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CRISIS RELOCATION: PERSPECTIVES OF AMERICANS

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CRISIS RELOCATION: PERSPECTIVES OF AMERICANS

ONE IN A SERIES OF REPORTS ON DEFENSE CIVIL PREPAREDNESS ISSUES

BY

JIRI NEHNEVAJSA

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The task of this study is not to advocate crisis relocation planning, rather, it attempts to assess the desirability of feasibility studies of population evacuation. Among the major factors affecting feasibility, public acceptance of relocation concepts must rank high. Plans could be developed with minimum public concern, and the planning process itself can be a

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low profile activity throughout. However, if the evacuation program is to have a chance of succeeding, its acceptance by the public, and their eventual compliance with its provisions must be considered.

Four national attitudinal surveys concluded during the past year give significant evidence of how different population segments view the desirability of an evacuation program: Women are more favorably disposed than men; People with High School education or less are more positive than are people with at least some college education; Respondents with incomes of less than $10,000.00 per year are more supportive than are those with incomes of that amount and over; U.S. Americans who express a "working class" identification are more positive about evacuation programs than are "middle" or "upper" class respondents; People with a Democratic party identification are more favorably disposed than are Republicans and Independents; More religious respondents are more favorable than are less religious ones.

The basic pattern is underscored by the findings that opposition, such as it is, is particularly strong among college-educated men who live in cities, tend to be single, and are renting their place of residence. This may be a small group but the impact of its possible articulateness in non-support, if not in opposition, cannot be underestimated.

The data support the conclusion that crisis relocation planning is acceptable to most Americans, and that the sentiments revealed in the national studies establish a broad bed of essentially supportive, though passive, attitudes which make it altogether possible to proceed both with feasibility assessments, and in terms of acceptability, with actual planning.

CRISIS RELOCATION:

PERSPECTIVES OF AMERICANS

One in a Series of Reports on Defense
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REPORT SUMMARY

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REPORT SUMMARY

Can major U.S. cities be evacuated in crisis situations? To what new locations? What are the probable effects upon the social structure of the society and what might be survivability rates?

In the 1950's the threat of renewed warfare and the severe ideological and political differences between East and West kept American's concern for fallout shelters and crisis relocation at a high pitch. After the 1961 Berlin Wall crisis and the 1962 Cuban missile crisis the concern of United States citizens about civil defense needs decreased. Today, some twenty years later, there is renewed interest. The civil defense posture of the Soviets includes elaborate and detailed provisions for city evacuation. However, studies conducted at the University of Michigan and at the University of Pittsburgh show that some shelter provisions have been made in only one or two percent of U.S. households.

It is one thing to know where public shelters are located, yet quite another matter to insure that people will use them with a modicum of success. The task of this study is not to advocate crisis relocation planning, rather, the logic of circumstances seems sufficiently compelling to make attempts to study the feasibility of population evacuation desirable.

Among the major factors affecting feasibility, public acceptance of relocation concepts must rank high. Plans could be developed with minimum public concern, and the planning process itself can be a low profile activity throughout. However, if the evacuation program is to have a chance of succeeding, its acceptance by the public, and their eventual compliance with its provisions must be considered.

Four national attitudinal surveys concluded during the past year give significant evidence of how different population segments view the desirability of an evacuation program.

1) Women are more favorably disposed than men,

2) People with High School education or less are more positive than are people with at least some college education,

3) Respondents with incomes of less than $10,000.00 per year are more supportive than are those with incomes of that amount and over,

4) U.S. Americans who express a "working class" identification are more positive about evacuation programs than are "middle" or "upper" class respondents,

5) People with a Democratic party identification are more favorably disposed than are Republicans and Independents,

6) More religious respondents are more favorable than are less religious ones.

Indeed, the basic pattern is only underscored by the findings that opposition, such as it is, is particularly strong among college-educated men who live in cities, tend to be single, and are renting their place of residence. This may be a small group indeed in the overall national perspective, but the impact of its possible articulateness in non-support, if not in opposition, cannot be underestimated.

In conclusion, the data support the conclusion that crisis relocation planning is acceptable to most Americans, and that the sentiments revealed in the national studies establish a broad bed of essentially supportive, though passive, attitudes which make it altogether possible to proceed both with feasibility assessments, and in terms of acceptability, with actual planning.

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PREFACE

This report on national perspective toward crisis relocation, or "strategic evacuation", is based on data which cover the period between 1963 to 1972. The last nationwide data which we have in our Civil Defense data bank comes from 1972, and is based on a sample of 1,302 Americans, eighteen years of age and older. While we draw a number of conclusions which we consider both significant and applicable to some aspects of the current state of thinking about crisis relocation planning, the reader must carefully take into cognizance that our data do portray a situation as it existed some years ago; and that, in the context of the wider research on civil defense postures, essentially only one question of direct importance to crisis relocation efforts was asked.

In this sense, there is much more that we do not, at this time, know than we do know. The results must be viewed as suggestive and indicative rather than definitive. They must be viewed from the historical perspective from which they derive. They must be viewed as limited in scope to expressions of general acceptability of the concept of "strategic evacuation" (the terminology which had been used in the study) and do not pretend to address the difficult and detailed questions which need to be considered in the context of current crisis relocation feasibility effort.

Jiri Nehnevajsa

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I. INTRODUCTION

For some time, the Defense Civil Preparedness Agency has been conducting feasibility studies to determine whether, under crisis conditions, our major cities could be evacuated and where to; how such population relocations might be accomplished, with what probable effects on societal viability should the crisis subside, and with what probable effects on survivability should the crisis eventuate in a nuclear confrontation.

It seems highly debatable whether the President would ever authorize such crisis relocation short of a situation in which the outbreak of war were truly imminent. Even then, it might be argued, the President might be inclined to disfavor such a policy because it could, conceivably, escalate whatever crisis beyond its point of no return and thus make an highly probable conflict an inevitable one.

The fact remains, however, that the Soviet civil defense posture does include elaborate, and detailed, provisions for city evacuation. It is doubtful that the Soviet leaders would be much more prone to activate their relocation plans than would be the President of the United States; but they have, indeed, developed such plans.

The Soviet leadership has thus been provided with an option, a perhaps remote contingency which the President has not had available.

Despite all reasons to the contrary, is it altogether unimaginable that the President might feel it necessary, no matter how undesirable it may be, to order counter-evacuation should the Soviet Union initiate population relocation in a threatening international environment? And if, indeed, the probability is anything but zero, or if it is anything but so close to zero that we might feel comfortable to disregard it, then the determination of feasibilities of crisis relocation looms important. And if population relocation were feasible, then it also seems to follow that crisis relocation planning might be worth the effort so that stand-by capabilities become available as a plausible, if unlikely, alternative. In this sense then, the notion of city evacuation of the 1950's as one of the defense responses to war threat has reappeared some two decades later.

But there are important differences between the concepts of the 1950's and the renewed interest in evaluating possibilities of population relocation.

The early civil defense system, then of the Office of Civil and Defense Mobilization, the parent agency of OCD and eventually of

DCPA, was predicated on a response to essentially tactical warning.

It must be remembered, and cannot be stressed enough, that the age of long range bombers and absence of ICBM capabilities allowed for fair evacuation feasibility because of the time which would have elapsed between the availability of warning and the arrival of enemy bombers over prospective target areas.

Thus the early evacuation system was significantly constrained by time itself, in that only that evacuation could be successful which might be achieved in the last hours, eight to twelve or so, before an attack.

But for many cities, the time limitation would have been somewhat more flexible simply because, in the early 1950's, the Soviet Union did not have enough of a force, in numbers of bombers that might eventually penetrate the Air Defense Command's barriers and in numbers of nuclear devices they may deliver, to target both all major military installations and all major industrial city-type targets.

The ICBM technology negated any possibility of tactical evacuation. With arrival times of weapons on targets now counting in minutes rather than in hours, in minutes, that is, upon attack detection and tactical warning issuance, there could be no thought of evacuation. With increasing number of weapons, the shift from kilotonage to megatonage and multimegatonage per weapon, the numbers of possible, if not probable, targets have also increased as well.

Thus it became necessary, as the only class of postures left open, to develop civil defense systems capable to enhance national survivability on an in-place basis - wherever our people may be, including all of the nation's cities. Furthermore, the probable attack magnitudes were, in part, to be blunted by such measures as the dispersion of our Strategic Air Command forces, by airborne alert, by the Polaris system, as well as by such deployment of our own missiles, the Atlases and Titans - and eventually the Minutemen - as would necessitate maximum use of enemy weapons on ever-more numerous military targets, and thereby, in effect, decrease the numbers of weapons left available for any city-oriented attacks.

Furthermore, in the absence of a sound technology of protection against primary weapons effects--blast, heat and radiation around Ground Zero--survivability chances were to be increased by improving protection against secondary effects--fallout.

A program to encourage American families to provide themselves with fallout shelters, the Family Shelter Plan, did not prove successful for reasons too numerous to identify here. It did, of course, lead

to some shelter construction and various nation-wide studies of the period (Michigan University) and thereafter (University of Pittsburgh) identify one to two percent of households in which at least some sheltering provisions had been made, though none of the inquiries were in a position to determine the resulting quality of shelters even for those few Americans who chose to have them.

Feasibility studies were undertaken of the social and organizational implications of the construction of larger public shelters, hundred men shelters as well as larger ones. Here, the issues revolved around social, economic (and political) feasibility rather than around technology. From a technical standpoint, advances in knowledge about weapons effects coming from weapons testing on the part of the Atomic Energy Commission, there was nothing in the way to design and build (fallout) survivable structures.

No national program, however, evolved to construct large public shelters perhaps mainly for want of adequate Congressional funding for the effort.

The Berlin Wall crisis of Winter 1961 - certainly not the only major crisis of the period, but one which represented a kind of watershed - provided the Office of Civil Defense with an opportunity, as well as necessity, to enhance its operational capability with essentially "what we had".

The Army Corps of Engineers conducted nation-wide surveys of large buildings to determine usability of basements for sheltering purposes, and the Marking and Stocking program was underway.

To be sure, basements represented only part of the story. It was clear by then, that above-ground structures under appropriate architectural and environmental circumstances may provide a desirable minimum of protection as well. Further research on weapons effects gradually led to changes in desirable minimum protection standards - from 1000 PF of the old, and discarded, Family Shelter program to 100 PF, and eventually to 40 PF as an acceptable minimum.

Thus many hallways and corridors in office buildings, schools, hotels, apartment houses and the like were found to have a protection factor of 40 or higher. Millions and millions of shelter "spaces" were discovered, and the overwhelming cooperation of building owners (over 90 per cent) led to their being marked and most, though never quite all, stocked with survival essentials.

Yet, the Marking and Stocking program, as successful as it was, presented new problems. Major among these was the simple fact that the best shelters, and also most of them, would be located within, rather than outside of, cities. Rural areas, suburbias and smaller towns proved to be characterized by serious shelter space deficits.

In other words: those parts of the nation most likely to be affected only by fallout were least protected against fallout even under these circumstances, while cities, possible victims of primary weapons effects against which relatively little could be done, were most protected against the hazards somewhat less probable, fallout.

It was, of course, the best that could be done at that stage of knowledge and with the given fiscal and human resources of the time. If people were in fallout shelters and if the area were not subjected to direct assault, survival chances were, indeed, enhanced.

While studies may differ as to the magnitude of the benefit, for most large scale thermonuclear attacks assumed to require a great deal of military-oriented targeting by an enemy, perhaps 40 or more million lives would be saved which a no-fallout protection posture would not have saved.

Now, given the distribution of shelter space deficits, how might further improvements in the nation's protection come about short of a well financed program of shelter construction?

Out of these considerations, the program to survey home basements came into being. If Americans were to supply elementary information about the characteristics of their basements, provided they had one, it might prove possible to identify a fair number of individual family structures which could augment the national stock of shelter spaces.

The willingness of Americans to pass on such information was not in doubt. Our own national surveys, prior to the launching of the program by the Office of Civil Defense, indicated that some 70 to 80 per cent of our people would comply with a request for information of this type.

The subsequent surveys carried out on behalf of the Office of Civil Defense by the Bureau of the Census proved these conclusions to be quite correct - and some 15 per cent of basements were, in fact, disclosed to provide protection of 40 PF or more, and other basements could do so upon minor adaptations.

But the contribution of the program to the national civil defense posture was, of necessity, quite uneven. In the Southern tier of states, and in parts of the nation's West, basements themselves are rare.

Thus the Home Basement Survey Program helped to decrease the shelter deficit in particular parts of the country at best, the Northeast and the Central states particularly.

It is, of course, one thing to know where shelter spaces are, and even to make this known to the public, and another matter to insure that our people can use the sheltering with even a modicum of effectiveness. For in a crisis situation, there could be no assurance that people might not converge on particular sheltering locations while leaving others unused or underused. In fact, the probability of serious difficulties in the movement of people to shelters would seem exceptionally high.

To solve, as best any plans can, the attendant problems, the Community Shelter Plans were initiated and carried out. The Plans, detailed out at local levels and in coordination with local planners and government officials, would lead to flexible, but rather specific, patterns of shelter assignments. Americans would be told which shelters are closest to their place of residence and to their place of work, and which shelter(s) they, in fact, should go to should an emergency arise.

The publication of such plans, and their dissemination - often as a special addendum to local newspapers, rendered the system as operational as under normalcy conditions it could, or should, ever become. Now one more major step along these lines has remained, the next logical low-cost (or nearly no-cost) option: could those home basements which do protect the homeowner or resident against fallout be also used by others? by neighbors? by strangers?

The question then arose as to the feasibility of incorporating private home basements into a national shelter system in some appropriate fashion. We have devoted a separate report to this possibility, a program also now under exploration and not yet in any operational phase. But the results of two of our national surveys, those of 1968 and again of 1972, indicate strongly that such approaches are altogether feasible from the vantage point of their public acceptability.

Intensive exploratory and near-experimental studies in Colorado Springs, Colo., carried out by Brigham Young University, lend strong support to our nation-wide conclusions in this regard. What of evacuation?

We have already pointed out that the changes in weapons technology, in particular in terms of delivery systems, can be used to explain the national shift from evacuation planning to in-place sheltering. Furthermore, that the sheltering programs of the late 1950's and throughout the decade of the 1960's and up to now have all been low cost efforts, with only one period of modest investment of funds, that is, into the Surveying, Marking and Stocking program triggered by the crisis of late 1961.

Given this "in-place sheltering" philosophy, itself necessitated by circumstances, and given the negligible financial and other resource investment which has been made thus far, something of a plausible operational system nonetheless came into being.

At the same time, however, the possibility of population evacuation remained in the background. It re-emerged conceptually as strategic evacuation when improvements in overall capacity to estimate risks of an attack were made, including the crucial improvements due to intelligence satellites.

It has become clear that an antagonist preparing to stage a war would have to go through a period of intensive, though not necessarily large-scale, mobilization of effort, the patterns of which are such that forewarning of two, or even three, days might be available. Not that such strategic clues to imminency of war would be, in fact, altogether reliable. Yet, many researchers have drawn the conclusion that the "out-of-the-blue" perspective on the onset of war was less reasonable than a view that we, or the President and his advisors at least, would have a "fairly clear" idea that war was coming some days before the outbreak of hostilities.

Furthermore, overall changes in the international political environment seemed to reenforce the notion that nuclear war would be avoided at almost all costs by all adversaries, and that, therefore, should it occur at all, it would follow out of a scenario of escalating tensions and crises which become accentuated rather than alleviated.

We think that the Soviet response in the Cuban crisis, their clear unwillingness to pick up the gauntlet which President Kennedy had thrown (in hopes that it would not be picked up), was the major factor in leading to an increasing conviction that the Soviets were not actively engaged in planning a surprise attack, merely awaiting for an opportune occasion to start a war. But if warning might be available some days prior to an attack, would strategic evacuation not be feasible?

And if, indeed, a population relocation strategy were feasible in a context in which warfare is days-imminent, could such a strategy have possible applicability under extreme crisis conditions?

The fact that the Soviet leaders have thought such an approach to have some merit and have thus developed relocation plans of the most broadly conceived strategic evacuation variety has only underscored the observation that imaginable war scenarios are quite unlikely to involve "out-of-the-blue" attacks and counter-attacks, and that removing people from the most threatened areas when extreme deterioriation of international conditions might make war highly probable may be a significant "old-new" alternative.

Whether there are other than shortest-of-war situations under which either the Soviet leaders or the President would even contemplate implementing relocation plans is highly debatable. But only an altogether cynical view would postulate that relocation strategies would be used as a form of "bargaining" or that they would be invoked simply as some kind of a "strong gesture". The social and economic dislocations, both for the Soviet Union and the United States, resulting from crisis relocation would be so vast that it seems rather obvious to us that the carrying out of relocation plans would occur only in the most threatening, and without war apparently unresolvable, situation. Be it as it may, our task is not to advocate crisis relocation planning. Nor is it to argue that the nation should simply disregard this option.

Rather, the logic of circumstances seems sufficiently compelling to make attempts at feasibility studies of population evacuation desirable. And, perhaps, to accomplish the planning task once feasibility will have been established, if it can.

Among the major factors affecting feasibility, public acceptance of relocation concepts must rank high. While plans could be developed with minimum public concern, and the planning process itself can be a low profile activity throughout, if the evacuation program is to have a chance of succeeding, its acceptance by the public, and eventual compliance with the plan provisions by the public, loom large.

This report is then concerned with public views on population relocation.

II. A RESEARCH PERSPECTIVE

Throughout the series of national surveys which we have undertaken under the sponsorship of the Defense Civil Preparedness Agency, we sought to ascertain the attitudes and opinions of Americans not only toward measures of civil defense but also their perspectives on the broader contextual questions of peace and war.

Furthermore, in each of the national studies, we were not only attempting to assess the nation's sentiments toward policies and programs then in existence, but also toward programs under consideration, and toward programs which seemed plausible even if they were not yet fully conceptualized.

In this manner then, our studies included questions about blast shelters even though there has been no program either in existence or under development which would actually try to provide protection against primary weapons effects.

We asked the sampled respondents about the ABM system, and its acceptability parameters, while the R&D on Nike X was still continuing and any policy attempt to protect military installations and cities with ABM's was still in the future.

The interviewees were questioned about their willingness to have their home basements surveyed just about when the then Office of Civil Defense was to undertake initial explorations in New England.

We probed into acceptability of shelter assignments before the Community Shelters Plans came into being as a major and formal aspect of the nationwide posture.

We asked Americans about the use of their own basement not only for themselves but for others, including strangers, before other dimensions of feasibility of such an effort have come to be explored by DCPA research.

Fully anticipating that the time may come when strategic evacuation may again come under consideration, questions concerning population relocation were included in every one of our national surveys, save only for the 1968 inquiry.

In the 1963, 1964 and 1966 national studies, the respondents were asked to assess the desirability of the following situation:

> "In tense situations which might precede a war, communities near military bases - plus some large cities - will evacuate their people to safer areas where fallout shelters will be available."

The 1972 question was worded in the following manner:

> "Suppose, in tense situations which might precede a war, it were the government's policy to evacuate the populations of large cities and communities near military installations. How desirable do you feel that would be?"

In each inquiry, the respondents were provided with a simple scale from (-3) to (+3) in terms of which they were asked to evaluate the relocation posture.

Questions concerning home basement surveys, shelter assignment, as well as use of one's own home basement to shelter others have provided for assessments with respect to an identical scale. Relative to these types of items, we have considerable validation that the responses do, in fact, reflect patterns of acceptability of the particular approach. Thus our forecasts of numbers of Americans who would respond to home basement surveys were validated by actual experience in all states of the Union in which the survey activity was undertaken.

Public acceptance of the earlier Surveying, Marking and Stocking program (of larger buildings) was mirrored in the cooperation with the program by landlords around the nation.

The Colorado Springs near-experiments with home basement sharing indicate that the national results in this regard do not overestimate the nation's cooperativeness with a program of this type.

Under these circumstances, we certainly have no reason to have less confidence in those results of our research which bear on strategic evacuation.

But it must be underscored that we do not construe the conclusions based on public sentiment expressions to be tantamount to public decisions; or even to policy mandates of sorts. Rather, public acceptability of particular policy thrusts, or their unacceptability, establish broad guidelines within which those in policy-making roles must evaluate not merely what the public believes and desires, disbelieves and does not want, but also all other issue-specific factors, be they economic, political or technical in character. The policy-makers, furthermore, must always weigh various trade-offs and balance a variety of programs, both in terms of human and fiscal resource .

And, in particular, the actual adoption of particular programs or their consideration for adoption involves <u>specific</u> program design

features on which judgment has to be passed along with the evaluation of the underlying policy direction.

The public, in these terms, is unprepared, and cannot be expected, to pass judgments on concrete technical characteristics of possible policies. Thus while public sentiment regarding, for instance, general forms of defense spending may be an important facilitator or impediment to patterns of defense spending, the specific budgetary charges which might be thus implied cannot be assessed by the larger body politic in a manner which would lead to "easy choices" on the part of policy makers.

Public sentiment regarding ABM, or the public acceptance of ABM limitations, may be taken also as broad guidelines, but either specific deployments or specific limitations on deployment are not easily estimated by the general public.

In these terms, our discussion of strategic evacuation is one of the class of possible postures which evacuation implies, and it is certainly not an evaluation of the program particulars as they may evolve out of the R & D efforts and as they might become crystallized as actual plans.

But this is not to say that actual location-and time-specific plans would be less, or more, acceptable than the underlying policy concepts might be. In general, concretization of approaches does not significantly alter public disposition unless major new factors enter into the consideration, such as factors of an intensive and prolonged national dialogue "against" or "for" a program, or those of significantly visible changes in the international environment, and the like.

It is, as it were, as if the public were to delegate the concretization of its broadly gauged policy guidelines to statesmen, politicians and experts. This then accounts, in good measure, for the fact that even highly endorsed policies do not necessarily mobilize significant segments of the population toward concrete demands for implementation. Over the years, high acceptability of civil defense has not, in fact, produced public demands commensurate with the attitudinal receptivity to the programs.

We think that this is, in part, related to the process by which actual policy making, and the concretization of national goals and of priorities among the goals, tends to be effectively delegated to government.

We also think, of course, that this is in part affected by the low saliency of any particular program at any particular time, except

in crisis conditions, to wit, during the Berlin Wall crisis, during the Cuban crisis, when the demands for action can be heard. But under normalcy circumstances, other more acute problems acquire prominence in the national dialogue, such as energy crisis in the shortfall period of 1973-1974 winter, or inflation, recession, or crime.

The results of our studies must then be interpreted in this broader framework of national concerns, and conclusions concerning acceptability or unacceptability of such programs as evacuation strategies are not directly and immediately translatable into public demands for policy. Rather, they are statements of the underlying sentiments which make some policy approaches more, and others, less acceptable and which can mobilize supporters and antagonists only when national and international circumstances indicate the need for some policies in the domain of problems under consideration.

III. ACCEPTABILITY OF EVACUATION

Over time, general support for evacuation policies has tended to decline. In the early days of the conflict in Vietnam, when most Americans were inclined to favor the nation's commitment in that South East Asian country, favorable views on population relocation, as well as on other civil defense postures, were at their peak.

TABLE 1

NATIONAL VIEWS ON STRATEGIC EVACUATION

	1963	1964	1966	1972
National averages*	+ 1.83	+ 2.04	+ 1.64	+ 0.92
Per cent desirable**	81.3	83.5	71.0	57.6
Per cent undesirable***	10.1	8.3	11.0	21.2
(Sample)	(1434)	(1464)	(1497)	(1302)

* The scale range is (-3) to (+3), respective minima and maxima.

** All positive responses, (+3), (+2), and (+1) combined and percentaged against total sample.

*** All negative responses, (-1), (-2) and (-3) combined and percentaged against total sample.

At a time when the Defense Civil Preparedness Agency is once again seriously considering the feasibility of population relocation, positive dispositions of the respondents are significantly less frequent, and negative views significantly more frequent, than has been the case throughout the period of our national studies. But, of course, almost 60 per cent of the interviewees are still favorable. Yet, over 75 per cent are in favor of public shelters, and as many approve the use of private basements as part of a national shelter system. In 1972, 87 per cent of the respondents were supportive of the use of stocked public buildings as shelters, 83 per cent thought that such buildings as schools or hospitals ought to be provided with sheltering capabilities if they do not have them already, and only 8.2 per cent thought that civil defense programs ought to be discontinued altogether.

The results are quite important because they reveal that strategic evacuation has come to be less favored as an option even though other civil defense programs have retained very high levels of public acceptance. Furthermore, the shifts have occurred throughout the whole country. Residents of the Northeast and the West were always somewhat less supportive of evacuation, and have remained so in the latest wave of interviews, 1972. In the South, however, favorable dispositions have exceeded those of inhabitants of other regions. In 1972, they still do. Table 2 gives a summary result.

TABLE 2

DESIRABILITY OF EVACUATION IN NATIONAL REGIONS

	1963	1964	1966	1972
Northeast	+ 1.76 (316)*	+ 2.04 (326)	+ 1.42 (347)	+ 0.77 (327)
Central	+ 1.86 (419)	+ 2.08 (412)	+ 1.44 (412)	+ 0.99 (296)
South	+ 1.99 (440)	+ 2.11 (459)	+ 2.08 (463)	+ 1.01 (356)
West	+ 1.74 (239)	+ 1.83 (233)	+ 1.44 (236)	+ 0.89 (239)

* N's on which the regional percentages are based.

Whatever the basic reasons, it seems that respondents in areas somewhat more difficult to evacuate in the first place, such as the Boston-Washington corridor of megalopolitan complexes, or the Bay area toward San Diego in the South, are less supportive than are those in the Central and Southern tier of states in which relocation would appear, on the face of it, more operationally feasible.

The potential evacuees, city dwellers, are somewhat less positive than are potential hosts in less urban America. This, too, is of importance and the results are provided in Table 3.

TABLE 3

ACCEPTABILITY OF EVACUATION BY SIZE OF RESIDENCE AREA

	1963	1964	1966	1972
Largest SMSA's*	+ 1.69 (317)	+ 1.92 (344)	+ 1.52 (325)	+ 0.67 (499)
Other SMSA's	+ 1.82 (564)	+ 1.64 (561)	+ 1.62 (589)	+ 1.00 (380)
Non-urban areas	+ 2.00 (533)	+ 2.01 (530)	+ 1.72 (544)	+ 1.19 (339)

* Note that 1972 largest SMSA's are not exactly comparable to the former data. The 1963, 1964 and 1966 study includes here SMSA's with 2,000,000 or more inhabitants; in 1972, the largest 26 (of over 1,000,000 inhabitants are included in this category).

In what sense are such results particularly relevant? For one, they suggest that potential host areas would be quite receptive to the influx of relocated city residents. Secondly, the slightly greater reticence of inhabitants of the cities with respect to evacuation might suggest that a proportion of them might be unwilling to be relocated. A program predicated on voluntary compliance with crisis relocation might thus amount to allowing some percentage of city residents to remain behind the flow of evacuees. In terms of our 1972 data, we can estimate this percentage to be approximately 30 per cent in the largest SMSA's, and about 20 per cent in other metropolitan areas. These are respondents who disfavor evacuation - and while some of them may change their mind, those who are undecided at the time of the study (14 per cent in largest SMSA's and about 15.5 per cent in other SMSA's) are quite likely to counterbalance the opposite shifts. A conservative estimate, using only the most extreme negative responses, would lead us to say that about 16 per cent in largest SMSA's and 10 per cent in other SMSA's might not be willing to relocate at all.

For the purposes of feasibility analysis, and for planning purposes, these types of percentages can be accepted as best available estimates at this time. Hence, between about 16 and 30 per cent of residents of the largest cities might not be evacuatable in a program which relies on voluntary cooperation. And in other SMSA's, perhaps 10 to 20 per cent fall in this category.

To what extent might further light be shed, especially on the most recent, 1972, results by considering both region and city size? Table 4 gives the acceptability indices, as desirability averages, along with percentages of respondents who disfavored the idea of evacuation at least mildly.

In this Table, the type of respondent's residential area "dominates" region. This is to say that whether a respondent lives in non-urban areas, in SMSA's or in largest SMSA's matters more than whether he lives in the Northeast, Central states, South or the West. Non-urban South, potential host areas for city inhabitants, turns out to be most receptive but, at the same time, the residents of largest SMSA's in the same region tend to be most reluctant. And those in other SMSA's of the Southern states fall just about at the national average in the acceptability index, with about one in five actually opposed. In the Northeast, the situation is somewhat different. Residents of SMSA's other than the largest ones are quite favorable to evacuation (and those in the largest city complexes much less so) but there is somewhat less enthusiasm in the countryside.

In the Western states, non-urban residents are quite positive and inhabitants of SMSA's as well. Those who live in the largest cities, like those in the Northeast and the South, are more reticent.

In the Central states, people in the major SMSA's as well as in other SMSA's are positive relative to the overall national perspective, and potential non-urban hosts are also in favor.

In sum, some difficulties may be expected in the largest cities of the South - coupled with great willingness of rural Southerners to help.

In the Northeast, inhabitants of SMSA's other than the large ones seem quite evacuatable, and those from the largest metropolitan areas much less so - coupled with something less than enthusiasm in the potential receiving areas.

In the West, only the residents of largest cities seem to present a planning, and perhaps operational, problem, whereas inhabitants

TABLE 4

ACCEPTABILITY OF EVACUATION BY CITY SIZE AND REGION

City Size	Region	Average	Per cent Opposed*	(N)
Non-urban	South	+ 1.43	8.5	(176)
SMSA's	Northeast	+ 1.30	17.2	(58)
Non-urban	West	+ 1.19	18.9	(37)
Largest SMSA's	Central	+ 1.07	20.6	(102)
SMSA's	West	+ 1.04	19.5	(87)
Non-urban	Central	+ 0.97	20.2	(109)
SMSA's	Central	+ 0.92	17.3	(98)
SMSA's	South	+ 0.91	21.7	(157)
Non-urban	Northeast	+ 0.87	17.0	(47)
Largest SMSA's	West	+ 0.68	31.5	(127)
Largest SMSA's	Northeast	+ 0.61	25.1	(243)
Largest SMSA's	South	+ 0.17	37.7	(61)

* Scale responses (-3), (-2) and (-1).

of other SMSA's are relocatable and the countryside is willing to receive them.

In the Central states, the situation is most balanced in that city dwellers (both largest SMSA's and other SMSA's) are receptive and rural residents are too. The differences, of course, are not exceptionally sharp. But they do present a somewhat different problem for the crisis relocation planner in each of the major regions of the nation and in the different types of cities as potential areas to be relocated.

Feasibility inquiries such as those in the Colorado Springs, Colo. (a potential relocation site) and adjacent hinterland (potential host areas) may somewhat obliterate this complexity. It will be noted that Colorado Springs SMSA is not among the largest ones - and such Western SMSA residents are very receptive to evacuation to begin with. Furthermore, the non-urban Westerns are also very favorable, so that a somewhat "natural" matching exists in the sense of our previous analysis.

A critical test case regarding public response to relocation strategies might then consist of a large Southern city (least receptive to relocation) with appropriate host areas (most receptive to relocation). The data would support the contention that all other cases, that is, combinations of city sizes and adjacent areas in the nation's regions, would prove to be less problematic than the extreme case of a large Southern metropolis.

It is, of course, plausible that some of the attitudes on which our results are based may have changed in the intervening period. After all, both the national and international scenes have undergone rather dramatic shifts between 1972 and the end of 1974. Even so, the basic direction of our conclusions should have remained essentially impervious to impacts which have affected the whole nation regardless of region and size of residential area.

How do the different population segments view the desirability of an evacuation program? Table 5 gives a summary.

Several patterns are consistent over the four national surveys:

* women are more favorably disposed than men;

* people with High School education or less are more positive than are people with at least some college education;

TABLE 5

DESIRABILITY AVERAGES AND PERCENTAGES OF RESPONDENTS IN "NON-DESIRABLE" CATEGORIES

	1963		1964		1966		1972	
	Average	Per cent Non-desirable*	Average	Per cent Non-desirable	Average	Per cent Non-desirable	Average	Per cent Non-desirable
Men	+ 1.73	20.0	+ 1.75	19.9	+ 1.54	26.8	+ 0.57	42.9
Women	+ 1.96	16.1	+ 2.27	9.4	+ 1.72	24.4	+ 1.18	30.6
Whites	+ 1.90	16.7	+ 2.04	14.0	+ 1.56	28.4	+ 0.87	37.1
Blacks	+ 1.50	23.0	+ 2.00	14.0	+ 2.08	15.5	+ 1.27	27.0
Single	+ 1.72	22.2	+ 1.57	21.1	+ 1.52	29.2	+ 0.45	46.2
Married	+ 1.84	17.3	+ 2.07	14.1	+ 1.62	26.1	+ 0.95	40.6
Divorced	+ 2.30	9.9	+ 2.08	12.7	+ 1.71	24.3	+ 0.76	44.0
Widowed	+ 2.08	13.1	+ 2.18	9.9	+ 1.70	19.8	+ 1.25	34.3
Separated	+ 1.65	19.0	+ 1.97	13.5	+ 2.10	17.5	+ 1.16	28.0
Up to 40	+ 1.78	20.4	+ 2.00	14.8	+ 1.60	26.3	+ 0.78	39.9
40's & 50's	+ 1.96	15.9	+ 2.19	11.5	+ 1.69	23.8	+ 0.92	35.2
Over 60	+ 1.83	16.9	+ 1.86	18.2	+ 1.62	26.9	+ 1.22	29.0
Owners	+ 1.85	18.1	+ 2.02	14.0	+ 1.54	27.0	+ 1.06	35.3
Renters	+ 1.88	16.0	+ 2.06	14.8	+ 1.80	22.2	+ 0.63	39.4
Single, detached	+ 1.85	16.7	+ 2.06	13.5	(not	)	+ 1.06	32.8
Single, attached	+ 1.74	20.0	+ 1.86	14.8	(	)	+ 0.97	37.7
Two units, detached	+ 2.08	13.6	+ 2.18	9.5	(available	)	+ 1.83	25.0
Two units, attached	+ 1.99	14.9	+ 2.09	13.7	(	)	+ 0.84	46.1
Multiple dwelling	+ 1.86	15.4	+ 1.90	17.8	(	)	+ 0.35	43.9
High school or less	+ 1.92	16.4	+ 2.10	12.9	+ 1.80	22.6	+ 1.10	32.2
Some college or more	+ 1.67	20.2	+ 1.84	18.4	+ 1.12	35.1	+ 0.49	44.8
Up to $10,000	+ 1.88	16.6	+ 2.06	13.6	+ 1.74	23.3	+ 1.05	32.9
0,000 or over	+ 1.71	21.6	+ 1.98	16.3	+ 1.23	34.1	+ 0.73	40.6

TABLE 5 (Cont'd)

DESIRABILITY AVERAGES AND PERCENTAGES OF RESPONDENTS
IN "NON-DESIRABLE" CATEGORIES

	1963		1964		1966		1972	
	Average	Per cent Non-desirable*	Average	Per cent Non-desirable	Average	Per cent Non-desirable	Average	Per cent Non-desirable
Upper class	+ 2.06	15.7	+ 1.77	20.0	+ 1.50	20.6	+ 0.17	45.9
Middle class	+ 1.83	17.3	+ 1.99	15.8	+ 1.46	30.2	+ 0.89	38.4
Working class	+ 2.91	17.9	+ 2.12	12.1	+ 1.77	22.1	+ 1.02	33.2
Lower class	+ 1.53	19.7	+ 1.70	19.5	+ 1.92	22.5	+ 0.94	29.5
Protestant	+ 1.87	17.0	+ 2.08	13.6	+ 1.72	23.9	+ 1.02	33.7
Catholic	+ 1.89	17.2	+ 2.07	13.2	+ 1.61	26.7	+ 0.89	35.0
Jewish	+ 1.87	15.4	+ 1.64	18.8	+ 0.67	42.2	+ 0.48	51.0
Very religious	+ 1.91	15.8	+ 2.09	12.9	+ 1.76	23.7	+ 0.98	35.5
Religious	+ 1.90	16.6	+ 2.20	10.9	+ 1.67	24.6	+ 1.19	28.3
Moderately religious	+ 1.84	17.6	+ 2.02	14.5	+ 1.58	25.6	+ 0.82	34.0
Not so religious	+ 1.37	33.4	+ 1.45	25.6	+ 1.21	34.5	+ 0.40	44.4
Not at all religious	+ 1.62	23.8	+ 1.72	28.0	+ 0.96	39.0	+ 0.37	48.5
Republican	+ 1.88	18.3	+ 2.00	14.4	+ 1.37	32.1	+ 0.76	40.6
Democratic	+ 1.92	15.1	+ 2.04	13.9	+ 1.80	22.2	+ 1.08	30.5
Independent	+ 1.91	24.2	+ 2.18	12.6	+ 1.42	29.9	+ 0.61	45.1
None	+ 1.68	20.8	+ 1.97	16.0	+ 1.43	29.8	+ 0.89	37.6

* "Non-desirable" responses include scale values (-3), (-2), (-1) as well as "zero" (0).

* respondents with incomes of less than $10,000 per year are more supportive than are those with incomes of $10,000 and over;

* Americans who express a "working class" identification are more positive about evacuation programs than are "middle" or "upper" class respondents, and they are also generally more in favor than "lower class" interviewees, save only for the 1966 results;

* people with a Democratic party identification are more favorably disposed than are Republicans, Independents, as well as those who claim no political preference whatever (or the few with "other" party affiliations, for whom the data are not given in Table 5 at all because of the very small numbers involved);

* more religious respondents are more favorable than are less religious ones.

At the same time, none of the demographic or sociocultural segments of the population falls into the negative dimension of the rating scale so that the patterned differences all occur within the context of overall national acceptance of relocation concepts. If women are consistently more positive than are men, perhaps married women might be in a position to affect further the attitudes of their husbands to enhance public acceptance of evacuation as a strategic option. For the 1972 data, as shown in Table 6 , we find indeed that married women are most favorable, though not much more so than are unmarried ones (single, divorced, separated and widowed); and married men are more supportive than are unmarried men.

Furthermore, Table 7 shows that it is mainly college educated men in cities (both largest SMSA's and other SMSA's) who rent their place of residence who tend to be non-supportive. Indeed, these two population segments yield actually negative averages.

Thus opposition to evacuation is most likely to single, well educated, men in the nation's cities. If city size can be said to "dominate" region (Table 4), it is, in turn, "dominated" by sex. Of the eleven groupings of Table 7 which yield acceptability indices higher than the national average (+ 0.94), the top eight involve women. And the only categories in which women are included among the groupings with lower than average acceptability scores have to do with women in the very largest SMSA's.

TABLE 6

RECEPTIVITY TO EVACUATION: BY SEX AND MARITAL STATUS (1972)

Sex	Marital Status**	Average	Per cent Opposed*	(N)
Women	Married	+ 1.19	17.4	(476)
Women	Non-married	+ 1.17	14.3	(211)
Men	Married	+ 0.67	25.2	(414)
Men	Non-married	+ 0.20	34.7	(117)

* Scale responses (-3), (-2) and (-1).

** Includes all individuals other than those married at the time of the interview as "non-marrieds".

TABLE 7

ACCEPTABILITY OF EVACUATION TO VARIOUS POPULATION SEGMENTS (1972)*

Area Size	Sex	Education	Own or Rent	Average	(N)
Non-urban	Women	HS or less	Renters	+ 1.78	(41)
SMSA's	Women	College	Owners	+ 1.58	(40)
Non-urban	Women	College	Owners	+ 1.42	(38)
SMSA's	Women	HS or less	Owners	+ 1.41	(110)
Largest SMSA's	Women	HS or less	Owners	+ 1.29	(94)
Non-urban	Women	HS or less	Owners	+ 1.19	(99)
SMSA's	Women	HS or less	Renters	+ 1.17	(42)
SMSA's	Women	College	Renters	+ 1.16	(19)
Largest SMSA's	Men	HS or less	Owners	+ 1.08	(64)
Non-urban	Men	HS or less	Renters	+ 1.07	(27)
Non-urban	Men	HS or less	Owners	+ 1.06	(85)
SMSA's	Men	HS or less	Owners	+ 0.93	(73)
Largest SMSA's	Women	HS or less	Renters	+ 0.89	(89)
Largest SMSA's	Women	College	Renters	+ 0.67	(33)
SMSA's	Men	College	Owners	+ 0.50	(40)
Non-urban	Men	College	Owners	+ 0.46	(24)
Largest SMSA's	Men	HS or less	Renters	+ 0.43	(61)
Largest SMSA's	Men	College	Owners	+ 0.38	(48)
Largest SMSA's	Women	College	Owners	+ 0.33	(52)
SMSA's	Men	HS or less	Renters	+ 0.21	(19)
Largest SMSA's	Men	College	Renters	- 0.87	(45)
SMSA's	Men	College	Renters	- 0.95	(19)

* Of the total of 41 empirical subsets, only the top 22 with larger numbers of respondents are presented here. These 22 groupings represent 40.7 per cent of all possible subsets and, with 1,162 respondents in them, include 89.2 per cent of the total sample (N=1302)

Furthermore, education also tends to "dominate" city size, though not sex. All but three of the highest eleven groupings involve people with high school education or less, and the remaining three segments include college educated women who own their place of residence and live in non-urban settings or in SMSA's other than the largest ones.

Among non-urban residents, only college-educated men who own their place of residence tend to yield below average acceptability of evacuation; while the only groupings above the national average of individuals living in the largest cities consist of both men and women with high school education at most, and those who are owners of their place of residence.

In addition to the two subsets of men with actually negative acceptability scores, only one additional such segment exists: college educated men who live in SMSA's (not the largest ones) and who live in places other than their own residence. But there are only 3 respondents in this category, with an index average of -0.34.

To determine the extent to which salient attitudes toward civil defense in more general terms affect favorableness or unfavorableness of sentiments regarding evacuation policies, we combined five key items to form up to 243 possible patterns:

* whether the respondent heard about, knew about, or saw public fallout shelters or whether he did not;

* whether the respondent's attitude toward public fallout shelters was one of support or one of opposition;

* whether the respondent thought that survival chances of sheltered people would be at least good, or whether he thought that the chances would not be good even if the population were in fallout shelters;

* whether the respondent favored home basement sharing or whether he did not favor it;

* whether the respondent supported the idea of protecting the nation's cities with ABM's or whether he was in opposition to such active defense systems.

Since "don't knows" and "no answers" formed a third alternative to each of the five dichotomies, all 243 types, (35), became admissable. Only 59.7 per cent of these types were actually found - and the fourteen patterns (5.8 per cent of all possible ones) presented in Table 8 include almost 61 per cent of all respondents.

TABLE 8

VIEWS ON EVACUATION FOR DIFFERENT ATTITUDINAL GROUPINGS*

		Knowledge about Fallout Shelters	Attitude to Public Shelters	Chances of Survival in Shelters	Basement Sharing	ABM's Around Cities	Average	Per cent Opposed	(N)
Above national Average	1.	No	Favor	Good	Favor	Favor	+ 1.51	13.2	(212)
	2.	No	Favor	Good	DK	Favor	+ 1.41	17.1	(23)
	3.	Yes	Favor	Good	Favor	Favor	+ 1.38	16.2	(191)
	4.	No	Favor	DK	Favor	Favor	+ 1.38	17.6	(34)
	5.	Yes	Favor	Good	Oppose	Favor	+ 1.36	7.8	(51)
	6.	Yes	Favor	Poor	Favor	Favor	+ 1.32	16.7	(24)
	7.	No**	Favor	Poor	Favor	Favor	+ 1.03	21.9	(32)
Below national Average	8.	No**	Favor	Good	Oppose	Favor	+ 0.81	17.1	(35)
	9.	No	Favor	Good	Favor	Oppose	+ 0.85	18.2	(55)
	10.	Yes	Favor	DK	Favor	Favor	+ 0.76	24.0	(25)
	11.	No	Oppose	Good	Favor	Favor	+ 0.72	36.8	(19)
	12.	Yes	Favor	Good	Favor	Oppose	+ 0.69	26.5	(49)
	13.	Yes	Favor	Good	Oppose	Oppose	+ 0.59	31.8	(22)
	14.	No	Favor	Good	Oppose	Oppose	- 0.17	27.8	(18)
									(790)
									(60.7)

* Only larger subsets are presented here. Of the 243 possible types, 59.7 per cent were actually empirically found. The above 14 patterns represent 5.8 per cent of all possible types, and encompass 60.7 per cent of the total sample (N=1302)

** Above the line are patterns with averages exceeding the national mean (+ 0.94). Below the line are those types for which the average is lower than the national mean.

Seven of the pattern types with larger numbers of respondents (including 43.5 per cent of all respondents in the total study) exceed the national acceptability average; six of the larger ones are below the national average (15.8 per cent of the sample) and one pattern type (with 1.4 per cent of the sample) falls into the negative range of the measurement scale.

Among the most positive pattern types, favorable dispositions toward public shelters and toward protecting the nation's cities with ABM's are the dominant variables. Favorable attitudes toward home basement sharing come next, and expectation of good survival chances for a sheltered population follow. Whether respondents knew about shelters or not seemed least crucial in determining views on relocation.

The few respondents with a negative acceptability average for relocation, and those with the lowest positive index (+ 0.59) are people who consider survival prospects good, who favor public fallout shelters, but are not supportive of home basement sharing or of ABM protection. These are, as it were, people who - whether they did know about shelters or did not - seem to have come to the conclusion that public fallout shelters would do an adequate job of protecting our people - hence, neither basement sharing is needed nor are active defense systems against missile attacks.

Since favorable attitudes toward antimissile missiles are so important in relating to support for relocation policies, might it not be the case that the Moscow agreements between President Nixon and the Soviet leaders which followed the national survey by several weeks on ABM limitations have altered the view of Americans regarding evacuation? We think not. For, indeed, we asked questions about the desirability of mutual agreements concerning ABM limitations, and the policy found extremely high levels of support even prior to its Moscow realization and the subsequent ratification of the treaty of the Senate.

This means then, that the favorable dispositions toward ABM's in this context must be interpreted as statements of desirability of protecting the nation's cities <u>if no mutual agreements with the Soviets were in existence</u>. Therefore, we conclude that the subsequent realization of a limited arms control accord in this area of military systems did not alter the basic results of <u>Table 8</u>. One more major point needs to be singled out for attention: if people are favorable to <u>public shelters</u>, if they tend to believe that survival odds are reasonable for sheltered populations, and if they are supportive of ABM protection of the cities, should they not feel that evacuation is <u>unnecessary</u>, and thus, perhaps, disfavor the concept? This is, of course, not the case in terms of the

data. Rather, opposition to ABM's relates to lower support for evacuation, and support for ABM's (and fallout shelters) to positive assessments of relocation. Indeed, we think that generally favorable dispositions to civil defense in its various forms are the overriding factor. Americans are saying, in effect, that relocation might well be "another option", along with home basement sharing, public shelters as well as ABM's.

Since one of these options has now been ruled out by the nature of the Soviet-American agreements (ABM installation around major cities and other target areas), we would actually expect that favorableness toward evacuation planning will have been enhanced rather than the opposite, and we would also expect to find even stronger support for the "remaining" (passive) defense alternatives.

Among the fourteen largest patterns, only one yielded a negative average. But in the total roster of 145 empirically established patterns, there are 29 additional types with negative indices - mostly consisting of one or two individuals only. What are the major themes among these unfavorably disposed respondent pattern types?

Opposition to home basement sharing dominates - of all the negative patterns (30 altogether, including the one reported in Table 8), 71 per cent involve opposition to basement sharing and 80 per cent of the respondents are in that category. Unfavorableness to public fallout shelter is next: 53 per cent of the negative patterns include 60 per cent of the respondents in all these patterns. Opposition to ABM's encompasses also 53 per cent of the 30 patterns, and 55 per cent of the respondents.

Hence, those who tend to be non-supportive of evacuation are generally:

* opposed to home basement sharing
* opposed to public fallout shelters
* opposed to ABM's
* estimating survival chances as rather good, and
* less likely to have knowledge about public shelters.

This suggest that these respondents are opposed more on ideological than any other grounds - and they are opposed to all aspects of

civil defense. Indeed, even though they tend to feel (48 per cent of them, with 27 per cent in the "poor survival" category, and 25 per cent in the "don't know" classification) that survival chances might be fairly good if people were sheltered, they do not want public shelters; nor do they want to participate in home basement sharing; nor do they want to have cities protected by antimissile missiles.

All in all, the 30 pattern types with negative averages regarding evacuation encompass 120 respondents, 9.2 per cent of the total sample. Of course, there are more opponents of evacuation than that: the national percentage is 21 per cent (Table 1), and the group or type averages obscure the fact. But the most crystallized, and most pronounced, non-support does not exceed 10 per cent and of these respondents, only some, about 5 per cent of the national sample, seem to be unfavorable because of an anti-civil defense syndrom rather than for more specific reasons of practicality, effectiveness, or cost.

In turn, those who are favorable are also unlikely to single out some programs (for instance, public fallout sheltering or ABM defenses or evacuation or home basement sharing) in strong preference over others. There is therefore also a strong pro-civil defense syndrom, itself occurring in the context of attitudes supportive of national security provisions. As many as six in ten Americans are in this group with the remaining three out of ten, as an approximation, being more selective about their patterns of support and opposition.

IV. CONCLUSIONS

We began this report by emphasizing the limited and historically grounded nature of our data. This year, 1975, or the next are not 1972. A single, if important, question concerning acceptability of "strategic evacuation" is not enough to unravel the kind of dynamic which it is important to understand in the Crisis Relocation Planning process. It is an indication. And it is the best data available at this time. Needless to repeat, our questions about "strategic evacuation", asked repeatedly in several of the national surveys since 1963 (when, at the University of Pittsburgh, we undertook the first one following the waves of national studies of the 1950's which were so ably carried out at the University of Michigan under the leadership of Stephen Withey), were raised at a time when "crisis relocation" even as a concept simply did not exist, and when "strategic evacuation" was either unfeasible or, later on, not within the scope of the Defense Civil Preparedness Agency's activities.

Thus our results antecede significantly the revival of interest in relocation possibilities, and they reflect national thinking which, in this respect, is as dated as was the strategic thinking around 1972 when contrasted with the situation today.

We have asserted at the outset, and in the initial statements in this section on Conclusions, that our results are "limited" also due to the fact that only one, admittedly important, question was asked about strategic evacuation.

It is, perhaps, important then to begin our discussion of conclusions not with a summary of the results themselves, but rather with the identification of some of the major things we do not quite know and may need to know if Crisis Relocation Planning is to proceed, as it most likely is, beyond the current feasibility phase.

1. How many people (and what are their characteristics) have camping sites, summer cottages, relatives within x-miles of their residence (or rather, within a certain travel time from their residence)?

2. How many of such locations are there in what are likely to be host areas for potential relocatees?

3. How many people would avail themselves of these sites in the event of relocation?

4. How many people are likely to leave the risk areas "spontaneously", that is, before actual relocation would be requested or ordered by the President and before the State Governors would order it?

5. How many people, of what kinds, and why might not want to leave the risk area under any circumstances (whether in an actual crisis they would or would not do so is indeed another matter; but for planning purposes, some understanding is needed of the magnitude of the possible problem)?

6. How many people in host areas might be willing to accommodate relocatees (altogether apart from the need for CRP to make congregate care provisions for all relocatees anyway) in their home?

7. How many host area residents might be willing to have their backyards (or other property) used for such purposes as camping on the part of relocatees (apart from available campsites, or parts of public lands that might be usable as campsites)?

8. What factors affect the reasons for which some people would, and others might not, volunteer their help in this manner?

9. Approximately, how much on-hand cash do Americans have on a "typical day" (and what are the approximate variations in this)? This would allow us to have a feeling for the problem of obtaining cash for the family for the possible duration of relocation stay.

10. How many families or individuals do not have any banking accounts or do not have enough cash in any form to survive for one, two or even three weeks?

11. How full is the "typical" gasoline tank of American automobiles on a "typical" day? This would, of course, allow us to make some estimates of the pressure on risk and host area service stations in a crisis period, in a mobilization of services period (when relocation order is imminent and preparatory measures are underway).

12. How many people would have, on hand, enough food supplies to last them and their family members for at least three days?
What would they take?
This would allow us to estimate the kind of pressure that may be exerted due to "last minute" shopping on food stores.

13. How many people have camping equipment of any kind and of what kind?

14. What might be the acceptability to the public of the commuting of "critical workers" from relocation sites back to the risk areas?
This would be especially important to determine from among those Americans who might be in this category of "critical workers".

15. Is relocation seen feasible? Hence, would actual relocation plans be considered credible by the public? If not, why?

These are major examples of questions which need to be raised in a systematic way and to which, at the present time, no real answers quite exist. Within this broad context of lacking knowledge, some conclusions, however, can be derived from the data which we have used in this report.

Since 1963, and in comparison with our subsequent national studies of 1964 and 1966 in which questions about strategic evacuation were included, the last nation-wide survey of 1972 reveals a significant decline in favorable attitudes toward evacuation. A majority of Americans favor the concept; but the percentage of those who consider strategic evacuation undesirable has more than doubled in contrast with previous studies, and the percentage of those who are neither in favor nor opposed has also increased.

Expectations of a major war have declined; but the perspective on strategic evacuation is not related to assessments of war probabilities. It is, therefore, not possible to simply say that strategic evacuation, along with other civil defense postures, has become somewhat less desirable to our people because there is less apparent need for it, or for civil defense in general.

Rather, we think that a different dynamic is operating. Favorableness to public fallout shelters has remained high, and there is a great deal of awareness of fallout shelters, even if many respondents would be unable to point to specific ones (though by far most can recognize the Civil Defense sign for what it is). Favorableness to the possible use of home basements is high, and the willingness to participate in home basement sharing is also high. Receptivity to ABM deployment to protect the nation's cities and other relevant targets is high - the study having been conducted prior to the ABM limitations agreement reached in Moscow in late Spring of 1972.

Under these circumstances, our sense of the data is that various forms of in-place protection, that is, public shelters, the use of home basements, as well as the possibility of home basement sharing (or, as the 1968 study has shown, sharing someone else's home basement) have come to be adopted to an extent that strategic evacuation thinking has simply receded into the background.

If the respondents seem to imply that there may be somewhat less need for strategic evacuation, while they assess other options as much mor desirable, it is a need which does not stem from beliefs that war will not, or cannot, come but from an undercurrent of conviction that in-place sheltering options, along with active defenses against missiles, might just do the necessary job.

Furthermore, strategic evacuation or crisis relocation has not been part of the national defense dialogue for many years, indeed, for

just about two decades. It would seem then, that our public may well have come to the conclusion that such plans are unfeasible in this day and age precisely because expert and responsible Government officials, including local civil defense officials, have not been promulgating it.

All this is quite important because the results mean that present efforts at feasibility assessments of crisis relocation planning, and subsequent planning itself, occur against a backdrop of sentiments and beliefs which may call for some degree of public enlightenment if the program is to be accepted with the understanding it deserves. We find that non-urban residents are generally more receptive to strategic evacuation than are residents of the largest SMSA's, or, for that matter, of other SMSA areas.

Roughly, of course, this means that potential host area residents are more affirmative about such programs than are the potential evacuees. Whether or not the implications of crisis relocation are clear, or even partially clear, to either the city dwellers or to the potential rural hosts cannot be determined on the basis of our data. Yet, the climate for crisis relocation planning is, in fact, somewhat more favorable in rural America than it is in the urban areas.

In the South and in the West, acceptance is somewhat higher but especially in rural areas. In turn, desirability is lower in the cities of these two regions.

In turn, the Central region of states displays most "balance" in that residents of largest SMSA's as well as non-urban inhabitants are quite favorable - and those in SMSA's other than the largest ones hover just around the national average.

In the Northeast, residents of SMSA's (other than the largest ones) are much more positive than are either more rural or more metropolitan inhabitants.

We find that women are particularly receptive, especially married ones; but even unmarried women exceed married men in favorableness. Furthermore, the more positive views also characterize respondents with high school education or less, those with incomes not exceeding $10,000 per year, and those who identify with the "working class". The more religious Americans tend to be more favorable, and Democrats are more likely to be supportive than others.

Indeed, the basic pattern is only underscored by our findings that opposition, such as it is, is particularly strong among college-educated men who live in cities, tend to be single, and are renting their place of residence. This may be a small group indeed in the

overall national perspective, but the impact of its possible articulateness in non-support, if not in opposition, cannot be underestimated.

Our data support still another major conclusion: strategic evacuation is seen, by and large, as "still another option" by those who are favorably disposed to it. For these are individuals who are also in favor of public shelters, and supportive of ABM protection of the nation's cities.

Yet, the notion that there may be somewhat less "need" for crisis relocation because of the perceived viability of in-place sheltering and also of active defense systems is further reenforced by noting that the desirability of public shelters, of ABM's and of other in-place options is consistently higher than is the desirability of evacuation even among those who favor it.

In turn, the relatively few opponents (9.2 per cent who are in genuine opposition) tend to be opponents of other civil defense, and defense, measures at the same time. They are people who are opposed to home basement sharing, to public shelters, to ABM deployment - and, at the same time, believing that survival odds in the event of a nuclear confrontation would be fairly good anyway.

Our results consistently suggest that active defense systems and their deployment are viewed with considerable favor. Indeed, attitudes toward ABM's are also closely related to attitudes toward passive defenses and to the evacuation option specifically.

Nonetheless, we have been also able to show that the same respondents are highly receptive to ABM limitations were such agreements reached between the United States and the Soviet Union. Since, in fact, such agreements were reached after the conclusion of the field work of this study, we have no reason to believe that opinions correlated with ABM desirability would have changed, as it were, in a direct cause-effect manner. The data indicated that ABM protection was favored in the absence of Soviet-American agreements so that the subsequent treaty would not have affected correlated attitudes, at least not significantly so.

With some of these major results in mind, we may proceed to consider some of their key policy implications.

V. RECOMMENDATIONS

Before we turn to some implications of our own data, it is, perhaps quite important to suggest that research to address the kinds of questions which we have illustratively identified in our discussion of conclusions would be highly desirable, if not essential.

We therefore do recommend that the Defense Civil Preparedness Agency undertake carefully designed survey type study which would help gain insight into those areas of crisis relocation planning which bear on public acceptance and credibility issues, and which would provide significant inputs into the planning process itself.

In light of such studies, some of the recommendations which we are making on the basis of the limited extant data may be somewhat altered, though we actually do not consider this to be likely.

In carrying out research into some of the critical "unknowns" as they pertain to the nation's body politic, we feel that samples should be selected not on a strictly nation-wide basis, but so as to represent specifically

* risk area populations
* host area populations.

We feel that, while the research instruments, presumably questionnaires (which we do recommend, in fact), would contain many identical items for both "risk area" and "host area" respondents. But some questions would have to be raised which are different for these subpopulations, so that, in effect, two overlapping but not precisely identical, instruments are called for.

We believe that, as has been done before in our national studies, the crisis relocation issues should be included, as detailed focus, in instruments which would also permit us to assess its relative credibility and acceptability vis a vis alternative civil defense postures. Thus what we do recommend is research which would again look at the broader international picture from the perspective of the trajectories of threats, and which would also allow an up-dating of the existing data base on fallout shelters in general, on civil defense volunteering, on expectations regarding arms control and disarmament (and the general climate of "detente"), on DIDS-type warning systems, on home basement sharing, and the like. But, in this broader context, the research would be designed primarily with a focus on problems associated with crisis relocation planning.

Beyond this recommendation which calls for the conduct of needed research, our study - with all the limitations attendant thereto - allows us to make several suggestions which we think warranted in light of existing knowledge, while again recognizing that much more remains, at the time, unknown than we already have some insight into.

It is, perhaps, of utmost importance to begin the consideration of a few recommendations which we think emerge from the study results by pointing out again what our data are, and what they are not. The data are responses of individual Americans to questions asked by interviewers in a face-to-face encounter with the respondents in their homes. Implicitly then, the data in no way weigh the articulateness or political involvement of the respondents, nor do they weigh their power or influence.

Furthermore, the data do not account for the many and varied forms of organized interactions, and organizational participations in which quite a few Americans are active.

Therefore, we have no way of ascertaining from our data what positions various organizations as organizations might take with respect to crisis relocation, and how such positions, once formulated and expressed, might affect members, followers and the remainder of the national body politic.

We do not know what attitudes toward crisis relocation might prevail in the halls of Congress. In turn, it would be altogether specious to attempt to guess the effects which the balances and counterbalances of various viewpoints of Senators and Representatives might have on a national dialogue regarding crisis relocation should such a dialogue be triggered.

Finally, we do not know what viewpoints might be adopted by the nation's influential media commentators and how much their views, whatever they turn out to be, would affect the basic national sentiments.

Now we mean by a "low profile" program an effort which does not require large-scale publicity in the course of planning, even though the eventual viability of the plans may require that the public be enlightened as to the full nature of the plans so that effective responses in a crisis environment become somewhat, if not considerably, more likely.

A "low profile" undertaking is one also which does not necessitate the mobilization of public, or organized support in the process of the technical formulation of plans, or of their technical feasibility assessments.

At the same time, the idea of a "low profile" program in no way assumes "secrecy", or "non-responsiveness" to legitimate queries

by citizens and media alike, or "official silence" with respect to requests for information.

Why is this question of profile raised at all? For reasons which do not directly derive from our research, and are therefore grounded in a somewhat weaker fabric of justifications, we do prefer a technical, matter-of-fact, low profile approach to the business of determining whether crisis relocation is a feasible option, and to the development of appropriate plans once basic feasibility will have been established.

Yet, our more methodologically based reasons to express a preference for low profile efforts have to do with the fact that survey data acquired from disaggregated individual Americans map more logically into a low profile situation in which, for instance, formal positions of influential individuals do not have to be though they may be, articulated and expressed; in which various organizations throughout the nation need not, even though they may feel it desirable to do, take official stands; in which Congress as a body, even though individual members of the Senate or the House may do so, need not formally confront the issue in the sense of substantive approval or disapproval; in which the media need not, though they may wish to do so, announce their advocacies or antagonisms, or in which they need not react to news and press releases because, even uncalled for, such news conferences were held or press releases were issued.

The major point is this: because of the nature of our data, and because of the specific ways in which the survey was conducted we feel more comfortable in expressing confidence in our findings in a low profile program environment.

A major national dialogue about crisis relocation, controversial and divisive as in part it would have to be since no program offers perfection and all programs have their problematic dimensions, might not even alter individual sentiments of Americans, but might have very different institutional and structural consequences from those which are predicated on the prevalence of disaggregated and structurally unformed belief patterns.

A major national dialogue is tantamount to a high profile situation. Such a discussion might come about anyway through the dynamics by which information in our society is acquired, disseminated, and interpreted.

But even in a climate of controversy about principles, or eventual consequences of crisis relocation, the feasibility testing and the

actual evolution of relocation plans could proceed expertly and efficiently as a technical venture, itself with "low profile" (as previously discussed) despite a context of "high profile" discourse regarding the socio-political, and economic, implications of the effort.

In this sense then, and with these caveats in mind, our data support the conclusion that crisis relocation planning is acceptable to most Americans, and that the sentiments revealed in our national studies establish a broad riverbed of essentially supportive, though passive, attitudes which make it altogether possible to proceed both with feasibility assessments and, in terms of acceptability, with actual planning.

Our results also show that Americans who favor crisis relocation, or strategic evacuation as our questionnaire items were actually worded, are even more favorable to public fallout sheltering, and that they are very favorable toward home basement usage and home basement sharing.

Hence, crisis relocation is not seen as an alternative to other civil defense postures, but as an additional option while other systems of in-place sheltering are themselves preserved, or further enhanced. Therefore, we would not recommend that the Defense Civil Preparedness Agency permit its crisis relocation program to be viewed as a total shift in a new, and exclusive, policy direction but as a program with crucial continuities in relation to previous efforts, and as a program which truly provides an additional future alternative along with continued improvements in in-place postures.

Our data do not show directly the extent to which crisis relocation as a multipurpose plans might be even more supported than if it were construed solely relative to the hazards of nuclear war. Thus we do not have, at this time, data on the "added value" of public support which would manifest itself were it fully understood that capabilities to relocate city dwellers in an internationally threatening environment also enable effective evacuation under circumstances of major natural disasters or other major man-made threats to life and property. Even though we cannot prove the contention for want of such direct evidence in the data, we see no way in which the coupling of relocation for nuclear hazards with relocation capabilities under other perilous situations would lead to the loss of support in the body politic. Hence, we see only potential gains and no losses so that it seems altogether appropriate to recommend that proper emphasis be placed in the dissemination of whatever public information may be necessitated on crisis relocation as having both war-related and

peacetime value. If relocation planning is actually undertaken following the feasibility studies now in the field, and if some degree of public cooperation may be required to insure operational success as much as any plans can accomplish, our data lend themselves to several major recommendations.

For one, such public support will reflect the results of our studies to the extent to which personal and individualized (or, in fact, household and family-related) approaches are made; while we cannot assess what might happen, city-by-city or host area by host area, in a high profile publicity environment especially were the needed public support to be marshalled through communications means which address aggregates of people.

Secondly, our data suggest that communications plans need to be developed with some slight variations in emphasis for the several major regions of the nation, and for cities and host areas.

In the Northeast, more resistence in host areas might be anticipated than elsewhere in the nation, but also more receptivity in other than the largest SMSA's (in our sample of 1972, represented by respondents from the Bridgeport, Stamford, Norwalk Connecticut area, by those around Hartford, New Britain, Conn., Syracuse, New York, Erie, Pa., Allentown-Bethlehem-Easton, Pa. and parts of New Jersey, the Springfield, Chicopee, Holyoke area in Massachussets).

In the rest of the nation, rural or non-urban residents are quite receptive, but in the West, Northeast and South (in these regions, the sample included the cities of New York, Philadelphia, Boston, Pittsburgh, Newark, Paterson-Clifton-Passaic, Buffalo, Washington, D.C., Baltimore, Houston, Dallas, Atlanta, Miami, Los Angeles-Long Beach, San Francisco-Oakland, Seattle-Everett, Anaheim-Santa Ana-Garden Grove, San Diego, and Denver) inhabitants of the largest SMSA's may require somewhat more convincing as to the feasibility, and desirability of crisis relocation.

Thirdly, program support, and thus even the need for participation by some segments of the public in the program, would rest best with essentially the "working class" of America - people with less than college education, with moderate (but not extremely low) incomes, who consider themselves, in effect, being in the "working class". And it can rest on the help, such as may be needed, of women significantly more than on that of men.

The natural reservoirs of strength, as well as the patternings of lower receptivity, clearly need to be taken into consideration in

the development of appropriate communications strategies by which the Defense Civil Preparedness Agency can best relate to the nation's public in regard to crisis relocation planning.

Finally, our results show that support for "strategic evacuation" has somewhat eroded over the years up to 1972. However, this seems related to beliefs in the adequacy of essentially in-place postures on one hand, and to feelings that in the age of ICBM's and the implicit warning times, crisis relocation may be somewhat impracticable.

Therefore, we think that dissemination of information about the feasibility of crisis relocation would eventually enhance the support levels rather than affect them in the opposite direction.

This may seem like a contradiction to statements about a low profile activity. It is, in fact, not. For we do not recommend that an educational and informational campaign be launched by DCPA since the actual planning process is unlikely to be in jeopardy even with current levels of support. Rather, we recommend that educational and informational messages be developed, contingent on the results of feasibility studies, which may be utilized in response to questions and probes rather than in an effort to "sell" the public on the idea of crisis relocation.

Nor do we believe that such messages can be solely related to the civil defense dimension of the broader problem. Indeed, perceptions of warning availability (and thus the practicality of large scale population movement) are tied to the overall defense posture of the nation. This would indicate that such eventual "messages" may need to emanate from the office of the Secretary of Defense or from the White House rather than from DCPA "only".

Yet, the key conclusion remains: the level of receptivity that has existed throughout the years, and that we last were able to measure in 1972 (and which we have no reason to believe would have changed dramatically since), is altogether sufficient for a professional and technical planning effort to proceed, and to find a supportive climate throughout the nation.