the plans, delay them or bring them to a grinding halt.¹⁷ And, between the pressures from conservationists, land speculators, social reformers and budget-minded, there will probably be many a policy agent who will wish that the flood plain evacuation program had never been implemented. (On the other hand, if the policy agent can capitalize on having successfully relocated a group of people with political clout, he may be able to capitalize on his success in order to further his career interest. ¹⁸

Effects on Relocates:

Future research will have to determine whether the people in Baytown who clamored for a relocation project will respond with enthusiastic "ayes" to the question, "Are you glad that you don't have to worry about flooding now?" "Are you pleased that you moved from a hazardous area?"

Satisfaction: Answers to similar questions about satisfaction with having relocated, addressed to persons who were forced to move for various programs offer both affirmative and negative responses.

Favorable attitudes were expressed by Black urban families in a highway study by House (1970) and an urban renewal study by Seeman and Williams (1971). On the other hand, Mack (1975) found that six out of ten interviewees from a rural area were dissatisfied. (Their dissatisfaction was associated with their attachment to their home place.) Gans (1973) has also pointed out the negative reactions of relocatees from Boston's West End.

Reports from entire towns that were relocated paint positive pictures. Two studies of new towns constructed in response to Corps flood control projects--Hill, New Hampshire, and Mannford, Oklahoma--and a newspaper account of Rapid City, South Dakota, provide evidence that most people made a satisfactory adaptation.¹⁹

Mermin's New Haven urban renewal study, probably the most complete study of the relocation process, involved a follow-up two to three years later. He concluded that responses in part depended upon the mood of the person when he called, but that the people were acclimated to their surroundings--as much as they had been before the move.

Researchers have attempted to identify factors associated with attitudes toward relocation. However, findings from studies of the effects of forced migration provide inconclusive--if not contradictory results. Varied findings have appeared in relationships between relocation effects and

- a. Knowledge of and/or experience with flooding;
- b. Socio-economic status (income, occupation, reputed status);
- c. Home ownership;
- d. Age;
- e. Family size;
- f. Community cohesion;
- g. Rural/urban location.

These studies as well as others that deal with satisfaction with relocation suggest:

1. There is a range of responses regarding how satisfied relocatees are once they have relocated.
2. Satisfaction with relocation increases over time.
3. How one evaluates his new home depends on his perception of its merits relative to what he had before.
4. There is a need for empirical research to find the correlates of satisfaction with relocation.

Phase III: After the Move

The New Dwelling:

"It is easy to overemphasize the importance of nonhousing factors in the locational choices of households...The fact of the matter is that regardless of choice, given the increases in our population and a lack of land available for residential development within central cities, most of the expansion of the stock of housing had to occur in suburban areas. Furthermore, national policy toward aiding American families to purchase homes had made it financially less burdensome to 'own' rather than rent. Federal home mortgage policy has fostered the development of the suburbs and of the single family detached home. The development and continued expansion of the suburbs can be largely accounted for on the basis of housing choices in relation to the way in which the housing markets of metropolitan areas have been structured by public policy and the economics of the housing industry." (Rossi, 1972, p. 122).

The realities of the housing market are forcefully driven home to many relocatees. For, although the URA assures them financial assistance, the resident is likely to find himself paying a higher rent (or mortgage) and a higher proportion of his income on rent (or mortgage) than he previously did (La Greca, 1977). Although, he may be paying more for better quality housing, it is also more because of the inflated market. Added to this, if he is a home owner, there will be increased taxes and upkeep. If he is a renter, he may find himself paying much more for an apartment than previously. While the rental allotment helps, the person who moves from an \$80 a month apartment to a \$225 one is likely to find that the \$4,000 (assuming he gets it) does not stretch very far.

The strain of the new home tends to be greatest on people with fixed incomes (particularly the disabled and persons in their retirement years). Despite the fact that several housing laws offer assistance, the limited amount of federal money and the stipulations that it be distributed with equity to a number of population groups throughout the country, leaves very little available for any one community to use. The utility of Section 8, of the Housing and Community Development Act of 1974, has been constrained by these factors.

Policies like those promulgated in Section 8 have attempted to stimulate the private sector to construct low and moderately-priced housing and the public to become home owners and responsible renters. However, as Senator Chaffee reported (Congressional Record, June 7, 1977), inflation has made construction costs rise phenomenally so that rentals and purchasing prices have zoomed. HUD limits the amount of assistance it offers and tenants or buyers have difficulty paying the difference. (Chaffee noted that in Rhode Island, 70 percent of the tenants were paying 30 percent of their after-tax incomes on rent.) The result has been that relocatees in marginal economic conditions lose their residences in time. Depending upon the city and neighborhood, speculators may buy the residence, sell it to another customer with Section 8 support, and the cycle repeats itself.

The situation is not wholly negative. Evidence shows that most people who take advantage of the URA when they move improve their housing conditions.²⁰ Persons who are upwardly mobile or who located in the flood plain temporarily may appreciate the opportunity afforded by the relocation. Those who move within the same county or to places within driving distance of their friends and community activities may be quite content (Drucker et al., 1974).

The New Location: In view of the competing philosophies prevalent at HUD and in other policy circles, the question of whether to disperse people throughout the city or to attempt to maintain the same population group in another physical setting should be mentioned.

For the relocatee, the implication of the former, the affirmative action approach, is that he may find himself among people who may provide incentives for him to adapt his life style to theirs. Since the housing is probably of better quality than he had before, he and his children will move up socially. He and his new neighbors will have an opportunity to learn about one another. This is the democratic way.

But proponents of the second approach consider cultural pluralism as the democratic way. They would let each group preserve its community identity and its exclusivity. Therefore, they would attempt to relocate people among "their own kind," presumably for the sake of the relocatee and of established neighborhoods.

There is no easy answer. Not every relocatee wants to--or for that matter has the psychological stamina--to be the "stranger," the different one, in a neighborhood. Some people are much more comfortable among people whose life styles are akin to their own. Others tend to want the transportation, convenience, housing types, etc., of a given location and have little to do with the people around them. They figure that they can accommodate to whomever surrounds them. Both situations may become complicated when more than one person in a household is involved. On the other hand, if several households are relocated, the adaptation (from integrating to isolating) may be facilitated.²¹

When looking at the situation from the standpoint of the established community, the picture appears to be different. Its members may feel that admittance of relocatees who do not share their life styles will be disruptive. The presence of a single family may not overtly disturb them, but some may have a sense of guilt about being exclusionary. (See Gunnar Myrdal, An American Dilemma.) The presence of several families may require adjustments on their part—and they may not want to make them. They may resent the relocatees because they are improving their position with federal assistance whereas they themselves "had to work hard for everything they got." They may enjoy their close-knit community where people are relatives and long-time friends. (Such cultural islands can be described by two different sets of adjectives: (a) friendly, cohesive, neighborly, courteous, generous, close-knit, egalitarian; or (b) exclusionary, bigoted, prejudiced, narrow, hostile.)

The General Community: During this third phase, members of the community at large may, depending upon the size of the city, be unaware of the changes that have taken place. Those who are might fall into three categories:

(a) People who know about the relocation through publicity, gossip, and rumors;

(b) People who feel they have something to gain or lose from potential usages of the vacated land, and;

(c) People who are directly or indirectly brought into contact with the relocatees.

The (a) group may run the gamut from those who are pleased to know that the people will be safe from flooding to those who object to the expenditure of local resources and federal dollars on "helping people who should help themselves." The latter may feel that they have been penalized for being foresighted and thrifty (Moore in Dynes, 1974).

Among the people in the second category, reactions will depend upon the anticipated and current uses of the land. If it is to be converted to park-land or play areas there may be those who feel that it will meet their recreation needs. Some may enjoy it aesthetically. On the other hand, some people might resent tax money providing advantages for a limited few. They may feel that it is not accessible to them or that it is not the kind of recreational activity that they enjoy.²² People who own property or who plan on acquiring property abutting it may see the value of their land appreciating. How one looks upon rising values depends upon one's perceptions.

If the land is to be put to other usages, whether preserve as open space or not, it will be evaluated differently by different people. Many will probably be concerned about pouring tax dollars into the area, others, about policing it. And for every group that would like to see it used in one way there is bound to be another that would object!

Among the most concerned people are those who have direct contact with the relocatees. The degree of contact is likely to depend upon the size and character of the particular neighborhood and the number and attributes of relocatees concentrated in it. They may find them competing for jobs as well as for other needs. They may welcome them or be indifferent or hostile. (See p. V-15). Depending upon the numbers of people relocating, there will be a ripple effect on people in less direct contact. For example, if 400 people move into an area, a housing shortage may confront prospective home buyers; schools may be strained; taxes may be changed.

Summary: Obviously, then, the effects of the new house and the new location depend upon the perceptions of the perceiver, whether relocatee, policy agent, or the general community. These perceptions in turn, are likely to be affected by:

--how the perceiver defines his economic situation, e.g., sees himself as hard-pressed financially or comfortably situated in a position to gain rather than lose;

--the degree of identification people have with their home and their community;

--how one feels being a stranger or toward strangers;

--one's orientation toward life at the stage of his life that he is in--one's personality, ambitions, attitudes toward change and people.

FOOTNOTES

- ¹Among the alternatives recommended for equal consideration were flood proofing, relocation, warning systems, zoning, flood insurance, channelization, dikes, dams, levees. The first five have come to be referred to as "nonstructural flood controls", the latter four, as "structural flood controls."
- ²U.S. Congress, House, "A Unified National Program for Managing Flood Losses," Communication from the President of the United States Transmitting Report by Task Force on Federal Flood-Control Policy, 89th Congress, August 10, 1966, Document 465.
- ³Those initiating the action have to have the ear of the local political leaders. These people, in turn, must be convinced that it is worthy of consideration. Not only that, but they must believe that it is something that should be given priority among local concerns, that it is achievable (is worth the time and effort in terms of returns), that it is financially feasible, and that it would have community support. Once the subject is publicized, the city fathers may have to cope with conflicting groups within or outside of their own ranks.)
- ⁴According to BERH*, the following steps are involved: Congressional authorization for a study of the problem→study by the Corps District →plan sent to the Corps Division→plan sent to BERH (if it needs reconsideration, it is returned to the Division)→plan sent to Chief of Engineers→to Assistant Secretary of Army for Civil Works→to Secretary of Army→to OMB→to Secretary of Army→to Congress→to Appropriations Committee. If the House and Senate do not concur, a conference committee is designated to work out their differences.
- ⁵Sundstrom et al. (1975) administered questions about the anticipated effects of construction of a nuclear power plant to the same subjects in January and in August. They found that consistency regarding each effect ranged from 77 percent to 98 percent. (Site preparation started one year after the survey; completion was expected to take eight years.)
- ⁶The situation in North Bonneville provides another illustration. Leadership appears to have come from outside of the original community residents.
- ⁷Hughes (1971) has noted this process as occurring in numerous minority group situations. He refers to this as talented individuals "being educated out of their communities."
- ⁸A number of studies have been made of reactions to anticipated forced relocation due to reservoir construction. Ones summarized by Johnson (1974) indicate that relocation stress was attributed to others controlling one's fate, advance mourning for loss of one's home, and strong identification

* U.S. Army Corps of Engineers, Board of Engineers for Rivers and Harbors

FOOTNOTES (Cont'd)

with home. She also cites Becker and Burdge who found that attitudes toward construction were not related to "familism, and traditionalism, ...rural residence, older age, and lower socio-economic status." (p. 173)

- ⁹This needs to be verified by checking records.
- ¹⁰Downs presents a list of 21 impacts attributable to highway relocation. Most of these are possible reactions to flood plain evacuation. (See Appendix).
- ¹¹A word of caution: the proportion of households represented was not stated nor was the way in which the vote was taken and recorded.
- ¹²No date was provided with this return. However, it may have occurred in the Spring, 1971.
- ¹³Funds are offered by a variety of agencies within federal departments as well as from state governments. For a listing of relevant agencies and programs, see The River's Reach, NERB Commission, December, 1976.
- ¹⁴Executive Order 11988, May 24, 1977. The order calls for all federal agencies to become actively involved in developing their programs in ways which will reduce or mitigate flood plain damages.
- ¹⁵Probably one of the biggest problems of local agents is to maintain services (police, roads, sewage, utilities, etc.) in neighborhoods that are sparsely populated because some of the houses have been vacated or removed.
- ¹⁶A HUD official pointed out that "development of an area takes such a long time that the plans may be antiquated by the time it is possible to use them." (Interviewee Number 10).
- ¹⁷The inner cities bear evidence to urban programs that were born and died. The vandalized, deteriorated, boarded-up structures or bubbled lots stand as monuments to dozens of post-riot renewal and poverty programs.
- ¹⁸The writer knows of two situations in which dynamic participation in relocation activities has enhanced the occupational mobility of policy agents.
- ¹⁹Maunford was built in late 1950's to replace a town that was inundated for the Keystone Reservoir Project. Morgan (1970) said that the majority were satisfied with the move after six years, that many of those who had been opposed changed their minds. Some of the people continued to bear resentment toward the Corps for forcing them to leave their homes.

FOOTNOTES (Cont'd)

The sixty plus households of Hill, New Hampshire, that were settled in the new Hill thirty years ago are currently being studied under Corps auspices. Preliminary findings indicate a high degree of satisfaction with the new community. (The relocation process was exceptional in that the townspeople themselves were extremely active, enthusiastically planning the new community, arranging for the financing, and assisting one another.)

After the traumatic floods of 1972, in Rapid City, South Dakota, people and industries were moved to higher locations. The newspaper article indicated that a relatively attractive new community has been established. The implication was that most people are satisfied. However, some people believed they didn't get a fair price for their old home or felt that they were forced to relocate.

- ²⁰Prior to the Act and even today there are people who do not take advantage of it. For example, a young man did not want to bother filling out the necessary forms on time. When the deadline date passed, he did not want to appeal his case either. More often, however, the person chooses to move to a place that will not meet the standards of decent, safe, and sanitary. This may be because they believe that the residence is more within their income or they prefer the location.
- ²¹When comparing alienation among evacuees and a control group, Napier (1972) found no significant differences.
- ²²More than one study has shown that income and education are correlated with recreation. Studies also show that parkland types of activities tend to draw middle and upper-class white people. (This may be accounted for in part on the basis of park location and accessibility.)

Chapter VI: Conclusions and Recommendations

The aim of this paper has been to view relocation as a process that involves the continuous interaction of a number of actors--policy agents, relocatees, and the general community. The orientation has been that of sociologists, more specifically, social psychologists who see "reality" as constructed through the interactions of human beings. It has been applied to the interpretation of social science research, governmental reports, and interviews that deal with the subject of relocation. Virtually all of the printed materials used dealt with urban renewal or displacement due to structural types of engineering projects. Since relocation in and of itself as a flood plain management approach is relatively new in terms of social impact, ex post facto studies in terms of social effects of the relocation process have yet to be undertaken. (Information pertaining to Phase I has been gathered for several environmental impact statements.) Therefore, this report has been based on ferreting out from investigations of other types of situations what might logically be applicable to relocation processes which involve the Corps in nonstructural, flood plain management. Because studies of relocation have concentrated on forced displacement of:

- (a) low-income residents of urban centers, and
- (b) small city and rural occupants of land needed for large structures,

they provide a very limited picture of American communities and their populations. This limitation may be one of the factors accounting for the diverse, and often contradictory, findings they present. Differences in the times, e.g., during the first years of the Kennedy-Johnson War on Poverty as compared with the post-Vietnam period, may be another. And finally, the value orientations and the methodologies of the researchers undoubtedly explain some of the variations in conclusions. Therefore, the reader should be cautious in comparing findings. What I have tried to do has been to interpret and analyze the specific datum as indicative of a factor contributing to a complex whole.

Summary: In order to emphasize a number of particular points that were presented earlier, some of the effects that each phase of the relocation process may elicit are presented. Whether or not they do occur, to whom, when, and for how long, depends on a number of factors--including perceptions, attitudes toward the extent and frequency of flood experiences, and the interactions of people with one another.

Phase I: The Start of Relocation

1. A community-sponsored (and federally assisted) evacuation program will not be formulated until local policy agents (generally the higher status community members):

a. Define the situation of flood plain inhabitants as significant and a "plight,";

b. See it to be in their , i.e., the agents (and the community's) interests to evacuate the area, and;

c. Believe funding agencies and local personnel and conditions would be supportive if evacuation were publicly proposed.

2. Property owners and renters who do not want to run the risks of flooding move.

a. Owners may transport, sell, rent, or abandon their dwellings.

b. This may cause a "leadership drain," i.e., there may have been potential leaders for promoting relocation among those who moved.

c. Owners of rental property lose their incomes.

3. Some people will be very eager and anxious to move; others upset and disturbed by the prospect; still others will be indifferent.

a. Some will see it as a way of getting out of a situation they've wanted to leave.

b. Some will think that they are being "forced" out.

4. The long planning period before actual relocation takes place may cause extreme tension and frustration.

a. People do not feel free to make plans to maintain the home, buy another, or budget their time, activities, and money because of the uncertainty as to whether they will be moving.

b. They are likely to direct their frustration toward persons or groups which they think are responsible for delays.

5. There may be property and community deterioration:

a. Neighborhood services (trash collection, street resurfacing, etc.) may be neglected.

b. Individual home owners may feel that repair work would be costly, not add to the value of their homes, and futile since they expect to move "shortly."

c. The deterioration may lead to a drop in property values and purchase by land speculators.

d. People with different life styles may move into the deteriorating property much to the consternation of long-time residents.

e. Small businesses may have to change their merchandise to meet different tastes or may have to close their doors.

f. Adjoining areas may be devaluated.

g. Vandalism may increase; police and fire protection may strain the local government's budget.

h. Individual householders may become afraid to go out--a "fear of crime" may prevail.

i. People may have difficulty going to work or meeting their daily needs because of poor roads, curtailed services, and the like.

6. There may be increased community conflict with pro- or anti-relocation forces trying to prevail.

a. Various pressure groups, e.g., Birchites, environmentalists, and tax reformers, might join the fray in order to promote their interests.

b. Political leaders might be "made" or "broken" by the conflict.

7. Community consensus will be engendered in order for the local policy agents to submit plans which will enable them to obtain funding.

a. Local policy agents may assume new responsibilities vis-a-vis federal agencies.

b. Local policy agents may feel that their status is enhanced or threatened by their contacts with outside "experts."

Phase II: The Move

1. For most relocatees, the move means an improvement in the condition of the physical habitat.

2. Relocatees are likely to experience a sense of grief when leaving their familiar places.

a. The intensity and/or duration of this sense of loss will depend upon what the individual's home means to him.

b. Individuals who move within the same home place (e.g., county in rural areas; neighborhood within urban areas) may feel little loss.

c. Some people are more stress- or crisis-prone than others; they adapt differently to the same situation.

3. Policy agents may be caught up in supervising the move and attempting to facilitate it.

a. If a sizeable number of households or businesses must be relocated, it is likely that they will be moved in shifts.

b. Local concerns involved in the move may profit from it.

Phase III: After the Move

1. Whether the short-run effects of the move are positive or negative depend upon the individual's perceptions of the situation at the time.

a. Some people see relocation as a step up and affording new opportunities; others feel it is just one more move; and still others may see it negatively.

b. How the people viewed actual flooding or the threat of floods affects their adjustments when the risk is minimized.

2. The new residence is likely to require higher monthly payments and more for maintenance. This will be particularly hard on persons with moderate, low or fixed incomes.

3. Small investors and small firms are likely to suffer when they move out of the flood plain because of loss of good will and customer following if they or their former customers are too far from one another.

4. Maintaining services in the evacuated area even after everyone has left may place an undue strain on the city's tax structure.

5. Community conflict may be generated over the usages to which the evacuated land is put.

6. There may be positive or negative reactions to the relocatees on the part of people in the neighborhoods into which they move.

a. Some communities may be resistant to the presence of strangers because they are seen as a threat to the community's way of life.

b. The relocatees may be viewed positively as contributing to the community's growth--and taxes.

7. The relationship of the policy agents to the relocatees and the amount of time that the relocation process takes has a significant bearing upon the satisfaction with the move that is expressed.

8. How the evacuated area is used may affect adjacent land values and the distribution of community services.

9. The experience of HUD, the Corps, and local and state agencies in completing the initial cooperative projects will provide a pattern for future projects.

10. Satisfaction with relocation increases over time.

The Broad Overview:

A frequent reaction of people concerned with flood plain management is that those who might be relocated strongly object to it; and, after the move, they are most dissatisfied. That the prospect of the move and the move itself work great hardship on some people is true. But, it is not true for all. As a matter of fact, some people want to have the opportunity to move--with governmental assistance. Some who have moved seem to be very satisfied. Further, there is evidence that as time goes on people who have relocated tend to become more satisfied with the move.

This leads to the conclusion that people perceive relocation differently; and their perceptions vary with time.

If this is so, then, one might ask how can social behavior be predicted? How will it be possible to develop programs that will enable movement towards national goals? I think that the foregoing analysis provides suggestions and the potential for better understanding of human behavior.

Early in this report it was suggested that the extent to which an individual's self-identity is dependent upon the physical space of his home and neighborhood is likely to significantly affect his reactions to relocation.

In Chapter I the importance of housing for self-identity was discussed. It pointed out that one's conception of one's self and other people's conception of one may take into account the house and neighborhood in which one lives. For example, our furniture and its placement reflect our moods, tastes, and income priorities. Social psychologists like Stone and Farberman (1975) have become increasingly interested in proxemics as it relates place to personality development. Their writings show how we use material accoutrements to create impressions we want to communicate to others; how we feel loss with the absence of objects we are used to having around us. The differences in the extent to which people identify their homes or work places with satisfaction with relocation may account for the contradictory findings relating satisfaction to selected variables (age, length of residency, and socio-economic status).

Another point that was made earlier was that one's orientation toward life (local/cosmopolitan) is likely to be associated with the facility with which one adapts to new situations.

Pursuing the logic presented elsewhere, people who have become accustomed to change, who have learned to cope with crises in their lives because of a breadth of new experiences to which they have managed to adjust, are less likely to be dependent upon the given local community for their needs and satisfactions. As Drucker et al. (1974) have pointed out, urbanization has been going on for a long time so that rural and city populations have had to adapt to it. Thus, even people from small communities may have had extensive experiences elsewhere; they may have moved a great deal; they may see opportunities for themselves beyond the confines of the community. Therefore, they may accept the idea of relocating.

On the other hand, people whose world is circumscribed by a given neighborhood understandably might be resistant to relocation--unless, perhaps, strong leadership convinced the community to relocate.

To the foregoing generalizations, I would append a rationale for the finding that satisfaction with relocation increases over time. The study of human history is the study of migration, acculturation and habituation. Migrants, sociological studies report, frequently experience "cultural shock" the trauma felt when one tries to perform habitual minutiae of daily living in an alien setting. Individuals and groups vary in the amount of time it takes to find a modus vivendi. Nevertheless, the majority in time adapt their ways to other residents (and the others make adaptations to them too). Gradually community ties are established and the migrants become an integral part of the society.

In the case of the flood plain relocatee, the better adjusted he was to the home town setting, the less he may be willing or able to adapt to a strange situation. Yet in time, the demands for one's time and attention by local people, one's acclimation to necessary routines, lead most people to finally adjust to the community.

To this point, attention has been focused on the relocatees. But a major premise of this report is that the relocation process affects all the interactants--relocatees, policy agents, and the general community. The effects are dependent upon the perceptions or meanings attributed to any aspect of the process. Ergo, persons occupying different functional roles in relationship to the evacuation may perceive relocation similarly. For example, a Corps planner, a relocatee, a local mayor, and a land speculator may all be upset and angered because of a delay in funding. They share feelings associated with part of the meaning each gives to the delay.

Whether they are policy agents or relocatees does not matter. But, though policy agents, e.g., the mayor and planner, may see eye-to-eye today, tomorrow they might not and the next day they might again! The point is, then, that the activities associated with the relocation process affect all of the actors involved in accordance with their perceptions of the dynamics of the process. And, their perceptions are constantly changing.

Just as a major point of emphasis in the above pages has been the variability of human responses, so too in the following pages this dictum must be borne in mind. The relevancy of this statement will become more apparent in the suggestions that are proposed as a result of this study:

I. The consideration of evacuation of flood plains necessitating relocation of occupants provides the Corps with an opportunity to assess both the applicability of traditional procedures for structural flood control projects as well as nonstructural projects--specifically evacuation necessitating relocation of flood plain occupants.

Since the social well-being and health of the population have become national goals, it seems that these could be furthered by facilitating the relocation process. There is ample evidence that one of the major effects on some people living in flood areas is the anxiety produced by the tremendously time-consuming Corps' process of project authorization and appropriation of project implementation funds.

II. The Corps might take the initiative in trying to expedite the inter-agency cooperative efforts relocation requires.

There have been several relocation projects showing that it is possible to accomplish flood plain evacuation cost-effectively, within a short time frame, and to the satisfaction of the parties involved.² It may be worthwhile to study what is to be learned from these relocations.

Specific actions to facilitate relocation that are worthy of consideration are:

a. Establish within the Corps (or with interagency cooperation) in an office that specializes in the relocation process. Its goal would be to expedite the process and help the people. It might also be responsible for developing approaches for handling different types of situations. For example, the relocation of people in the inner city might involve different procedures than a town of 500 farmers with low incomes. (if the latter do not want to be relocated, the office might make the decision to acquire the property when it is transmitted to heirs.)

By expediting procedures, other savings might accrue from a reduction in forms, litigation, etc.³ Most important, of course, would be the reduction in anxiety due to uncertainty.

III. So little is known about relocation as part of nonstructural flood plain management that it demands the accumulation of more knowledge about all stages of the process. For example, which localities are likely to be willing to consider it as an alternative? What factors contribute toward their support? Or, what are the pros and cons of dispersement that takes the form of affirmative action or of cultural pluralism? How could coordinated implementation of programs--energy, land management, housing, unemployment--be brought about so that the quality of life for Americans in flood plains might be improved? And finally, a longitudinal case study of a community that is in the process of developing a relocation program should be researched.

Obviously, there are no easy "right" and "wrong" answers. There is just the continuous process of action and interaction through which, hopefully, the human condition can be more satisfying for more and more people.

FOOTNOTES

¹Overall study requirements have greatly expanded time and studies required to meet environmental concerns, more stringent evaluation criteria and increased public participation. Although this process may be dictated by Congress, the Corps might (a) recommend that Congress review the procedure, or (b) at least expedite the steps involved in internal reviews.

²My knowledge of successful evacuations rests on statements from several sources. T. N. Yelich of Vector Corporation (an organization involved in planning and implementing relocation) and John Sheaffer of Sheaffer and Roland spoke to me concerning Kingery West, DuPage County, Illinois. John Seyffert, an employee of the government of Towson, Maryland has been proud of the relocation project he organized and implemented within approximately one year's time at minimal costs involving a Towson, Maryland flood plain.

Current research on the relocation of a whole community, Hill, New Hampshire, suggest another success story. (However, the relocation 30 years ago was a response to acquisition of land for a dam site.)

³More than one interviewee stated that "generous" reimbursement reduces the anxiety, time and efforts involved. The satisfied citizens then make it easier at the next project because of favorable public relations.

APPENDIX

The Kinds of Losses Imposed Upon Residential Households by Urban Highway and Urban Renewal Projects (Other than Construction Costs) (Downs in McCoy, 1975)

- A. Losses imposed upon residential households by displacement itself:
- *1. Disruption of established personal and other relationships
 - *2. Losses due to the taking of real property
 - 3. Losses due to home financing arrangements, especially contract buying
 - *4. Costs of seeking alternative housing elsewhere
 - 5. Costs of paying for alternative housing elsewhere
 - 6. Moving costs
 - *7. Higher operating costs of residing elsewhere
- B. Losses imposed upon residential households by uncertainties and delays:
- *8. Deterioration in the quality of life during waiting periods
 - *9. Inability of property owners to sell property at reasonable prices during waiting periods
 - *10. Declines in the value of properties during waiting periods because of neighborhood and individual property deterioration
 - *11. Losses of income suffered by owners of rental property because of the departure of tenants before actual taking occurs
 - *12. Costs of maintaining property after its fair market value has been established for purposes of litigation
- C. Losses imposed upon residential households not directly displaced but located in surrounding areas:
- *13. Higher taxes paid because of increased city costs of counteract vandalism and other deterioration in the area
 - 14. Disruption of local communications through the blocking of streets
 - *15. Reduction in the quantity and quality of commercial and other services available in the area because they have left or been displaced
 - *16. Reduction in employment opportunities and increased costs of traveling to work because firms have been compelled to move elsewhere or have gone out of business
 - *17. Spillover effects of deterioration in the clearance areas during the waiting periods
 - *18. Higher rents or housing prices because of increased competition for housing among low-income households resulting from displacement
 - *19. Reduction in the efficiency of community facilities through:
 - a. Loss of patronage if displacement has removed customers
 - b. Overcrowding if displacement has removed alternative source of supply (such as a local school, parks, playgrounds, etc.)
 - *20. Losses in property values due to changes in the accessibility of various parts of the metropolitan area
 - 21. Losses resulting from congestion, vibration, noise, street blockage, dust, and other negative factors involved in the process of constructing the new highway or urban renewal project

22. Losses in property values due to increased ugliness, noise, air pollution, or other adverse effects of the completed highway or urban renewal project.

*Items that are particularly relevant for consideration as possible effects of the flood plain evacuation process.

BIBLIOGRAPHY

- Burdge, Rabel J., "A Summary of Sociological Studies of Water Resources Dealing with Social Goals and the 'Quality of Life', the 'Strawman' and other Studies" in The Social Well-Being and Quality of Life Dimension in Water Resources Planning and Development, W. H. Andrews, et al., eds., Proceedings of the Conference of the University Council on Water Resources, Logan, Utah: Utah State University, July 10-12, 1973.
- Caplovitz, David, The Poor Pay More, New York: Free Press, 1968.
- Cook, Earleen, Bibliography on Relocation of Families as a Result of Government Acquisition of Property, Council of Planning Librarians: Exchange Bibliography, Mrs. Mary Vance, ed., Monticello, Ill.: 1975.
- Donnermeyer, J. F., Forced Migration: A Bibliography on the Sociology of Population Displacement and Resettlement, Council of Planning Librarians: Exchange Bibliography, Mrs. Mary Vance, ed., Monticello, Ill.: 1975.
- Donnermeyer, J. F. and P. F. Korsching, "Long-Term and Age-Related Adjustment Problems Associated with Forced Relocation in Eminent Domain Cases," Paper presented at the Annual Meeting of the Southern Association of Agricultural Scientists, Mobile, Ala.: February 14, 1976.
- Downs, Anthony in C. B. McCoy, "Residential Impacts," in Social Impact Assessment, C. P. Wolf, ed., American Association for the Advancement of Science Study Guides on Contemporary Problems, Test Edition, 1975, pp. 141-145.
- Drucker, P., C. R. Smith, and E. B. Reeves, Displacement of Persons by Major Public Works: Anthropological Analysis of Social and Cultural Benefits and Costs from Stream Control Measures - Phase 5, Lexington, Kentucky: University of Kentucky, Water Resources Research Institute, 1974.
- Dynes, R. and D. E. Wenger, Environmental Crises: Project Completion Report, Columbus, Ohio: Water Resources Center, January 19, 1971.
- Finsterbusch, K., "The Displacement and Relocation of Residents by Highways and other Government Projects," Unpublished Manuscript, 1977.
- Flood Disaster Protection Act of 1973, P. L. 93-234.
- Fried, Marc, "Functions of the Working Class Community in Modern Urban Society: Implications for Forced Relocation," Journal of the American Institute of Planners, 33:317-323, 1967.

- Fried, Marc, "Grieving for a Lost Home," in The Urban Condition, L. J. Duhl, ed., New York: Basic Books, Inc., Publ., 1965.
- Fried, Marc, "Transitional Functions of Working-Class Communities: Implications for Forced Relocation," in Mobility and Mental Health, M. B. Kantor, ed., Charles C. Thomas, 1965, pp. 123-165.
- Gans, H. J., "The Failure of Urban Renewal: A Critique and Some Proposals," in The Modern City: Readings in Urban Economics, D. W. Rasmussen and C. T. Haworth, eds., Harper & Row, 1973.
- Gans, H. J., "The Human Implications of Current Redevelopment and Relocation Planning," Journal of the American Institute of Planners, 25:15-25, 1959.
- Gans, H. J., The Urban Villagers, Glencoe: Free Press, 1962.
- Hill, R., "Social Stresses on the Family," in Social Problems: Persistent Challenges, E. C. McDonagh and J. E. Simpson, eds., New York: Holt, Rinehart & Winston, Inc., 1965.
- House, Patricia A., "Relocation of Families Displaced by Expressway Development: Milwaukee Case Study," Land Economics, Vol. 46, No. 1, 1970, pp. 75-78,
- Hughes, Everett C., The Sociological Eye: Selected Paper, Aldine Publishing Co., 1971.
- Johnson, Sue, "Recent Sociological Contributions to Water Resources Management and Development," in Man and Water: The Social Sciences in Management of Water Resources, L. Douglas James, ed., Lexington, KY: University of Kentucky Press, 1974, pp. 164-199.
- Johnson, Sue, and F. J. Burdge, "An Analysis of Community and Individual Reactions to Forced Migration Due to Reservoir Construction," in Water and Community Development: Social and Economic Perspectives, D. R. Field, J. C. Barron, and B. F. Long, eds., Ann Arbor, Mich: Ann Arbor Science, Pub., Inc., 1974, pp. 169-188.
- La. Greca, Anthony J., "Critical Urban Problems," in K. P. Schwirian et al., eds., Contemporary Topics in Urban Sociology, Morristown, New Jersey: General Learning Press. 1977, pp. 339-401.
- Lippman, Walter, Public Opinion, New York: The Mac Millan Co., 1922.
- Mack, Ruth, "Assessment of Flood Mangement Alternatives Against Social Performance Criteria," Phase II Report prepared for New England River Basin Commission, Institute of Public Administration, November, 1975.

- Mermin, Alvin, Relocating Families: The New Haven Experience: 1956-66. National Association of Housing and Redevelopment Officials, Wash., D.C.: NAHRO Publication #N4540, 1970.
- Merton, Robert K., Social Theory and Social Structure, Glencoe, Ill., Free Press, 1957.
- Miller, Harold V., Flood Damage Prevention for Tennessee: A Survey of Tennessee's Flood Situation, Trends in Vulnerability and a Proposed Program for Action, Tennessee State Planning Commission, November, 1960.
- Mills, Timothy M., "Research Analysis," Unpublished Term Paper, University of North Carolina, May 4, 1977, p. 4.
- Mogey, John, "Family and Community in Urban Industrial Society," in Handbook of Marriage and the Family, Harold T. Christensen, Chicago: Rand McNally, 1964, pp. 501-534.
- Moore, Harry E., "Tornadoes over Texas: A Study of Waco and San Angelo in Disaster," Austin: University of Texas Press, 1958, pp. 179-180 in Russell R. Dynes, Organized Behavior in Disaster, Columbus, Ohio: The Disaster Research Center Series, Ohio State University, 1974.
- Morgan, W. C., "A Study of the Social and Economic Effects of Keystone Reservoir on the Community of Mannford, Oklahoma," Masters Thesis, Oklahoma State University, 1970.
- Myrdal, Gunnar, An American Dilemma, New York: Harper & Bros., 1944.
- Napier, T. L., "Socio-Psychological Response to Forced Relocation," Water Resources Bulletin, 8, Aug. 1972. pp. 784-794.
- New England River Basins Commission, The River's Reach: A Unified Program for Flood Plain Management in the Connecticut River Basin, December, 1976.
- Rossi, P., "Community Social Indicators," in The Human Meaning of Social Change, A. Campbell and P. E. Converse, eds., New York: Russell Sage Foundation, 1972, pp. 86-126.
- Seeman, J. and P. Williams, "Applied Research and Public Policy Study in Urban Relocation," Community Mental Health, Vol. 7, No. 2, 1971, pp. 99.
- Seyffert, John D., "The Urban Flood Dilemma; Baltimore County, Maryland." Towson, Maryland: Department of Permits and Licenses, March, 1977.
- Shaw, R. Paul, Migration Theory and Fact: A Review and Bibliography of Current Literature, Philadelphia: Regional Science Research Institute, 1975.

- Singh, Raghu N., Kona Dam vs. Konatown: A Sociological Interpretation of Selected Impacts of Reservoir Development on a Community Field, Commerce, Texas: Department of Sociology and Anthropology, East Texas State University, February, 1975.
- Stone and Farberman, Social Psychology through Symbolic Interaction, Waltham, Mass.: Xerox Pub. Co., 1970.
- Strauss, Anselm, ed., The American City: A Sourcebook of Urban Imagery, Chicago, Ill.: Aldine Publishing Company, 1968.
- Sundstrom, E. D., et al., Citizen's Views about the Proposed Hartsville Nuclear Power Plant: A Survey of Residents' Perceptions in August, 1975, Oak Ridge, Tenn.: Oak Ridge National Laboratory, May, 1977.
- Thiel, F. I., "An Approach to S.I.A.," in Proceedings: Social Scientists Conference; Social Aspects of Comprehensive Planning, V. 1, United States Army Corps of Engineers, Institute for Water Resources, 1977.
- Thomas, W. I., The Unadjusted Girl, Boston: Little Brown, 1937.
- Thursz, Dan, Where Are They Now?, Health and Welfare Council of the National Capital Area, November, 1966.
- U. S. Army Corps of Engineers, Environmental Statement: Flood Protection on the Mississippi River between Sainte Genevieve and Saint Marys, Missouri, St. Louis, Mo.: January, 1977.
- U. S. Congress, House, "A Unified National Program for Managing Flood Losses," Communication from the President of the United States Transmitting Report by Task Force on Federal Flood-Control Policy, 89th Congress, August 10, 1965, HD 465.
- Werner, W.L. and Paul S. Lunt, Social Life of a Modern Community, (Yankee City Series), New Haven, Connecticut: Yale University Press, 1941.
- White, Gilbert F., ed., Changes in Urban Occupance of Flood Plains in the U.S., Chicago, Ill.: University of Chicago Press, 1958.