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DISPLACEMENT OF PERSONS BY MAJOR PUBLIC WORKS

Anthropological Analysis of Social and Cultural Benefits and Costs from Stream Control Measures --- Phase 5

By

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December, 1974
ABSTRACT

This study is concerned with social change and social impact of a major public works project on the human population required to relocate the persons being forced to sell to the Federal Government or turn over through condemnation proceedings homes, farms, and/or businesses to facilitate completion of a Federally authorized stream control measure. It is intended to test the utility of anthropological method and concept in evaluating and explicating sociocultural impact, and in addition to check hypotheses concerning importance of impact on social and economic areas of culture of the persons to be displaced, on their emigration patterns, and their cultural adaptation, and other social effects of relocation. Conclusions reached are that application of anthropological concepts and methods yield more intelligible results than sociological studies based on data generation through highly artificial questionnaire methods with attempted quantification of what are basically non-quantifiable data. This does not mean that simple counts and raw percentage comparisons are not significant to demonstrate trends, but that complex arithmetic computations are often used to imply a degree of precision that does not exist and explains nothing. Social scientists, planners, and change agents must come to realize that there are aspects of the quality of human life which must be considered which cannot be defined in numbers.

The study also presents evidence for the conclusion that in forced relocation in modern rural Kentucky, and probably elsewhere, social disruption is perceived as less disastrous and threatening, therefore less tension-producing, than perceived economic ill-effects. Finally, the study suggest ways in which the action agency involved in environment-changing major works could by social science-oriented planning mitigate the social costs of its operation.

DESCRIPTORS:

Social change*, social impact, human population*, relocation*, planning.

IDENTIFIERS:

Emigration, cultural adaptation.
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Study description and objectives. This report presents the results of a study of the impact of a major public works project on that sector of the local community that will be displaced - in this case by the construction of a multipurpose dam and the filling of a lake behind it. The study is not an isolate but rather is a segment, (Phase V), of a larger program: Anthropological Analysis of Social and Cultural Benefits and Costs of Stream-Control Devices, which is designed to test the hypothesis that any major stream-control device or similar major public work that creates massive change in the local environment simultaneously causes massive change in the sociocultural patterns of the local community. Theoretically the focus of the program is thus on culture change. In addition, however, the program has a major applied science component: To define patterns of sociocultural impact and their causes in such a way as to make possible recommendations for minimizing social and cultural costs and maximizing social and cultural benefits. It is believed that such recommendations should have practical utility for personnel of action agencies concerned with planning and with decision-making, as well as those concerned with preparation of an Environmental Impact Statement for each proposed public works project, in
compliance with the National Environmental Protection Act of 1969.

The reason for this concern is that review of Environmental Impact Statements makes apparent that the writers thereof have little access to reference material from social sciences other than Economics. The Statements consistently contain detailed discussions of anticipated dollars-and-cents benefits from a project such as a proposed dam/lake complex, expressed in terms of favorable cost/benefit ratios as the result of new income sources (recreation-derived vs. agricultural, for example). They discuss effects on geological, archaeological, and historical resources of the region to be affected, and give lists of fauna and flora by phylum, family, and species, with appraisals of probable effects of the ecological change on each. However, one species, Homo sapiens, is almost omitted from consideration. The Environmental Impact Statements do not discuss adequately the impact on the human residents of the region. The usual statement on social impact consists of a standardized remark to the effect that there will be an "unavoidable adverse effect" on a relatively small number of families who will be required to resettle elsewhere so that the project may be accomplished. No mention, let alone discussion, appears of impact on the remainder of the population: changes in concepts of land use and drastic alterations of land values, probable changes in lifeway caused by influx of tourists and development of recreation-related commerce, expectable impacts on local governments, school systems, and other institutions as a result of the new ecologic system resulting from
the manmade lake. Yet studies that have been made of this sort of impact, for example as part of the present program, and by such other social scientists -- the few anthropologists, sociologists, and geographers -- who have concerned themselves with impact problems of this genre, have shown that major public works may produce very negative sociocultural results — that is, high sociocultural costs -- in the local community, its individual inhabitants, and their institutions. Most, if not all these adverse impact effects are controllable to some degree by the agency proposing the construction, in the planning stage and/or in its public relations program with the local citizenry. As a simple example, in planning a dam to impound a lake one of whose major purposes is to provide water-related recreation, access roads tapping existing highways usually are needed. To plan an access road that will route the tourist traffic along the main street of the local county seat can easily cause monumental traffic congestion in the small town, with campers, cars with boat trailers, etc. added to normal local traffic in bumper-to-bumper jams. (This example is not hypothetical: there are reservoirs in central Kentucky with just this type of access.) If planners considered effects on the local community, simply by designing a by-pass, or selecting a slightly less direct access route that avoided the town, they could eliminate the increased tensions, the augmented hazards to life and property, and the economic loss to local merchants whose clients desert them rather than struggle through the lake-bound traffic. For this reason the reports of the present program of
studies emphasize not only the causal factors of the dysfunctional impact effects, but as well attempt to present practical options available to the action agency for ameliorating them.

As stated initially, this particular report is concerned with displaced persons, those forced to move from the areas of dam, spillway, and pool areas of the reservoir, and from other tracts destined for use in connection with the proposed lake, by legal acquisition of their real properties by the U. S. Government. Ludtke and Burdge (1970) have proposed the term "free compelled migration" for this type of demographic movement, since the people involved are "compelled" to leave the take-area as defined by projects planners, but are "free" to move to any other locality they wish -- or can.¹ In some ways the most spectacular of the aspects of public works impacts, with people being compelled to leave long-established homes, farms, businesses, etc., the displaced persons problem has received somewhat more attention than have other forms of impact from social scientists, especially sociologists with their interest in migration and demography (see Bennett, 1974). In fact the geographic area of primary focus of this study program, that of the proposed Taylorsville

¹ Presumably the "free" element of the term is meant to distinguish this type of population movement from such, as in connection with major dams in Africa, where people have been moved from homes in the proposed reservoir area to new habitation sites chosen for them by administrators. See Bennett, 1974.
Reservoir in Spencer, Anderson, and Nelson counties in central Kentucky, was, along with a proposed reservoir in Ohio, the scene of a study of attitudes toward each project by prospective displaced persons, by sociologists Ludtke and Burdge (op. cit.).

We do not particularly care for the designation "free compelled migration". It should be turned around: "compelled/free" because the compulsion to give up home and land occurs first, then comes such freedom of choice as may be open to the displaced persons. But this is a minor quibble. What is important is that such forced migration is a highly disruptive process, stressful, creating a high level of tensions, social and psychological. The authors just cited summarize a series of studies that indicate substantial support for the "...proposition that migration does contribute to mental strain and mental disorder" (op. cit., pp. 10-15). Even though instances of emotional disorders attributable to forced migration are not numerous statistically, they demonstrate that the process is tension-producing. Basic assumptions of the present study, as of other studies of this type of migration is that a) such tension can only be reckoned a cost, b) that as a cost it is inordinately high, and c) that it can be greatly reduced by social science oriented planning by the action agency planning the stream-control device.

While action agencies appear to deal with all prospective displaced persons, in acquiring their real property, without distinction, sociologists who have studied forced migration have
assumed that impact differs, and have directed attention to attempting to define factors producing such differential effect. Ludtke and Burdge (1970, pp. 25-29) discuss some of the more important studies and the findings, so it will not be necessary to repeat such a review. (Ludtke and Burdge themselves attack this problem.) Unfortunately the findings of the studies as to significant tension-producing factors — the statistically defined independent variables producing negative attitudes toward displacement and toward the project — disagree. One researcher concludes, for example that "knowledge of projects and purposes" is significant in reducing tension thus contributing to acceptance of the forced removal (Dasgupta, and certain others, cited by Ludtke and Burdge, loc. cit.); Ludtke and Burdge found no significant correlation between knowledge of project and acceptance of removal (op. cit., pp. 105-108). Similarly Photiadis found that older respondents were the least favorable disposed toward water resource development; other researchers found no significant correlation between age and acceptance (op. cit., pp. 25-29). Numerous other disagreements appear. It appears highly dubious that there should be so much local variation in significant tension-producing factors in a similar situation in the rural American subculture. More likely, the use of gross demographic characteristics (age, sex, education level, organization involvement, etc.) as variables, and of conceptual (researcher-conceived) factors, plus the difficulty of structuring a rigid research tool (the questionnaire) so as to elicit responses expressing subtle nuances of perception
must have introduced error.

The present study therefore is aimed at testing the efficacy of ethnographic field methods: open-ended in-depth interviews, use of key informants, etc., in defining and explaining factors causal of stress, in addition to the primary goal of testing the basic hypothesis that man-produced environmental change produces sociocultural change.

Methodology. Like the other studies of this program, the present one is anthropological in concept and design. It is based on anthropological concepts of culture particularly that of the holistic nature of culture, and of culture change. Standard ethnographic field methods were used in data collection: the participant observer technique, the open-ended in-depth interview, use of key informants, and data collection for use of the comparative method. This last-named procedure, derived from comparative ethnology and use of the ethnographic analogy in archaeological interpretation, involves use of data from a source as similar as possible to the data base of primary concern but removed from it in space and time. By holding the space factor as a constant on the basis of the cultural/environmental similarities one can use the time differences for diachronic interpretations and predictions. In the present case the area of primary focus, the proposed Taylorsville Reservoir, at the time of data collection, was, so to speak pending. Land acquisition by the Corps of Engineers for the Federal Government
had not begun. Many of the prospective displaced persons were still on tenterhooks, waiting to see what would happen to them.

In the comparative area, Green River Reservoir in Taylor and Adair Counties in central Kentucky, land acquisition (and dam construction) began in 1964, the lake was impounded in 1969. Thus it was possible to find central Kentuckian rural people who had been dislocated, and who could report their experiences before, during, and after the dislocation process. This same comparative procedure was utilized in a previous phase of this program, a study of reservoir impact on local government institutions, (Drucker, Clark, and Smith, 1973), where it proved to be very useful.²

The division of labor in the preparation of this report was as follows: Smith had the primary responsibility for data from the proposed Taylorsville Reservoir area. His was the participant observer role. He has resided in Taylorsville with his family for some three years, while engaged in data collecting for various phases of the present program of reservoir impact studies. He is widely known not only in town but in the rural areas and participates actively in community affairs. It is common knowledge in the reservoir area that he is collecting information on the effects of the reservoir, which materially assists him in his tasks. Reeves concentrated on the Green River

². Recently sociologists Johnson and Burdge, designating it "the diachronic model," have advocated its use in impact studies (Johnson and Burdge, 1974).
Reservoir area. Although his stay there was briefer than Smith's in Taylorsville, he was able to collect abundant data. He also reviewed the Corps of Engineers files on Green River Reservoir land acquisition, thanks to the courtesy of the District Engineer, Louisville District. The Principal Investigator planned research procedures, supervised data collection, conferred with the Research Assistants, and finally wrote the present report utilizing data supplied by the Research Assistants.

This research was designed to conform to the standards of ethics defined by the American Anthropological Association concerning respect for the privacy of informants and subject persons. Because of this the project was given authorization for implementation by the University of Kentucky Committee on Human Investigations (Appendix A). Thus while information collected is non-sensitive, and methods of collecting non-hazardous, neither informants nor other members of the populations studied will be identified, to avoid the possibility of even the slightest embarrassment to those who were so kind as to give us the benefit of their knowledge and/or opinions about sociocultural effects of the stream-control devices.

Study areas and populations

Taylorsville Reservoir. The area of the proposed Taylorsville Reservoir on the Salt River in Central Kentucky is the focus
of this study. This region and this population have been described in C. R. Smith, 1970, and Drucker, Smith, and Turner, 1972. Therefore, only a brief resume will be given here. The dam, which is designed to empound the reservoir, is to be built at River Mile 59.5 measured from the confluence of the Salt and Ohio Rivers. It will be constructed in Spencer County, Kentucky about three miles above the county seat of Taylorsville. This proposed reservoir is a multi-purpose project designed for flood control, water quality control, recreation, and fish and wildlife enhancement. In addition to some 3,000 acres of the seasonal pool, a 12,000 to 13,000 acre buffer zone/recreation/wildlife enhancement area will be taken from private ownership by the government. There will be a total, in other words, of between 15,000 and 16,000 acres, most of which lie in Spencer County with some additional tracts in adjacent Anderson and Nelson Counties. The region centering on the proposed lake appears to have been occupied fairly early in the white settlement of Kentucky. (Harrodsburg Kentucky, on the upper Salt River, established in 1774, is, as is well known, the oldest permanent settlement west of the Alleghenies.) The region appears to have been perceived as eminently suitable for small farms, a tradition which has continued to the present day. The agricultural potential was not rich enough to attract large plantation-type enterprises as was the case in the Central Bluegrass. Such historic records as are available indicate
a continuity of peasant-like economy from early days with tobacco and some livestock being produced for cash, and a heavy reliance on subsistence crops. Changes in this lifeway appear to have been gradual. In 1880 Spencer County had a population of 7,000 or so with 7 market towns. The popularization of the automobile in the early decades of the twentieth century and the improvement of roads began rapid changes, some of which include decline of the importance of the small market towns, as well as emigration and population decline. The rural lifeway persisted, however. Major changes began shortly before and continued after World War II with the introduction of more and more intensively mechanized agriculture, intensive cultivation of tobacco, introduction of Grade A dairying. Another change although its origins are not precisely dateable was the shift of cultivation toward the river bottom lands. The bottom lands with their heavy soils and weed problems, in addition to occasional flooding, apparently had little attraction for the earlier inhabitants of the region. But with improvement of plows and then mechanization they came to be regarded as a best and most fertile lands in the region. Consequently, they were and are highly prized. The modernization of agriculture, particularly intensive tobacco cultivation and Grade A dairying brought prosperity to the region. At the same time, these progressive changes doomed farms too small to support mechanization. The number of farmers decreased and farm size tended to increase. Some of the farmers who sold their inadequate small holdings left
for other regions, some for other occupations. With the increasing growth of industry in nearby metropolitan Louisville, many farmers moved to jobs in industry. Since 1940 the Spencer County population has decreased by 28%. This should be construed not as a local phenomenon, but as part of the nationwide trend toward the phasing out of the small farm. Another manifestation of widespread trends in American agriculture is the prevalence of "commuting," or part-time farming. About 20% of the Spencer County work force commutes to metropolitan Louisville where they work in industrial jobs and most of these people are part-time farmers. This, of course, says something about the strength and appeal of the rural lifeway since they were willing to sustain the added cost and time loss of commuting in order to retain their homes in the farming region and continue some farm activities. Another change that developed as transportation improved in recent years, is that in the county seat of Taylorsville, the heir to the business activity of the small market towns phased out by increased communications, economic decline set in. Not only the commuters but other members of the community began to do some or much of their purchasing in Louisville. This fact is an important element in motivating townspeople to support the dam in the early 1960's since they saw possibilities of new income sources in what had become a declining economic pattern.

Salt River occasionally overflows its banks. According to the Corps of Engineers report on this aspect of local hydrology, "major" floods in the Salt River basin usually occur in the late winter or early spring months although head water floods have occurred during
summer months. The highest stage of record on the Salt River at Shepherdsville occurred in January 1937. After this flood additional stream gaging stations were established with the result that more and better flood data are currently available. Accordingly, since 1937 the four floods of greatest magnitude from the standpoint of areal coverage combined with maximum stages for the portion of the Salt River basin considered herein, in descending order of magnitude occurred in March 1964, May 1961, March 1945, and March 1943. (U.S. Congress 89th Congress, 2nd Session, Salt River Basin, Kentucky, House Document No. 502, 1966, p. 20, cited hereafter as "Salt River Basin, Ky.") During the floods major and minor, principal damage to property especially occurred in the towns Taylorsville and in Shepherdsville some thirty miles downstream. In the rural areas the damage was less extensive although of course the major flood in May 1961 did serious damage to crops, and other floods classed as of lesser magnitude during the summer months also cause some crop damage, although not necessarily extensive. After the major flood of 1937, which of course was just one manifestation of the widespread, disastrous floods of that year, the U.S. Congress enacted the Flood Control Act of 1938 in which the U.S. Army Corps of Engineers was charged with designing a comprehensive plan of flood control for the Ohio and Mississippi Rivers (a less comprehensive Act had been passed in 1936). There was said to have been considerable discussion locally of the desirability of building a flood control dam on Salt River. In 1943 the Corps of
Engineers made a feasibility study. However, at that time the Corps recommended an alternative course of protecting the town of Taylorsville, where the damage had been most intense, by constructing a levee around it. This levee was constructed in 1948. For some years there was little talk of a dam locally. In the early 1960's interest in the dam was resuscitated and the Corps began feasibility studies once more for a Salt River water control device. There was considerable local interest in the studies that were being carried out by the Corps. The Spencer County newspaper, a weekly, published a number of articles suggesting that construction of the flood control device was probable in the near future. In December of 1964, the Corps announced that a public meeting would be held in Spencer County in Taylorsville to assess the local attitude toward the proposal, to explain in detail what would be involved, and what the results of the construction would be. Such public meetings are part of the process of obtaining approval by Congress for any such major projects. According to the local newspaper report of this meeting, a large number of local citizens attended. The Corps of Engineers representatives showed color slides of other reservoir projects in Kentucky and told of the economic benefits accruing to those areas as a result of reservoir construction. The general reaction appears to have been, or at least was reported to have been, highly favorable with very small opposition which faded during the hearing. In 1966 the Corps of Engineers submitted a proposal for constructing a dam on Salt River to Congress, recommending
approval of the project. Congress authorized the project by Section 203 of Public Law 89-79, 89th Congress, which was approved in September 1966. However, Congress failed to appropriate money other than minor amounts for continued engineering and design studies until fiscal 1973. And up to that year -- the time of research for the present report -- no land was acquired for the project and nothing was done in the way of construction. During that eight year interval between the public meeting in 1965 and the research in 1973, the impact of the proposed project intensified. This is a matter which will be discussed in some detail in the present report. In point of fact such lag time is not uncommon nor in fact unusually long for such major public work projects but this was not known to nor anticipated by prospective displaced persons. There were significant changes in impact during this period. As the report was prepared and first steps to dam construction are to begin the population has changed personnel-wise but its characteristics have changed but little. The prospective dislocates are still rural in orientation. Rural values are still strong even among those who are part-time farmers, that is those who commute to industrial jobs in Louisville and do their farming on weekends, holidays, and on summer evenings. A strong attempt is made to retain rural customs perceived as traditional: making sorghum molasses and hog killings are social occasions to which relatives, neighbors, and ex-neighbors are invited. Collecting of "antiques" is a widespread diversion in which this nostalgia for the traditional rural lifeway is expressed. The objects collected include all
sorts of things deemed reminiscent of the old way of life: old
types of farm machinery, such as plows and drag harrows, harness
for draft animals, brass and iron kettles, kerosene lamps, old
bottles, fireplace pot-hangers, etc.

While maps showing seasonal pool and flood control pool
areas of the proposed reservoir are reported to have been shown
at the Corps of Engineers' public meeting in January 1965, and
copies have been available at the District Office, many persons
who could not or would not interpret the maps have been uncertain
as to whether their properties will be affected or not. However,
from the time of the meeting it was obvious to most people in
the area that if the dam actually is constructed, 3 geographic
population units -- subcommunities, or rural "neighborhoods" --
will inevitably be inundated because the households composing
them, and most of the householders' lands, are situated squarely
on the valley floor. (A relatively small number of the farms
extend up the hillsides and include some upland tracts that may
or may not be affected; most are bottom land tracts.) The three
subcommunities are remnants of former market centers, with
associated outlying farms. The Van Buren neighborhood, with 55
households in 1965, includes the nucleated settlement of Van Buren.
This was a busy small town in the late decades of the last century
and the first decade or so of this one. Just before World War I
its establishments included a hotel, a bank, a school, a church,
2 general stores, 2 blacksmith shops, a wagonmaker, a flour mill,
and an undertaking parlor. By 1965, there were only 2 general stores,
2 churches, and an antique shop catering to Louisville, not local trade, a small concentration of households, and the surrounding farms. The second neighborhood is Ashes Creek. This was never as large as Van Buren, even in the early years of the century. A report from the early 1900's lists a school, a church, a general store, and a blacksmith shop. In 1965 there were 2 churches, no nucleated settlement, and 25 households in the scattered subcommunity. Beech Creek is the third unit. Never populous, apparently always dependent on Taylorsville for marketing, although it had a school until after World War II, it was nonetheless a distinct named socio-geographic unit. In 1965 it included 10 households.

Green River Reservoir. Green River Reservoir occupies most of the valley of the Green where it transects Taylor and Adair Counties in the eastern Pennyroyal of south central Kentucky, for the most part an upland of undulating limestone country. Adair County had been founded in 1801, Taylor County in 1848. The region had been settled mainly by agriculturists from Virginia and the Carolinas in the late 18th and early 19th centuries. Although the land was not uniformly arable -- in some places the topography was too rough, in others the soils too shallow or too sandy, most of it was suitable for family farms operated according to the techniques of the time. Taylor and Adair Counties, like Spencer County, participated fully in the rural economy and ethos of central Kentucky. Tobacco was the principal cash crop, supplemented by small scale livestock raising. Corn, oats, wheat, and hay were grown, mainly for local consumption.
As in the Taylorsville Reservoir area, the early settlers rarely farmed the bottom lands, in this case those of the main river and Casey and Robinson Creeks. The heavy soils, the occasional flooding, and the incursions of that tenacious weed, Johnson grass, made the bottoms difficult to handle. It was not until improved farm machinery and then mechanization came in that the bottom lands could be used effectively. Then, as in the Taylorsville case, these lands became very productive, and quickly came to be regarded as the most valuable of all. They were farmed intensively, along with the better upland soils. Poorer soils provided pasture, and some were used for fruit trees. Intensive tobacco cultivation and dairying raised the income level of local farmers. Increased use of commercial fertilizers (which had such spectacular effect on tobacco), contour plowing, and crop rotation improved yields on the better upland soils so that others shared in the new prosperity. But the bottom lands were and by many farmers still are considered ideal.

Improved transportation had the same effect as in much of the older rural U.S. Small market towns with their typical "country stores" declined. In Taylor County, the county seat, Campbellsville, and in Adair County, Columbia, also the county seat, became the main centers of commerce and population growth.

A major challenge to the predominance of the traditional agrarian system of values had been the increasing urbanization and industrialization of the area following World War II. By 1960, more than half the working population of Taylor County was employed either in industry
or in white collar positions, whereas in Adair County about one-third of the population was so employed. Urban and industrial growth has focused entirely on the two county seats, with Campbellsville enjoying the lion's share. The population of Campbellsville gained dramatically between 1940 and 1960, while Columbia gained well between 1940 and 1950 and then increased more slowly. During this same time period, the population growth for Taylor County was well above the average for the state, while Adair County growth was off (the rural population declined considerably).

Campbellsville has attracted and continues to attract industry. One positive feature is an ample water supply; the old water system was supplemented by a source in the reservoir. About 4,000 persons are employed by the manufacturing plants. Residents no longer regard their community as a country town, dependent on the rural sector and preserving a rural outlook. Nonetheless, agriculture is still the major industry in Taylor County.

Columbia's growth has been much less, and the town boasts only one major industry. Interestingly, the same sort of part-time farmer/commuter pattern in which people from Taylorsville Reservoir area commute to industrial jobs in Louisville has developed in Adair County. According to U.S. Census Reports, in 1960, 10.3% of the county work force worked outside of Adair County. In the 1970 census, this number had increased to about 20%. Most of these persons apparently work in Campbellsville factories. Adair County still remains mainly agricultural however, with 28% of its labor force employed in agriculture in 1970.
Summary. The two study areas and their populations are highly similar. Both are predominantly agricultural, in the central Kentucky small farm tradition. Both have undergone similar processes of sociocultural change: decline of small market centers whose functions were replaced by the county seats; recent population decline (except Taylor County); modernization of agriculture resulting in lucrative tobacco-growing and Grade A dairying complexes. Even the esteem of the bottom lands for cultivation is the same. The principal difference is the absence of an urban influence comparable to that of burgeoning expanding metropolitan Louisville on the Taylorsville Reservoir area. Green River's most urbanized center, Campbellsville, manifestly affects both Taylor and Adair Counties, but its influence is a very miniaturized analog of that of Louisville on its peripheral regions. Despite this, it is reasonable to assume that the impacts of the completed reservoir in the one area should have predictive value in connection with impact in the case of the Taylorsville Reservoir.

Population change

A convenient time-mark for the beginning of impact of the proposed Taylorsville project is the public meeting held in January 1965. (Some impact was felt earlier as the result of reports in the news media in 1964 [Drucker, Smith, and Turner, 1970], but it appears that only a limited sector of the local people were affected; extent of impact is difficult to determine.) At the beginning of the field study in 1973, eight years later, it was assumed that we were dealing
with a stable population. Key informants soon made it clear that population change has been considerable.

In 1965, in the 3 subcommunities of Van Buren, Ashes Creek, and Beech Creek, there were a total of 90 households distributed as shown in Table I. The next line in the table shows households terminated (relocated), between 1965 and 1973, a total of 41, reducing the original population to 49 households. However, immigration has also occurred: 23 households have been established in the study area since 1965.

The 49 households in the pool area in 1965 who were still there in 1973 (Table I, line 3), form a prime target group for the analysis of impact of the proposed project. But the other categories are also of interest. Table II gives a summary of causes for terminating households during the 8 year period.

In the time interval considered, there were 21 deaths in the study area. Of this number, 17 were of "natural causes" according to informants, that is, they were deaths of elderly persons of the 60 years and over age group; 4 were of the sort that can be classed as "violent". The high frequency of deaths among elderly persons points to the high proportion of the aged in the population of the study area. Among the deaths of the elderly, there were 3 instances in which both husband and wife died, so that the 21 deaths actually involved 18 households. 14 of these terminated, 4 were continuing to function in 1973.

Classification of death-terminated households as non-reservoir related terminations raises some problems. Anti-dam informants
TABLE I

Household Changes in Pool Area: 1965 - 1973

<table>
<thead>
<tr>
<th></th>
<th>Van Buren</th>
<th>Ashes Creek</th>
<th>Beech Creek</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>55</td>
<td>25</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Terminated 1973</td>
<td>29</td>
<td>12</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td>Remaining 1973</td>
<td>26</td>
<td>13</td>
<td>10</td>
<td>51*</td>
</tr>
<tr>
<td>Immigration</td>
<td>15</td>
<td>5</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>1965-1973</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1973 Totals</td>
<td>41</td>
<td>18</td>
<td>13</td>
<td>74*</td>
</tr>
</tbody>
</table>

* Numbers include 2 householders who have sold speculative land, or most of it (one retained 4 acres with house), who are waiting for Corps to purchase remainder.

TABLE II

Households Terminated: 1965 - 1973

<table>
<thead>
<tr>
<th>Motive</th>
<th>Van Buren</th>
<th>Ashes Creek</th>
<th>Beech Creek</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-reservoir related:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Voluntary sales</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>15*</td>
</tr>
<tr>
<td>Totals</td>
<td>29</td>
<td>12</td>
<td>0</td>
<td>39*</td>
</tr>
</tbody>
</table>

* Plus two voluntary partials sales. See footnote above.
hint, or sometimes state flatly that so-and-so "worried himself to death because of the dam." Such statements are impossible to evaluate. Research Assistant Smith reports on 4 persons now deceased whom he chanced to interview before their demise. Of the 4, 2 had accepted the anticipated removal with no apparent apprehension, a man of 89 surmised quite calmly that he would not live to see the dam built, which proved correct. The fourth was most bitter, and obviously under great stress at the prospect of losing his home and farm. In another aspect of the matter, termination of the household by the elderly relict by selling, finding tenant, or giving up rental, it seems reasonable to assume that factors other than the threat of dislocation were important to the decision.

The category "Other" (non-reservoir related) (Table II, line 3) covers a wide variety of motivations. 4 Household heads were commuters who were reported to have got better jobs in places too far for commuting. A fire destroyed the house and effects of an economically depressed family who subsequently moved away. Another household was terminated when its head was awarded a prison term.

The designation "Voluntary sales" refers to sales to private individuals prior to the beginning of land acquisition by the Corps of Engineers for the Federal Government. Such sales bring out the fact that there was and is a special factor operant in the Taylorsville Reservoir area. This is the proximity to the growing metropolitan center of Louisville, which makes it possible for urbanites to buy homesites near the proposed lake, to commute to their offices in but little more time than from geographically closer suburbs. There
were interested prospective buyers in the area, who made a few purchases prior to the Corps of Engineers' public meeting in 1965, presumably due to statements in the media that there was a high probability that the dam would be constructed. Subsequently more purchases were made. Such buyers are locally referred to as "speculators" because it is believed that they consistently buy substantial tracts with intent to subdivide them or parts of them into residential, etc. lots. Obviously lands to be inundated are not of prime interest to them; they want upland tracts close to the proposed lake but outside the take line. Therefore not many of the farms of potential displaced persons qualify for this special market. Farms consisting entirely of bottom land, or bottom land and hillside, have no sales interest. Their owners have no hope of selling to anyone except Government buyers. Thus the 17 voluntary sales were made by the few prospective dislocates to whom this option was open. A few of the remaining households have lands that give them the option of selling to "speculators" but have made no decision. (Other sales to speculators, and in some cases to urban persons planning to build their own homes, have been made by owners of upland farms not threatened by dislocation [Drucker, Smith, and Turner, 1970]). Characteristics and motivations of those making voluntary sales will be discussed in a later section.

To return to Table I, the category "Immigration" (line A), adds a previously disregarded variable to the picture of population change. It is assumed that persons moving into the reservoir area
in 1965 and after did so in full knowledge that it was probable they would have to move sooner or later. Special factors must have been involved.

Interestingly, of the 23 "new" households, 17 are classed by study area informants as "native." By this they mean that one or both of the spouses is of local origin, born in the county. These are people, in other words, who had emigrated, and who have "come home," even though they knew their stay would probably be limited. Table III shows some of the characteristics of both the "native" and "outsider" immigrants.

Perusal of Table III brings out some features of the immigrant population. It is essentially a young group (unfortunately Smith failed to collect precise age-group data on the "outsiders" but we know they are approximately similar in this respect to the "natives"). A large majority (12 of 17 natives, 5 of 6 outsiders), are commuters, travelling daily to city jobs; of the remainder, 4 returnees are tenant farmers, 1 is retired; one of the "outsiders" is a tenant farmer. Among the "natives" more (7) own their homes than rent (6 renters, if we eliminate the 4 tenant farmers). This suggestion of intent of permanence is rendered dubious by the fact that 5 of the 7 owned homes are "trailers" or "mobile homes." Of the "outsiders" 3 own their homes, while 3 (1 a tenant farmer) were renting.

These data indicate that the immigrants are essentially a young mobile population (tenant farmers in the region who are not tied into a sessile extended family of farmers are notoriously
### TABLE III

Characteristics of Post-January 1965 Immigrants to Pool Area

<table>
<thead>
<tr>
<th>Category</th>
<th>Van Buren</th>
<th>Ashes Creek</th>
<th>Beech Creek</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. &quot;Native&quot; immigrants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Total households</td>
<td>9</td>
<td>5</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>b) Age group: 20-39</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>40-59</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>c) Income source</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commuting</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Commuting/farming</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Tenant farming</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Retired</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>d) Linkage to home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm owner</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Home owner</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>&quot;Trailer&quot;</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Farm renter</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Home renter</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Trailer</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

| 2. "Outside" immigrants       |           |             |             |       |
| a) Total households           | 6         | 0           | 0           | 6     |
| b) Income source              |           |             |             |       |
| Commuting                     | 5         | 0           | 0           | 5     |
| Tenant farming                | 1         | 0           | 0           | 1     |
| c) Linkage to home            |           |             |             |       |
| Home owner                    | 3         | 0           | 0           | 3     |
| Tenant                        | 3         | 0           | 0           | 3     |
footloose), aware of the probable forced removal, willing to undergo the inconvenience of removal for temporary perceived benefits. Such benefits would presumably include: preference for rural living (particularly in the case of the commuters), cheap rent or cheap purchased housing (cost of latter to be compensated for at the time of Government land acquisition), opportunity to save on living costs by gardening, etc. The "natives" who knew the region presumably returned on learning of available housing as the result of emigration. Against practical economic factors one must posit satisfaction of a nostalgia for the home region, or on the part of the "outsiders" simply for the rural ambient. It should be noted that immigration, presumably of similar pattern, has occurred in other projects, such as those of TVA, in which a considerable number of years elapsed between authorization and completion of the stream-control measure.

A lag time of 8 years between Congressional authorization of a project and actual beginning of construction is by no means unusual -- some projects take considerably longer to get under way. In studies of pre-construction impact of major public works the possibility of considerable population change during such prolonged lag time should be kept in mind. It is postulated that such changes, on analysis, should assist in identifying factors and effects of impact.

Green River Reservoir. Population change in the Green River Reservoir area occurred. We do not have as detailed data on it as
in the Taylorsville Reservoir, but it is clear that it went on. The information on the private land sales that continued nearly to the beginning of Corps' land acquisition and construction provides some evidence. There was a definite pattern. Land was being purchased for agricultural use. Sellers were typically elderly farmers who planned to retire to move to town, or to move near emigrated children, or elderly widows or widowers who did not feel up to carrying on alone. Buyers were younger successful farmers who wanted to expand their operations by acquiring tracts of rich bottom land. There emerges a clear picture of attrition of the rural population associated with increase in size of individual landholdings. The growth slow though it may have been, of Columbia during the pre-construction years accompanied by reduction of rural population in Adair County makes this trend clear. In addition there was the steady turnover of the footloose variety of tenant farmers, the sort that stay a year or two then move on (there was the other variety, of course, often with local kinship ties, who move but rarely, and then only in the local area). Research Assistant Reeves, trying to trace some of the "drifter" type of tenants whose removal was directly caused by Federal land acquisition, was impressed by the fact that many farmers could not even recall the names of tenants of a few years past; "they come and go all the time," his informants told him.

The comparative model breaks down when we come to the matter of voluntary sales prior to Corps of Engineers' land acquisition. It breaks down because the comparison breaks down. Campellsville's
industrialization/urbanization increased attitude-difference between town and country, it attracted some rural persons to abandon the rural lifeway, it developed the "commuting" pattern whereby some persons in both Adair and Taylors Counties live in the country but work at industrial jobs. But it did not create an interest in a suburb in the lake area. Thus no change of concept of land use from agricultural field to residential lots was introduced as occurred in the Taylorsville Reservoir area (Drucker, Smith, and Turner, 1970). There was no speculative buying for subdivisions and residential tracts. In other words the proximity of metropolitan Louisville contributed special impact, not likely to be duplicated in regions remote from such a center. In the Green River case there was almost no emigration of prospective dislocatees prior to actual land acquisition.

Another factor of course was the shorter time interval between formal announcement that the Green River dam would be built and commencement of land acquisition/construction. If one uses the data of the 1960 Corps' meeting, when the dam site reportedly was not firm, only 4 years elapsed; from the 1962 meeting when the site had been finally selected there was a lag time of but 2 years. This too reduced the amount of significant population change.

The land acquisition process

The U.S. Army Corps of Engineers, which acquires real property for all military programs of the Army, for civil works projects of
its own Rivers and Harbors program, and as well for the Air Force, for NASA, and the AEC, is the largest Federal land acquisition agency (U.S. Congress, House Committee on Public Works, 88th Congress 2nd Session, 1965, cited hereafter as: "Committee on Public Works"). The power to take private property for public use is delegated to this and other agencies by the U.S. Government under the limitations imposed by the 5th Amendment to the Constitution of the United States:

Amendment V. No person shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation (underlining supplied).

Procedures developed by the Corps (and by other Federal agencies), to acquire land for public use consist of administrative operationalizations of the acquisition process within the limitations set by the 5th Amendment, by later Congressional legislation, and by rules derived from court decisions.

As a matter of policy, Federal agencies after appraising a property, attempt to acquire it through purchase in fee instead of going through the lengthy and expensive (both to the Government and to the private owner) process of condemnation/litigation. They also recognize that litigation of numerous cases adds to the congestion of the courts. In order to comply with the "just compensation" demanded by the 5th Amendment therefore, appraisers seek to evaluate the real property needed, and negotiators to purchase it at a price equivalent to the "fair market value" of the property. Such fair market value "has been defined by
various courts in varying language, but the substance of most definitions is that [fair] market value is that cash price which would be agreed upon at a voluntary sale between an owner willing but not obligated to sell, and a purchaser, willing but not obligated to buy ..." (Committee on Public Works, p. 59). The courts have denied that the Government is responsible for considering factors of loss of, good will, business potential, and sentimental attachment in determining fair market value. In practice, "fair market value" is a pragmatic estimate made by a professional real property appraiser of the amount the property would bring in a voluntary sale.

The Corps of Engineers has staff appraisers and also engages the professional services of appraisers familiar with land values in the region. Appraisers, both staff and fee, are selected on the basis of their experience, integrity, and good judgment in evaluating real estate. The appraiser is required to contact the property owner or his representative inviting him to accompany the appraiser on his inspection of the property, to insure that all factors bearing on the value of the property are given full appreciation by the appraiser. Detailed notes are taken by the appraiser, supplemented by photographs of the land, and of buildings and other improvements. Vicinity characteristics -- economic trends, roads, schools, public utilities, transportation, markets, and other amenities -- are supposed to be considered, as well, as bearing on the value of the property. Having inspected the property the appraiser attempts
to find at least one, and preferably two or three, reasonably similar properties in the vicinity which had sold within the previous five years. These sales-prices of comparable properties are used as indices to guide determination of the fair market value of the property to be acquired. The appraiser then submits a detailed report to the reviewing appraiser at the project of the value of the tract of land broken down according to its condition and use. For example, one 8.50 acre tract in the Green River Reservoir was evaluated as follows:

<table>
<thead>
<tr>
<th>Land Classification</th>
<th>Acres</th>
<th>Unit Value</th>
<th>Estimated Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homesite</td>
<td>0.50</td>
<td>$2000</td>
<td>$1000</td>
</tr>
<tr>
<td>Bottom land</td>
<td>7.50</td>
<td>300</td>
<td>2250</td>
</tr>
<tr>
<td>Bank, brush, and streambed</td>
<td>0.50</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$3257</strong></td>
</tr>
</tbody>
</table>

The appraiser includes in his report a detailed description of all improvements on the tract and determines a depreciated replacement cost of them which is added to the land value as a final appraisal estimate. In general, appraisal estimates are rounded off slightly. This is done regardless if it favors the land owner or the Government. A salvage value of all buildings is also calculated.

The Corps of Engineers' reviewing appraiser evaluates each appraisal report as to its adequacy and reasonableness. An approved appraisal estimate is then made available to the Corps of Engineers' negotiator who uses it as a basis for reaching a settle-
ment with the property owner.

According to Corps' policy, negotiations with each property owner are conducted in such a manner as to replicate the willing buyer/willing seller situation as nearly as possible, to reach a settlement satisfactory to both parties. Of course this high standard cannot always be achieved. During the negotiator's initial contact, the land owner is advised of the location and the amount of his land to be acquired for the purposes of the project, the interest to be acquired (i.e., fee or easement), and the procedures for settlement and payment. Negotiation begins with the Corps of Engineers' representative making a lump-sum offer for all of the land owner's property that is to be acquired.

At the time of the Green River project, the negotiator used the appraisal estimate only as a guide for making offers, usually not as the initial offer. Real estate records at the Louisville District Office reveals that the initial offer was frequently 10-15% below the appraisal estimate. This practice was defended...

3. "Prior to 1960, the Corps followed a "one price" policy [in negotiations]. The Corps' stated practice was to obtain two appraisals for each property to be acquired and ordinarily to offer the owner the higher of the two. Witnesses testified ... before the Senate Public Works Committee in 1960, that the Corps' policy was rigid and inflexible; that offers were made on a 'take it or leave it' basis; that appraisers did not consult with property owners concerning the nature of operations conducted on the land; and that, as implemented, the policy precluded any serious efforts to resolve reasonable differences of opinion concerning the value of property. As a result, the Congress enacted the Land Acquisition Policy Act of 1960 (74 Stat. 502)... (Committee on Public Works, p. 117-118), which required the agency to carry on a more flexible type of negotiation, with a view to avoiding acquisition by condemnation and litigation wherever that insures fairness to both the landowner and the Government.
by Corps officials on the grounds that the appraisal estimate was only an approximation of the fair market value of the property. Therefore the negotiators were justified in making an initial offer slightly lower "to establish a bargaining position with the property owner that was faithful to the willing buyer/willing seller principle." This practice was strongly condemned by the Subcommittee on Real Property Acquisition (Committee on Public Works, pp. 47, 119, et passim). Public Law 91-646, 91st Congress, 1970, prohibits this procedure, stipulating the property owner must be furnished the appraiser's valuation prior to negotiation.

If, in the course of the first negotiation interview, the property owner accepts an offer, then a settlement is concluded. In many cases, the property owner either flatly refuses all offers or insists on a price that far exceeds the appraised value. Under these circumstances the negotiator leaves, asking the owner to reconsider the Government's offer. After a period of one or two weeks, he returns to the property owner in an effort to confirm a settlement. This process maybe repeated several times. Often the negotiator raises his previous offer slightly. After three or four unsuccessful negotiation attempts, the land owner may expect the Government to begin condemnation proceedings.

In general, the Corps of Engineers was amenable to paying a compensation that did not exceed an increase of 10-12% more than the appraised estimate for the property. When a land owner holds out for a price above this, condemnation is considered. In so doing, the Corps of Engineers considers the cost to the government
for preparing and conducting a condemnation suit. The Corps has stated that in cases of small low-value tracts "the savings of built-in court costs might justify paying several times the estimated value of a tract appraised at $100; whereas such savings would, alone, justify only a small percentage increase on high value tracts, inasmuch as costs of condemnation and trial do not increase in proportion to increase in value." (Committee on Public Works, pp. 390-391). Previous court awards in Government condemnation cases on the same project, or in the same court jurisdiction are reviewed in order to determine "risk of condemnation", that is whether past cases indicate that there is a strongly likelihood of an award substantially larger than appraised value. From these factors a determination is made either to pay what the land owner demands or to resort to litigation, which ever appears to be the less costly to the Government.

The spacing of the negotiator's contacts is designed to afford the land owner a reasonable period of time in which to arrive at a settlement prior to the initiation of condemnation proceedings. As a matter of practicality, the land acquisition process is tied to the construction schedule of the project. Land purchases begin at the dam site and proceed upstream. It is necessary, therefore, to achieve and maintain a certain momentum in the process of land acquisition if the acquirement of property is to keep pace with the scheduled construction of the dam. When an agreement is reached, payment and closing of the transaction is accomplished within sixty days, provided the owner's title is clear or is
"curable." If title to the property is defective, a condemnation suit is undertaken to establish legal title.

The Corps of Engineers files land condemnation suits in the U.S. District Court of jurisdiction. When condemnation is initiated, the amount of the Government's appraisal is deposited with the court and title to the required property rights transferred to the Government. The court permits the defendant to withdraw the funds on deposit immediately in order that he may purchase replacement property without delay. The amount which the defendant may withdraw cannot, of course, exceed the appraised value of his condemned property.

Trials are frequently delayed several years due to congestion of cases pending on the court docket and because of the delay in preparing cases. During the trial, the Government's attorneys and the defendants' attorneys are given full opportunity to present evidence of value. Any offers or counter-offers made in the course of negotiating are not deemed binding in the event of condemnation. While the case is pending, the defendant could opt to reach a settlement, in which event the case is dropped. Primary responsibility for such negotiations rests with the Department of Justice, through the local U.S. attorney. Usually cooperation of the Corps of Engineers is invited.

A prominent attorney, who handled many defendants' in land condemnation suits for the Green River Lake project, stated that the defense strategy was typically as follows: The defendant obtained legal counsel by paying a retainer. The attorney would
then engage land appraisers (usually two). Aerial and ground photographs would be made of the defendant's property. Soil samples would be collected. The Agricultural Stabilization and Conservation Service would be contacted for additional photographs and information. A thorough search would be conducted to find land comparable to the defendant's that had been sold within the last five years. As a result of this detailed preparation the defendant's case was frequently more substantial in court than was the Government's, which relied essentially on the original appraisal report. Because the compensation being awarded to defendants ran consistently 15-20% above Corps of Engineers' appraisals, defense attorneys were advising their clients to make no settlement prior to trial that fell short of a 15% increase over the government's original offer. Attorney fees were contingent on the amount of the award: one-third of the amount of the court's award in excess of the Government's appraisal.

Property owners can retain title to buildings and other improvement if desired, in both direct purchase and condemnation cases, at the appraised salvage price. The appraised salvage price is deducted from the Government's payment for property acquired. Buildings retained by the owners must be removed from the project area in accordance with the dates established by the Government at the time of acquisition. All buildings not reserved by the owner are advertised by the Government and sold to the highest bidder. Property owners are encouraged to reserve growing crops. The Corps of Engineers endeavors to refrain from
possessing cropland until the current harvesting season is terminated.

The Government does not take possession of any property until arrangements for paying the land owner have been made. After the Government acquires title, owners and tenants normally are permitted to retain possession of the premises until the property is needed for project purposes. The Corps of Engineers inform land owners and tenants, at the time title is transferred, of the date at which their residence must terminate. Usually this is several months after the Government has acquired title. Under circumstances where the land owner or tenant has not yet acquired a replacement residence, an extension of this period may be allowed if construction schedule permits. Continued, longterm occupancy requires the arrangement of a lease at the prevailing rental rates in the vicinity. It is not uncommon for farmers to rent their former land for crops after the Government has taken possession, especially when the beginning of construction is delayed.

Relocation assistance

Federal agencies acquiring private lands publish regulations governing all procedures in which agency personnel engage officially including procedures for land acquisition and relocation existence, such as the "Corps of Engineers, Engineer Regulations." These agency regulations are frequently updated to conform to relevant new legislation passed by Congress. At the time of construction of the Green River dam, regulations concerning relocation assistance were based on Public Law 86-646, Title III,
Land Acquisition Policy Act of 1960, and earlier enactments concerning payment for moving and related expenses which may be synthesized as follows:

(1) Time and travel in search of a replacement site, and travel in moving to the replacement site. (a) The value of the time actually spent in search, but not to exceed 56 hours in absence of special circumstances. The rate of reimbursement was the hourly salary or average earnings of the applicant, or a reasonable rate if unemployed (usually $1.25 per hour), but not to exceed $6.25 per hour. (b) Vehicle use allowance at the rate of 7 cents per mile for passenger cars and small carriers, 9 cents for 3/4 ton, and so forth. (c) Allowance of increase in cost of food while traveling, up to $1.00 per meal for each member of the applicant's household during the search and during the move. (d) Expense of lodging away from home, to the extent deemed reasonable, for applicants during the search, and for both the applicants and members of their family during the move.

(2) Acquisition of replacement site costs. Reimbursement was made for the cost of a survey and appraisal of the new site, legal services such as title opinion, costs of obtaining mortgage and title insurance when necessary in acquiring replacement property comparable in value to that acquired by the Government, and fees for recording the deed.

(3) Moving costs, which included the transportation of persons, household goods, livestock, machinery, etc., to the new site.
(a) Commercial mover's charges, to include packing, unpacking, and insurance. If the relocatee moved himself, he might claim recompense for his own time and labor in moving, providing this did not exceed what a commercial mover would charge. (b) The cost of hiring a truck or trailer. (c) Expenses, exclusive of maintenance and repair, of a personally owned automobile or truck. (d) Labor hired to assist in moving. (e) Reinstallation of machinery, equipment and appliances, exclusive of improvements, to replacement site. (f) Damages sustained to household goods, machinery, livestock, etc., incurred in the process of being moved (where damages are not covered by insurance and where no negligence is involved). (g) Interest on short-term loans required for moving expenses only.

The following items could not be considered for reimbursement:

1. Loss of business, profits or good will, 2. Costs of moving buildings or other improvements reserved from Government acquisition, 3. Interest on loans, except for loans obtained to cover moving expenses, 4. Costs of conveying property to the Government, and 5. Down payment on the acquisition of a replacement site.

The land owner or tenant applied for the above reimbursements by filling out a questionnaire which itemized each of the eligible categories noted above. The relocatee was required to specify the number of members in his household, make a summary description of the possessions he moved (household goods, machinery, livestock, etc.) and the distance moved. The Corps of Engineers provided a form that allowed the relocatee to itemize time and mileage spent in search of a replacement site.
Legislation regulating the relocation assistance which will be available to persons displaced by Taylorsville Reservoir is summarized as follows:

Moving costs. Public Law 91-646, the Uniform Relocation Assistance and Land Acquisition Policies Act of 1970 (effective January 2, 1971), gives a person who will be displaced because of the acquisition of his real property by the Federal Government a choice of one of the following three reimbursements:

1. (a) actual reasonable expenses in moving himself, his family, business, farm operation, or other personal property. (b) actual direct losses of tangible personal property as a result of moving or discontinuing a business or farm operation, but not to exceed an amount equal to the reasonable expenses that would have been required to relocate such property; ... and (c) actual reasonable expenses in searching for a replacement business or farm; or

2. any person who is displaced from a dwelling may receive a moving expense allowance not to exceed $300 and a dislocation allowance of $200; or

3. any person who is displaced from his place of business or from his farm operation may receive a fixed payment "... equal to the average annual net earnings of the business or farm operation, except that such payment shall not be less than $2500 nor more than $10,000. In the case of a business no payment shall be made under this subsection unless the head of the Federal agency is satisfied that the business (1) cannot be relocated without a substantial loss of its existing patronage, and (2) is not a part of a commercial enterprise having at least one other establishment not being acquired by the United States, which is engaged in the same or similar business."

This payment is in addition to the payment for the title to the

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real estate and is not considered income for Federal Tax purposes.

Replacement of housing. In addition to moving costs, the Federal Government under the provisions of Public Law 91-646, must "make an additional payment not in excess of $15,000 to any displaced person who is displaced from a dwelling actually owned and occupied by such displaced person for not less than one hundred and eighty days prior to the initiation of negotiations for the acquisition of the property." This additional payment is made only in the "amount, if any, which when added to the acquisition cost of the dwelling acquired by the Federal agency, equals the reasonable cost of a comparable replacement dwelling which is a decent, safe, and sanitary dwelling adequate to accommodate such displaced person, reasonably accessible to public services and places of employment and available on the private market."

This additional payment for housing is made only if the replacement dwelling is purchased "not later than the end of the one year period beginning on the date on which he receives from the Federal agency, final payment of all costs of the acquired dwelling, or on the date on which he moves from the acquired dwelling, whichever is the later date."

A choice of one of the following payments for replacement of housing for tenants is available to those tenants who occupied a dwelling for not less than 90 days prior to the initiation of negotiations for the dwelling:

(1) the amount necessary to enable such displaced person to
lease or rent for a period not to exceed four years, a decent, safe, and sanitary dwelling of standards adequate to accommodate such person in areas not generally less desirable in regard to public utilities and public and commercial facilities, and reasonably accessible to his place of employment, but not to exceed $4,000, or

(2) the amount necessary to enable such person to make a down-payment . . . on the purchase of a decent, safe, and sanitary dwelling of standards adequate to accommodate such person in areas not generally less desirable in regard to public utilities and public and commercial facilities, but not to exceed $4,000, except that if such amount exceeds $2,000, such person must equally match any such amount in excess of $2,000, in making the down-payment.

Payments made for replacement of housing are not considered income for Federal Tax purposes.

Relocation Assistance. Whenever a Federal agency displaces a person in order to acquire real estate the agency must provide relocation assistance. This assistance basically consists of (1) assuring that prior to the person's displacement, decent, safe, and sanitary dwellings are available in areas not generally less desirable in regard to public utilities and public and commercial facilities at rents or prices within the financial means of the individual and (2) assisting a person displaced from his business or farm in obtaining and establishing a suitable replacement location.

Public Law 91-646 declares the Federal Government's intention to make suitable housing available to displaced persons by stating:

(a) if a Federal project cannot proceed to actual construction because comparable replacement sale or rental housing is not available, and the head of the Federal agency determines that such housing cannot otherwise be made available he may take such action as is necessary or appropriate to provide such housing by use of funds authorized for such project.
(b) no person shall be required to move from his dwelling
... unless the Federal agency head is satisfied that
replacement housing ... is available to such person.
CHAPTER II: CULTURAL IMPACT

There are two ways of considering impact. One approach is to examine what areas of culture are most affected by changes resulting from public works projects, the other is to assess impact directly on persons. Of course the former approach eventually comes to the effect on persons; people are what social science research is about.

**Social impact: a hypothesis**

Familiarity with the rural Kentucky lifeway suggests a hypothesis to be tested: that the effect of impact, particularly the proposed forced migration, on social organization is very marked. In view of the persistence of the extended family structure in the primary study area a sub-hypothesis is proposed to the effect that perception of dislocation as disruptive to extended family structure is a tension-producing force. Sub-hypothesis number two is that threat of disruption of voluntary associations, particularly church congregations, is seen as threatening, and therefore is stressful.

Taylorsville Reservoir. Informants are in agreement that the beginning of major impact on potential displaced persons can be related to the series of announcements in the media in 1964 of the probability of approval of the Corps' plans to build the dam on Salt River upstream
from Taylorsville, and the public meeting held in January 1965 to
assay local opinion on the project. They also agree that that
meeting was attended principally by townsfolk strongly disposed to
favor the dam, plus some downriver farmers, two groups who most
obviously stand to benefit most from flood control. Prospective
displaced persons attended in sparse numbers. Because of population
changes and other factors we do not have precise figures on numbers
of this population group who attended the meeting, but the consensus is
firm that they were few. Proponents of the dam (including numbers
of persons from frequently flooded Shepherdsville 30 miles or so
downstream), formed the majority of the audience. Nonetheless the
news was disseminated rapidly that the Corps of Engineers probably
would construct a dam that would inundate a substantial reach of
the Salt River valley above Taylorsville.

Since this news was diffused by informal channels, "gossip networks"
that is, it included abundant misinformation. In particular, there
was considerable confusion as to the extent of inundation. While
most of the persons to be affected understood that the bottom lands
in the lower part of the proposed reservoir would be drowned, they
were unclear as to extent of flooding on tributary streams and the
upper portion of the proposed lake in Anderson County. The buffer
zone concept: 5 feet above maximum flood pool and 300 feet horizontally
beyond as necessary, was and is especially unclear. That maximum
flood pool level plus 5 feet defining the margins of the take area
is expressed in altitude above mean sea level, which can be read on
topographic maps (for instance, U.S.G.S sheets), does not mean anything to people unfamiliar with such maps. The result was that some persons owning land in the take area did not realize they would be affected, or did not realize the extent to which they would be affected, while others who would lose little or no land became highly exercised believing they would suffer substantial loss.

The initial response of those who saw themselves threatened with disastrous loss of homes and farms was to protest. According to information from the Corps, 38 letters stating opposition to the dam were sent to the Corps of Engineers' office. Then what could have been a step toward organization occurred: petitions, with 23, 45, and 102 signatures each were transmitted to the Corps and to state officials. We were unable to see these documents, but apparently the signers were principally persons whose farms were in the take area (or who believed they would be affected), plus a few sympathizers. However, at the same time petitions endorsing the dam because of the benefits it would bring through "flood control, water supply [actually not among the benefits listed in the Corps' proposal; 'water quality control' was probably misunderstood], recreation, and improved economic conditions," were circulated, and were signed by "more than a thousand persons," according to Corps of Engineers officials. These petitions crystallized people's stand on the issue -- one signed or refused to sign a petition pro or con and thus publicly defined his position. The local expression of perception of difference of opinion was that one "learned who his
real friends were," depending on whether the other signed whichever petition was presented to him or not. The result was development of animosities of varying intensity in the community. Some prospective displaced persons broke off relations with certain kin and friends. They also ceased to shop at stores in Taylorsville whose proprietors they considered strong advocates of the dam. A smaller number avoided, and still avoid, Taylorsville altogether, driving considerable distances to do business elsewhere. A perception held by many future dislocates is that the dam is essentially a town project. As a result the longtime distinction between town and country is accentuated.

Taylorsville is a supply and service center for the rural community. Residents are oriented toward the rural value system. Some businessmen also own farms, and retired farmers live in town. Nonetheless there always has been a perceived dichotomy between the two lifeways. The proposed dam has intensified this difference and compounded it with ill-will because the reservoir project is seen as a creation of the town. Local businessmen were conspicuously active as proponents. It is also obvious that townfolk stand to benefit most from the flood control aspect of the dam, since they sustained the most serious damage before the levee was built, and live in fear of a flood that will pour over the levee. Their homes were flooded with muddy water that left layers of alluvium on floors, walls, and furniture and ruined appliances. Farm homes, barns, and sheds in the river bottom are almost invariably situated on knolls or benches above the level of highest floods. The Corps of Engineers study of flood damage
(Salt River Basin, passim), happily cites no human fatalities nor even livestock losses. Of the floods cited as "major" only one (May 1961), between 1937 and 1964 occurred in the field preparation/crop growing season. Minor summer floods cause some, but usually not major crop damage. River bottom farmers of the proposed reservoir area see the floods as nuisances but not as disasters. Townfolk also are the only ones who stand to gain from lake-related tourism. Farmers, therefore, consider that townspeople will be the beneficiaries of the project. Anxieties of those who were to be dislocated came to be manifested as animosities.

Thus a rift was created in the local community, accompanied by considerable tension. Those indifferent to the project, owners of upland farms, for example, had to take sides or walk the tightrope of neutrality when interacting with affected kinsmen and friends. Such an affect-tinged division in a formerly united community constitutes social disorganization.

When the split became known, as word spread who had signed or refused to sign which petition, it became clear that opponents of the dam were a minority. They were soon put in the untenable position of opposing "Progress" for self-interest. The population of the region in which the reservoir is to be built is not really noted for progressiveness. Nonetheless, favoring progress is a ringing slogan, to oppose it is to label oneself as a culturally retarded rustic. Instead of emphasizing the dismay at impending loss of homes and farms, arguments against the dam came to take the form of alleging the folly of drowning fertile farmland: (a) to provide recreation for "riffraff
from the city;" (b) in the face of an impending world food crisis
(a theme derived from recent discussions in communications media).
An even more extreme argument revolves about the possibility of
collapse of the dam and resultant destruction of Taylorsville,
wishful thinking of near-paranoid dimensions, significant in terms
of anxieties caused by impending forced removal.

By the time of the fieldwork most opponents of the project were
convinced of the futility of their opposition. Their opposition has
not diminished, but their antagonism has gradually been transferred
for the most part from other members of the community to the Corps
of Engineers. (Some intracommunity antagonisms persist, but on a
less intense scale.) This trend has been facilitated by the increased
visibility of the Corps: surveying crews, crews sampling sources
of aggregate, etc. The resentment against the Corps is expressed in
what are probably idle threats about firing rifle shots over the
heads of Corps' employees in the pool area, or "slicing a few tires"
to harass them. Local men, who have taken jobs on Corps crews are
prime targets of malicious gossip. In one case reported, a pool
area farmer swerved his car at one such person, pretending an attempt
to run him down and sending him diving into the ditch. The story
was hilarious to the farmer's cronies. Such attitudes obviously
are attempts at tension-management, but counter-productive in social
terms, disruptive of community solidarity.

There are two categories of prospective displaced persons who
did not go through the process just described. One such group con-
sisted of those who severed connections with the take area, or whose
connections were severed prior to beginning of land acquisition by the Government. The other group consists of a small number of individuals who until very recently have refused to accept the idea that the dam will really be constructed. Both categories will be discussed in a later context.

While tension created by intracommunity conflict clearly has been caused by impending dislocation, supporting the hypothesis advanced, the proposition that disruption of familial ties would be seen as a major threat of dislocation was not validated. One elderly couple predicted that after removal their children and grandchildren would visit them less often, because visiting the "homeplace" was the major factor motivating the visits, but this was a minor complaint among their perceptions of dire results of the impending forced relocation. Other informants did not consider disruption of family ties a menace. Two factors are operative. One is that the process of urbanization of rural populations -- emigration to urban communities -- has been going on for some time, long before dislocation by the reservoir was threatened. Geographical separation of kindred is not welcomed but accepted. Second, improved transportation (vehicles and roads), has made the population very mobile within limited radii at least. For those to whom kinship ties are still important trips of 50 to 60 or more miles to visit family members are made most casually. Factors other than relocation a few miles from the "homeplace" contribute more significantly to breakdown of family unity.

This conclusion seems sharply variance with Ludtke and Burdge's findings. Their questionnaire included a set of queries which they
considered gave a measure of "identification with place." Where this characteristic measured strong, they found a high correlation with apprehension over removal and separation from homes and friends (Ludtke and Burdge, 1970, pp. 121, 122). "Uniformly, the more intense the identification with place, the less inclined the people were to engage in [geographic and] social separation" (op. cit., p. 125). However, on closer scrutiny our results are not so different. The matter resolves about definition of "place." Ludtke and Burdge use the term to refer to the home and tract of land of residence. It is clear that some persons identify strongly with "place" in this sense. But there is another sociogeographic entity with which rural Kentuckians (and those of various other states) identify strongly: the county. This does not mean that identification with the county is as strong an affective tie as that with the "homeplace." What it does mean is in cases of forced removal, relocation within the county is less stressful than relocation outside it, and mitigates somewhat the tensions of separation. (A variant is relocation to a place near emigrated kin, particularly that of an elderly couple to the vicinity of emigrated children.) As a prospect, perception of the possibility of relocation within the county lessens the level of apprehension over removal, though of course, does not eliminate it. We have some figures on relocation (see Table IV): a) from Taylorsville Reservoir persons who made voluntary private sales (discussed in detail elsewhere); b) volunteered statements of a sample of Taylorsville Reservoir persons still living in the take area as to aspirations; c) distances moved by Green River
Reservoir relocatees from Corps of Engineers files on relocation.

Table IV

Place of relocation

Taylorsville Reservoir:
Voluntary sale relocatees
<table>
<thead>
<tr>
<th>Place of relocation</th>
<th>Number of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same county (Spencer County)</td>
<td>11</td>
</tr>
<tr>
<td>Adjacent counties</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15 households</strong></td>
</tr>
</tbody>
</table>

Aspirations of non-relocated:
| Same county | 5 |
| Adjacent counties | 2 |
| Non-reported | 5 |
| **Total** | **12 households** |

Green River Reservoir:
Re locatee sample | 166 households

Distance from original home site:
<table>
<thead>
<tr>
<th>Distance from home site</th>
<th>Number of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 miles</td>
<td>69</td>
</tr>
<tr>
<td>6-10 miles</td>
<td>45</td>
</tr>
<tr>
<td>11-15 miles</td>
<td>25</td>
</tr>
<tr>
<td>16-20 miles</td>
<td>12</td>
</tr>
<tr>
<td>20-25 miles</td>
<td>5</td>
</tr>
<tr>
<td>more than 25 miles</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>166 households</strong></td>
</tr>
</tbody>
</table>

The data in Table IV clearly show the strength of the county ties. Of those in the first category, the early relocatees, 3 of those moving to adjacent counties were elderly persons who moved to be close to emigrated children, one involved a farmer who found a suitable replacement farm in nearby Nelson County. The next category, on aspirations, should cover more cases, but represents volunteered information only from prospective relocatees; the 12
intensively interviewed were unfortunately not specifically questioned on this point. The sample from the Corps relocation files is accurate on mileage because distance moved was the basis for claims for relocation reimbursement. Although county to which the households moved is not shown, most moves of 15 miles or less (nearly 84% of sample) were undoubtedly within the same county; the only possible exceptions would be of households in the take area situated close to the Taylor-Adair County line. The removals of 25+ miles incidentally include 2 elderly couples who moved to Florida for retirement.

That "identification with county" is one form of "identification with place" receives massive statistical corroboration from TVA records. The TVA Annual Report (fiscal 1950), which covers the agency's first 17 years of operation during which most of its major stream control devices were constructed, in reporting on "about 14,400 (relocated families," states of the relocatees, "More than 70 percent relocated in the same county, and about 95 percent in the same State" (Tennessee Valley Authority, 1950, p. 23). The report does not give a breakdown on the 25% who relocated outside of county of origin but "in the same State," but it seems likely that many of these relocated in counties near their county of origin.

Rural Kentuckians who are regular participants in church activities take their religious beliefs seriously, and in addition the congregations are social units of considerable importance to their members. Association, congeniality, and cooperation are
important aspects of participation.

There are 4 churches situated within the pool area of the proposed reservoir. Attendance at all four has been gradually but steadily declining for some time. A variety of reasons are offered for the decrease, the primary one being that many of the old members have died or moved away and the young people today are not taking their places. The estimated average Sunday morning church attendance at two points in time is:

<table>
<thead>
<tr>
<th>Church</th>
<th>1965</th>
<th>1973</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van Buren Church of Christ</td>
<td>45-50</td>
<td>35-40</td>
</tr>
<tr>
<td>Van Buren Baptist</td>
<td>30-40</td>
<td>10-15</td>
</tr>
<tr>
<td>Ashes Creek Union</td>
<td>30-40</td>
<td>10-15</td>
</tr>
<tr>
<td>Ashes Creek Assembly of God</td>
<td>40-50</td>
<td>20-25</td>
</tr>
</tbody>
</table>

It appears that the proposed reservoir's impact on these religious institutions has been to accelerate decrease in number of active participants by dispersing them, not to initiate the decline. Informants believe that the 3 out of the 4 rural religious institutions probably would have ceased operation at some future date, dam or no dam, as the older members who carry the financial burden died away. Sense of loss, and resultant anxiety, resulting from the impending disbanding of the congregations is certainly present, but is not directly related to the reservoir.

Only one congregation is planning to relocate its church. This institution has the largest regular attendance. It is the oldest of the four in the pool area, having been organized in the 1870's.
Adjacent to it is a cemetery in which members of the congregation have been buried since the church was built, and it too, will be relocated. Church members perceive that it is "fitting" to relocate the cemetery next to the new church whenever it is relocated. (There are no cemeteries adjacent to the other churches.) A reason given for relocation is that there is no other church of this denomination in the region. A fundamental tenet of faith of this group is that attendance at this church is a prerequisite for salvation. Current plans are to relocate the church just outside the reservoir area where one member has offered to donate land for the new church site. As of mid-1973 no contact had been made between the Corps and the church regarding relocation procedures.

The other three churches located within the pool area are not planning to relocate following Government acquisition. The reasons given for anticipated institutional dissolution are as follows:

Church attendance has declined to the extent that it is difficult for the churches to function. None of the churches located in the pool area is able to support a full-time minister. Following relocation it is anticipated that the few remaining members will be widely dispersed. Relocating a church that would be in a convenient location for all would be impossible. In two cases, churches of the same denominations are located nearby, so it is considered preferrable to merge with sister institutions rather than to continue struggling with small memberships and limited financial resources. One congregation is planning to donate the money it receives from the Government for its present building to the sister church with which
merger is planned so a new sanctuary can be constructed.

One pool area church has a unique problem in that three religious denominations jointly own the real property. No one interviewed believes that an agreement could be reached on relocating the church with its present multi-denominational composition. Current plans are to divide the final settlement price among the three denominations and let each go its own way.

In fine, the social units comprised by the four congregations have resolved their impending dislocation problems rationally, with minimal tension and anxiety. Our second sub-hypothesis, that forced removal of such social entities would be perceived as disruptive and menacing, and therefore stress-producing, is clearly invalid. It must be recognized that a special factor was operant: in 3 of the 4 cases it was perceived that the associations were doomed in any case. With however much regret, this was accepted as inevitable. The sudden intrusion of the dam into the local scene merely will hasten the impending collapse.

Green River Reservoir. In compliance with the Flood Control Act of 1938 involving design of a comprehensive plan of flood control on the Ohio and Mississippi drainage systems, construction of a dam on Green River as well as on other major tributaries of the Ohio was given early consideration. One person interviewed recalled that in 1940, when he was planning to purchase a bottom land farm near Elkhorn on Robinson Creek, a Congressman warned him a dam might be built that would flood the farm. He bought the property
anyway, The case seems typical. Many people in the region, including many of those to be affected, were familiar with the rumor that "the Government" might someday build a dam on Green River, but no one took the bit of gossip seriously; no one believed that the dam and its impoundment would affect him and his neighbors.

In 1945 the Corps of Engineers held a public hearing in Greensburg, Green County, downstream from Taylor County, which was attended by a small number of residents of Taylor and Adair Counties, to assess public reaction to the construction of a dam on Green River. According to some who attended the meeting, the project was in the stages of very preliminary planning. It was indicated that the Corps had under consideration a dam on Green River, possibly in Green County, whose height, and therefore, extent of pool area of the reservoir to be impounded, had not been determined. Informants who attended the meeting, including a brother of the man mentioned who bought a tract of land near Elkhorn in 1940, recall that they came away quite unconcerned. There was no certainty that they or their neighbors would be affected by the dam whose location was tentative and whose construction was but a faint gleam in some bureaucrat's eye. Real estate in what was to be the take area was bought and sold in private transactions with no concern as to likelihood of inundation and forced removal.

In September 1959, a brief article on the front page of Campbells-ville's News Journal stated that Congress had made further appropriations to the Corps of Engineers to continue planning for the construction of a flood-control dam on the Green River. A tentative site for the
dam was at Bluff Bloom in Green County. The article added that subsequent study could locate the dam elsewhere on Green River.

In July 1960, a representative from the Corps of Engineers' met with local citizens at the Taylor County High School in Campbellsville. The meeting, announced a week in advance in the News Journal (there was no announcement in The Adair County News), was sponsored by the Campbellsville Kiwanis Club and other civic organizations. According to the News Journal approximately 400 persons from Green, Taylor, and Adair Counties were present. Informants note that few persons eventually displaced by the reservoir attended this meeting. During the program, the Corps' representative explained the nature of the project and the planning and surveying that had been done. Alternative placements of the dam in either Green or Taylor Counties were presented. A film was shown to demonstrate governmental land acquisition procedures. The extent of the land required was estimated. Upon completing the survey that summer, the project design would be submitted through normal channels to Congress requesting funds needed for acquiring the dam site, land covered by the waters to be impounded, flowage easements, and costs of construction.

For a period of two years following this meeting, no further information was disseminated by the Corps to the local people. The meeting, however, stimulated much speculation. The possible location, size, and purpose of the reservoir were discussed casually among neighbors and business acquaintances. Some people still believed that no dam would ever be built. When the presence of survey teams in the area was pointed out to them as proof that the project was
underway, the doubting Thomases preferred to believe that they were surveying for the new roads which the county needed.

In August 1962, the Campbellsville News Journal, announced that Congress had appropriated one million dollars to begin land acquisition. The dam would be located in Taylor County about eight miles south of Campbellsville just to the east of State Route 55. The Corps of Engineers was to announce a date for the land acquisition hearing soon.

This information spread rapidly by word of mouth as well as by the news media. There was now no doubt where the lake would be impounded, but considerable doubt still remained as to whom would be displaced by its impoundment. As late as 1963, property near Robinson Creek was still being exchanged privately as if no reservoir project was underway.

In questioning people as to how they first learned that their property would be taken by the Government, one is impressed with how casually this information was acquired. One informant said that in March 1963 he did not believe that the Robinson Creek area would be affected by the reservoir. He was negotiating for land in the locality to expand his farming operation. In April, he was in Acton (upstream from Elkhorn) when he saw a survey team taking readings from a bench mark. He surmised then that the project was underway and that his property near Elkhorn would be taken. Many people said that they learned that they were to be displaced by the reservoir by listening to talk, not all of it authoritative, at the county court house. Old people and others who seldom went to
Columbia or Campbellsville stated that they first heard of land acquisition from their neighbors; the gossip channel was at work.

The urbanized segments of Taylor and Adair Counties were optimistic. New industry was coming to Campbellsville while an established plant was expanding. Columbia was attracting its first major industry. The proposed Green River Lake contributed to the optimism. It was said that the area to be flooded was the least populated in the counties. Land owners would be compensated fairly for their property. Arrangements had been made for displaced farmers to retain their tobacco base. It was expected that the lake would increase land values, so that no diminution of the county tax base was expected. Local businessmen believed that the lake would encourage tourism and that this in turn would stimulate retail sales.

The Upper Green River Association was formed by local leaders with headquarters in Campbellsville. One of the organization's principal concerns was to explore the possibility of tapping the lake to provide water for increasing industrial needs. The urban-oriented news media wholeheartedly supported the construction proposal. A prominent newsman recalled that it was a policy of his newspaper not to print criticism of the reservoir project. It was felt that the lake would prove to be a boon to the area, and there was no point in giving ill-informed critics a soapbox.

In April 1963, the Corps of Engineers began detailed surveying for the Green River project. This procedure included the placement of survey markers on land in which the Government was to acquire an interest. Informants reported that red markers indicated tracts to
be acquired in fee; yellow markers those on which easement rights were to be acquired. Local people soon learned to interpret these markers. We were unable to check the accuracy of this statement; it may be an example of the folklore that develops due to inadequate diffusion of official information on such projects. The Corps has stated it did not normally delineate take and easement areas (Committee on Public Works, p. 407). However, this "knowledge" was abused by some. Rumors that so-and-so would surely lose his land were started deliberately "to get someone's goat." Several pranksters went so far as to place survey markers surreptitiously on the property of a "worrier", a person known to be an especially anxious individual. Within a year, so it was said, this individual suffered a heart attack and died. It was said he worried himself to death.

Meanwhile, the Corps of Engineers delayed taking bids on construction. There was a problem of water quality control: oil seepages from wells upstream had to be capped. The delay brought new rumors that the extent of the reservoir was to be greatly increased and that the project in fact was to provide hydro-electric power instead of flood-control. These unsettling items of folklore came to the notice of the Corps of Engineers, which denied them in the press.

The data from Green River make clear that the same process of development of intracommunity animosities, social disorganization in the raw, occurred as is now occurring in the Taylorsville Reservoir area. Townspeople and such downstream farmers who foresaw benefits from protection from floods, favored the dam, and many became
out-spoken partisans. The prospective displaced persons (those who realized they would be displaced, and others who thought they would) and a few rural sympathizers found themselves in the position of forming a minority opposing "Progress." The resultant ill-feeling is played down by informants now: the intracommunity animosity of the displaced persons and their supporters toward perceived beneficiaries of the dam became redirected against the U.S. Army Corps of Engineers. This trend developed along with the increased visibility of the Corps in the take area once land acquisition actually began, and was enhanced, as will be brought out, by resentment against Corps' procedures.

**Economic impact: a hypothesis**

In this modern day, operation of a small farm is economically perilous. To operate one successfully requires a good business sense, constant attention to detail to reduce expenses and to increase profits. It seems reasonable to expect a successful farmer to be the epitome of economic man, constantly alert to possibilities of gain, and wary, even apprehensive of possibilities of loss. Therefore, it should be useful to examine the hypothesis: that perceived economic impact is a major factor in determining strong attitudes, with accompanying emotional tensions, in favor or or against the stream-control device. A sub-hypothesis can be derived: persons perceiving severe economic loss associated with forced removal will be most opposed to the project and under the most stress over their proposed removal.
Ludtke and Burdge did not propose a similar hypothesis, but did derive a conclusion from certain of their correlations to the effect that, persons "with a vested interest in removal" will have a more favorable attitude toward the project and less apprehension about removal (1970, pp. 101-104, 119, 126). This at first sounds like double talk, because those authors make no attempt to explain how anyone could have "a vested interest" in his own forced removal. We believe that the matter can be clarified by reviewing the data in light of the hypothesis and sub-hypothesis proposed.

When it seemed likely, according to information disseminated by the communications media, that the Taylorsville Reservoir project would be authorized (Drucker, Smith, and Turner, 1972), various persons both from the reservoir area and from some distance outside it foresaw that there would be numerous tracts close to the future lake but outside the take line that would be converted from farmlands and pastures into desirable residential tracts overlooking the lake. The proximity of expanding metropolitán Louisville meant that urbanites could build homes in an esthetically satisfying setting, from which they could commute to offices and businesses in Louisville. Prospective buyers of tracts with such residential potential began to tour the area. It has been noted that the Corps' definition of the buffer zone (5 feet vertically above flood control pool level, + 300 feet horizontally), was not understood by local persons in or adjacent to the take area. The buyers were more sophisticated in map-reading; in many cases they, rather than the land owners, identified the potentially desirable tracts.
While some of the early purchases were made at prices per acre in keeping with local standards of the agricultural worth of the land, it soon became apparent that the buyers were willing to pay substantially more for tracts that interested them. The realization that many of them were buying for speculative purposes (buying sizeable tracts to subdivide into house lots), was soon achieved. Locally such buyers soon came to be referred to as "speculators," and by extension, the properties of interest to them are referred to as "speculative lands."

Of the 90 households in the take area, 26 owned tracts that extended from the river bottom lands up the hillsides to the top of the peneplain above and beyond the buffer zone. Some of these speculative tracts were sold prior to beginning of Federal acquisition. In most cases the entire farm was sold, the buyer ("speculator") thus making himself responsible for dealing with the Corps of Engineers when the agency began to acquire lands in the take area.

The voluntary sales of speculative land made prior to the beginning of land acquisition by the Corps of Engineers show economic motivation strongly. This is true even though some of the earliest sales were at low prices. New concepts of land use and value quickly came into effect, driving land prices upward (Drucker, Smith, and Turner, 1970, pp. 66, 70-71). The early sales (15, excluding 2 households that did not relocate early, Table II), include 2 cases of purchase of replacement farms, and 13 of acquisition of replacement housing by elderly persons planning retirement. The opportunity to obtain cash to negotiate a purchase was seen as economically
significant, especially in view of the normally limited availability of both farms and homes in the county and even in adjacent counties. The persons involved were aware also that land prices have been rising steadily in recent years and would continue to do so (an average increase of nearly 6% per annum on Kentucky farmland over the last 20 years is reported, [Lynch, Sena, and Watts, 1972, p. 52]). In addition, as higher prices began to be paid for speculative lands, it came to be recognized that all land prices in the region, including those of farms purchased for agricultural purposes, were going to rise sharply. Thus, those who had the opportunity to sell early and did so, perceived that they had both more choice of location and more favorable price on purchase of replacement real estate than they would have by waiting. Even those who sold out at relatively lower prices in 1964-65 consider that they were well paid in terms of prices originally paid for their lands before World War II.

Among the 9 households having speculative land who had not made voluntary sales by mid-1973, 4 did not intend to sell their lands outside the take area, planning instead to move their homes to these tracts. Individual plans varied: one man, part-time farmer and businessman believed he could benefit by relocating his store on the remainder of his land, orienting it to recreational trade. Another considered he could continue farming by relocating house and buildings on his land outside the take area and buying some additional land (which should be relatively cheap since it would not have to have a house, barns, etc.). These 2 persons and
the other 2 who planned to retain their remaining land saw practical solutions, no serious economic problems, and were under no particular stress. A fifth man with such land was undecided, but saw retaining it as an option open to him. He had searched for a replacement farm but when interviewed had not found one he liked at a price he could afford. Either way, he foresaw an economically feasible solution, and was prepared to accept the outcome.

Two other householders in this category were out to "sell out at a profit," in their phraseology, and then retire. One of these interviewed, displayed considerable anxiety, and hostility to the project. He had overpriced his lands (retaining an unrealistic agriculturally oriented evaluation: $1,000 per acre for bottom land, $500 per acre for hillside and upland). Two points concerning the economic aspects of speculative land buying must be noted here. One is that speculators who purchase whole farms, including lands certain to be inundated, certainly know that the areas within the take area could be expected to be purchased by the Corps of Engineers at no more than standard farmland values. Costs, including price paid for the land to be drowned, transfer expenses, taxes prior to purchase by the Government, and more importantly interest rates if they operate with borrowed capital, make loss on such parts of the tracts likely. Some buyers have attempted to cover this phase of the transaction by finding tenants, share croppers, or renters of the housing. The foreseen profit lies, of course, in the sale of residential lots of the portions of the tracts outside the take area. The second point, is that some of the 9 tracts considered here may
have been less attractive to speculators than others which were purchased. Factors of access, view of lake, etc., may have been operative. However, it is certain the speculative tracts will increase in value, not decrease, over the course of time. Owners who can retain them without economic hardship will eventually get better prices, and they know this.

No explicatory data were collected on the 2 remaining cases of potentially speculative land, except that the owners were said to be considering selling, but seem to feel themselves under no intense pressure to do so.

The persons just described who owned or own speculative land are those who fit the Lutdkc and Burdge classification of holders of "vested interest" in moving, and who consequently felt no stress in the removal situation. They faced no critical economic problems. The elderly farmer whose children have emigrated to the urban scene and will not take over operation of the farm, knew that sooner or later he would have to sell out as best he could to retire in or near a town. For the elderly it is significant that medical services are available in town, not in the country, with doctors no longer making house calls. Even buying groceries is more convenient in town. To be able to sell the farm and go into the housing market cash in hand was an acceptable solution of an inevitable problem. The same, essentially, was true of the younger active men who want to continue farming, and for those who foresee an economically viable future in retaining lands out of the take area. They could buy adequate replacement farms, or utilize remaining holdings
effectively, so as to continue to operate at their perceived economic level, or possibly even improve it. This is not true of the remaining persons who have nothing to sell except what the Government will eventually take.

In 1973, there were in our sample neighborhoods 14 farm owners and 12 home owners with no speculative land who had been in residence prior to 1965. There were also 14 non-property owners. (Recent immigrants are not included in these counts.) These are the persons who have come to refer to themselves as "the trapped," as they wait for the Corps land acquisition program to begin. In their uncertain circumstances, credit was not available to them, even at former interest rates. Borrowing to buy replacement property is still not a solution with the present tight money market and high interest rates. These householders are people with no options. All they can do is wait for the Corps to commence land acquisition. They are for the most part bitter, hostile to the project and to the Corps of Engineers, seeing themselves as seriously disadvantaged. Of the 14 farm-owning householders, 9 are young to middle-aged men who want to continue farming. Since they have insufficient unencumbered capital to make a purchase or even a down payment, it is useless for them to search for a new farm. What with the lengthy unpredictable Corps' timetable, no seller will give an option on his property contingent on settlement by the agency. The 5 elderly farm owners who plan to retire to a home in town are in the same
predicament, as are most of the home owners. These persons view
their situation as follows:

1. The Corps of Engineers will appraise properties
at very low prices, and buy them cheaply. Few
persons are aware of their rights under condemnation
proceedings, and foresee only long drawn-out
litigation with the attorneys skimming off any
possible financial gains, if they go through the
condemnation process. They also seem to be unaware
of the fact that the amount of the appraised value,
deposited with the Court when suit is filed, is
available to them for purchase of replacement
property.

2. Meanwhile, regional land prices are seen as sky­
rocketing, stimulated by speculative sales, residential
and developmental purchases by people from Louisville
in the western part of the county as well as near the
reservoir, as well as by the demands of those trying
to buy replacement farms and homes.

3. Farmers who want to continue farming, foresee themselves
with their limited capital as being forced to settle
for inferior smaller farms, or being forced out of
farming altogether. Both possibilities are regarded
as unfair and unjustified hardships.
4. Many of the persons who cannot make relocation decisions until the Corps of Engineers purchases their property in forced sale are acutely aware that their homes are old, less than modern, and somewhat run-down, and will expectably be appraised at a low figure. Many have augmented this condition by believing a widespread rumor, one of the many ill-producing products of the local rumor factory, to the effect that an old house would be evaluated as an old house of little worth by Corps appraisers despite recent painting and caulking, roof repairs, etc. (A local store owner, himself a prospective dislocatee, who formerly did a brisk business in paint and painting materials, roofing, fencing materials, and other items utilized in maintenance and upkeep of homes, farm buildings, and farms, reported that his sales in these items had decreased spectacularly over the past few years.) In other words, prospective displaced persons believe firmly that the amount to be received in forced sale for housing (and other buildings in case of a farm), would be less than half enough to purchase a newer, more modern, structure (or structures) of comparable capacity. Even similarly old, rundown structures were perceived as much more expensive in the seller’s market which the dislocates will enter.

There are 4 cases of farm owners in the take area whose situation
merits special mention. These are persons whose farms include hillside and upland tracts originally believed to be out of the take area, but bordering on it, perceived as exceptionally suitable for lakeside residential sites. These owners saw themselves as beneficiaries of the reservoir project who would be able to reap a substantial profit from sale of speculative lands. On September 6, 1973 at a public hearing convened by the Corps of Engineers in Taylorsville to report on land acquisition procedures, it was announced that nearly 4,000 acres of land are to be acquired to provide a recreation-related park area. This tract will include the lands just mentioned, and an estimated additional 40 to 50 wholly upland farms and houses.

Since the recreational component was a major consideration in reservoir plans, Corps of Engineers' plans included a large park. This is clear from an early official publication (Salt River Basin, Kentucky, 1966, p. 35). A map showing the location and extent of the proposed park, along with a plan for the park design, was prepared by the Corps prior to the latter portion of fiscal year 1971, but was not distributed locally. By the time of the formal announcement of size and location of the park, on the date mentioned above, many persons suspected they might be affected, but none was certain. The public announcement came as a devastating blow to hopes based and plans built on sale of prime speculative lands at high prices. Of our sample of those so affected, 2 were elderly, looking forward to retirement. They had anticipated return from the speculative land would permit moderately comfortable retirement. Frustrated in this hope, they now see themselves forced into a marginal situation,
which they resent. The 2 younger men who plan to continue farming had been looking for replacement farms, planning to buy or to make a substantial down payment with proceeds from sale of speculative lands. Now, foreseeing a much smaller return, and with no capital until bought out by the Corps, they feel defrauded. They feel they were dealt with unfairly, and do not hesitate to express their antipathy toward the U.S. Army Corps of Engineers.

The non-property owners subject to removal include 8 households of elderly retired, most of whom depend heavily on public assistance. There are also 2 commuters, and 4 sharecroppers. The retired group see themselves as disadvantaged. They anticipate being uprooted, driven out into an unfriendly world, after having found haven in what they perceive as comfortable, inexpensive rental housing (though sub-standard by some criteria). Rental housing is scarce in the region; these people see themselves as having nowhere to go. Actually they, with minimal economic ties to the locality, do not face the financial problems of property owners. Nonetheless most of them, aside from a few characterized as "resigned" or "indifferent" by the Research Assistant, see themselves as economically damaged because of moving expenses and probable higher rents. A possible explanation of their attitude is that these renters who viewed relocation as economically disastrous were identifying with the property owners, which some of them had once been.

Few data were collected on the renting-commuter households. Ludtke and Burdge (1970, pp. 95-97), note that commuters tend to be negative toward the project, opposed to relocation. The reason
should be obvious. Commuters, whether they retained, purchased, or rented homes in the reservoir area, are persons who have already gone through the decision-making process to come to the conclusion that the inconveniences of commuting were outweighed by the perceived benefits of country living: the preferrable ambient ("the country is the best place to raise kids"); "attachment to place" including retention of kin and friendship ties; economic benefits (including some or all of the following: part-time farming, especially of high cash-yield burley tobacco; gardening on owned and rented plots; low rents in rent situations).

The sharecroppers formed a distinct group. These are people who have moved their households before. Those in our sample were locally considered to be competent reliable farmers. Such people are in demand in the region; these looked forward to easy placement (one had already been promised employment on satisfactory terms by his present landlord who owns another farm outside the take area).

The final Taylorsville Reservoir group to consider consists of those who moved into the take area after 1965. This reverse of the usual rural to urban pattern is not unique. It has been noted in connection with TVA relocation programs. It is probable that availability of low rental housing or in a few cases modestly priced purchase housing attracts former emigrants who want to return even temporarily to the rural ambient. Data on our sample is unfortunately scant. We have mentioned that in 12 of the 17 households some local ties occurred. As a group the immigrants were a notably younger population. Of the 17, 15 fell into the 21-40 year age group,
1 man about 60 was actively farming, and 1 estimated at about the same age was retired. Property ownership/tenancy has been summarized (Table III). Occupationwise, 5 were farming, 1 of whom is reported as "renting" the farm; so presumably the other 4 were sharecroppers. There were 11 commuters, some of whom (the Research Assistant failed to specify how many), were part-time farmers, including the one immigrant who had purchased a farm with speculative land. The 17th member of the group was the retired householder just referred to. Information on attitudes of this group toward forced sale/removal was not collected. It seems reasonable to assume that there was some emotional motivation involved in the return: to renew ties to local society in case of those with kin and friendship ties, or to "place" (county), or at least to the rural way of life. Expectably such an emotional factor would create some tensions as the time for forced removal approached. It would have been interesting to know about attitudes of the few "home owners" who acquired property during their brief stay, for comparison with attitude of longtime residents. The numbers of trailers, presumably still movable, would introduce a different variable, however.

The preceding paragraphs have reviewed data collected on Taylorsville Reservoir prospective dislocates in terms of their perceptions of the probable economic outcome of their situations. It is quite obvious that economic effects are of major importance. It is no overstatement to say that prospective displaced persons view their situation principally in economic terms. Tensions deriving from
social ties -- kinship, friendship -- are relatively easily managed by planning to move within visiting range of those in whom one's interests center, or at least staying within the county). Perceptions of economic disaster, as by those who see themselves as "trapped" are highly disturbing. Such persons (a) cannot make firm decisions for relocation because of lack of capital, (b) must wait until the Corps of Engineers acquires their properties, (c) expect to be forced into accepting low prices, while land prices on the truly free market are surging upward. The expectable result is that the man who continues farming will end up with a smaller inferior farm, or be forced out of farming altogether, calamitous for one dedicated to the rural way of life, with minimal skills useful in industry if he has to change. The retired person or the one close to retirement foresees inferior housing, higher rents if not a property owner (and if rental housing can be found), and reduced income. Such persons are the elderly, in rundown housing owned or rented (but "comfortable" since they are used to it), supported in part by public assistance with interest from small savings and their gardens keeping them just above the poverty line. In summary, to such persons perceptions of their situation point directly to a major deterioration of the quality of their lives. Small wonder that high tension levels, apprehension over removal, and hostility to the U.S. Corps of Engineers and its project characterize the attitudes of these householders.

Importance of economic perceptions is brought into stronger
relief by those who see options that may improve their situation
or at least not worsen it. These are of course owners of speculative
land. Some 2 or 3 owners who have not completed sales and purchases
are described as "apprehensive" but their apprehensions concern the
extent of the benefits they will derive from the change. One
person with saleable lands who died prior to 1973 was described as
anything but despondent. After a lifetime of hard work and hard
dealing for a cent or so more per pound on his tobacco and feeder
steers, he apparently saw himself as playing for big stakes in
trying to get a maximum price for his speculative land, and found
it exhilarating.

Another group anticipating no major deterioration of life
style is that of tenant farmers (renters and sharecroppers). With
the high proportion in the reservoir area of elderly farmers whose
children have emigrated and will not return to the farm, tenants
foresee no major problems in finding another farm for rent for cash
or on a share basis that will maintain them at a level commensurate
with their aspirations. There are no indications of high levels of
tension or apprehension among these people.

Incomplete economic data on the "commuters -- part-time farmers"
and on their attitudes makes their situation difficult to appraise.
It has been pointed out that these persons, whether farm-owners,
home-only owners, or renters, had already made the decision to live
in a rural rather than an urban setting. Consequently they could
be expected to view forced removal with reluctance. The extent,
unreported, to which some depend on their part-time farm income
($250 to $1,999 per annum, according to the Bureau of the Census category), to supplement their industrial income may be crucial to attitude formation. Douglas and Mackie (1957, p. 9) point out that "low farm income ... and low wages from nonfarm employment characterize the socio-economic status of rural people engaged in part-time farming."

Little can be added to what has been stated about the post-1965 immigrants.

In summary the hypothesis concerning significance of economic factors in formation of attitudes toward forced removal and toward the project is both strongly supported and explained. The sub-hypothesis that perception of economic disaster is directly related to development of anxieties and hostilities over forced removal and the project is not only supported, but accounted for. In the broad sense those findings support those of Ludtke and Burdge (1970, passim) if we translate their "those with vested interest" in removal into more intelligible if longer "those perceiving results of removal as economic improvement or at worst maintenance of equivalence in life style." Those without "vested interest in removal" are those who see removal as inevitably causative of their own economic disaster.

An aspect of economic effects that has not been considered is the degree to which rigorous application of the spirit and the letter of Public Law 91-646, the Uniform Relocation Assistance and Land Acquisitions Policies Act of 1970, will ameliorate the situation of those who see themselves as potentially disadvantaged by removal.
This will be evaluated in the final section of this report, in which findings will be evaluated in practical terms.

**Green River Reservoir.** Data from the Green River Reservoir are enlightening precisely because they report on experiences with and reactions to accomplished land acquisition and relocation. The caveats pertinent to use of these materials comparatively concern distance of the reservoir from metropolitan centers, and certain peculiarities of topography and reservoir design. The former meant that there was no demand for reservoir-related residential sites by urbanites. The second consideration concerns the fact that it is reported that the limits of the buffer zone of the take area tend to run close to the crests of the ridges flanking the inundated portions of the river valley, so that there are relatively few tracts of land affording attractive views of the lake, etc. In consequence there was very little "speculative land" in the Green River Reservoir area. Outside of Campbellsville and Columbia, land sales continued to be based on appraisals of land worth for agricultural purposes.

In the take area, there were 415 households. Part of our data base consists of Corps of Engineers' relocation records on 166 households, or 40% of total relocations, thanks to the courtesy of the District Engineer who made the files available. Our sample was not statistically randomized but probably is reasonably adequate. In addition the Research Assistant interviewed numerous informants as to their individual experiences, as well as interviewing knowledgeable key informants who reported on general patterns as they perceived them.
In our sample, households were classified as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>70%</td>
</tr>
<tr>
<td>Residential</td>
<td>27%</td>
</tr>
<tr>
<td>Commercial/residential</td>
<td>3%</td>
</tr>
</tbody>
</table>

Clearly, the majority of relocatees lived on lands whose primary use was agricultural, and they themselves were agriculturalists. "Residential" means a house and lot; typically relocatees occupying such lands maintained large vegetable gardens -- a moderately prestigious activity on the rural scene -- and some poultry.

Commercial/residential concerns store/residence, filling station/residence etc. combinations. Tenants (home renters, sharecroppers) comprised about 14% of the total agricultural and residential householders. Part-time farmers ($250 to $1,999 annual sale of farm products, 100+ days per annum off-farm work), probably constituted about the same percentage of persons as in that of the counties in general, in the neighborhood of 20%. While populations of the 3 counties (Spencer, Taylor, and Adair), had similar age-group distributions (U.S. Bureau of the Census, 1960, 1970), our impression is that the take area population of the proposed Taylorsville Reservoir, when the post-1965 immigrants are excluded, was notably older than that of the Green River Reservoir.

From the interview data sharply defined patterns of dislocatee attitudes in the land acquisition situation emerge. Prospective displaced persons uniformly saw themselves as facing economic loss (no one perceived benefits, that is no one saw himself with a "vested interest" in his forced removal). Degree of economic damage was
anticipated as less severe than by Taylorsville Reservoir displaced persons because land prices had not begun to rise since there was no speculative land buying. Most resented the threat to their economic security, a few, fatalistically inclined, accepted it grudgingly. Many informants said they were intimidated by the prospect of a confrontation with the juggernaut of "The Government." It was a situation outside their experience. They had no guides to aid them in coping with it. To add to their feeling of helplessness they saw that the decision that they be removed had been forced upon them -- no one regarded the Corps hearings as allowing for decision-making. Moreover they felt their whole value system was being demolished: farming was the traditional good lifeway of American culture. To drown good farmland to reduce floods that were only occasional nuisances just to provide a place for city people to play with their speedboats seemed little short of indecent.

Some persons reportedly took refuge in what Research Assistant Reeves called "the-head-in-the-sand-syndrome." That is, they disregarded information from the hearings, in the media, etc., concerning the project, choosing to believe that the dam would not really ever be built. Every information release by the Corps could be countered by half a dozen items from the busy rumor factory: the Governor (Congressman, Senator) opposes the dam and will not let it be built," "they won't dare drown good farmlands in face of the impending world food shortage," etc. They persisted in this unrealistic view, making not even tentative plans, living from day to day as though no change in their lifeway was impending, until the Corps of Engineers negotiator
forced them into an agreement (apparently few such persons forced filing of a condemnation suit against themselves). This reaction was not peculiar to Green River. A few persons in the Taylorsville Reservoir area held to such a stance for a number of years, although by mid-1973 they had abandoned it. Corps personnel are familiar with this response, regarding it as unrealistic and counter-productive, which is correct. They also regard it as demonstrating a Dogpatch mentality which is an unfair appraisal. The head-in-the-sand-syndrome is a form of tension-management that on a short term basis controls anxieties of persons who find themselves helpless in the face of impending disaster. Its denouement is of course catastrophic. It is a direct result of an inadequate communications/public relations program of the U.S. Army Corps of Engineers.

Appraisals of property values made by Corps personnel based on free market sales within the preceding 5 years, were consistently low, just as Taylorsville Reservoir area residents fear theirs will be. It was reported that many Green River people who planned to cope realistically with the situation made the error of disregarding the appraiser, not accompanying him on his inspection to point out positive valuable features of their properties. They believed that the negotiator was the key figure to be dealt with. In retrospect, informants see this as a grave error. Too late, those who followed this strategy learned that the negotiator was constrained in his offers by the appraiser's evaluation.

Occasionally the Corps demonstrated it could be flexible. A case was reported of commercial/residential property that by some chance
was grossly under-appraised. The negotiator suggested that the property-owner would do well to submit to condemnation proceedings. The owner did not want to go that route. Instead, he went to District Office in Louisville requesting a reappraisal. This was arranged, despite the bureaucratic cost of slashing quantities of red tape. From the reappraisal a figure was derived, substantially larger, which the owner felt he could accept. The case was unique, however. In others, no flexibility was allowed.

Dealings with the negotiator had been a source of aggravation to many Green River informants. At that time, prior to Public Law 91-646, it was standard procedure for the Corps negotiator to make an initial offer of an amount substantially less (10% to 15%) than the approved appraisal value. If this offer was not accepted, and the prospective dislocatees soon learned that the first offer was usually low and would be increased, the negotiator returned after some days, and sometimes several times, increasing the offer each time. Apparently few persons, if any, accepted the initial low offer; in our sample none did, about 10% of those reaching a negotiated settlement (not submitting to condemnation proceedings), settled for a figure close to the appraised value, and nearly 90% held on until they were offered, and accepted somewhat more (up to roughly 10% more) than the appraised value.

True fair market sales in the region are carried out in one of two ways, by public auction, or by arriving at agreement between willing buyer and willing seller. In the latter situation, some very hard bargaining is typical. However, informants uniformly felt
it improper and demeaning that "The Government" (through its official representative, the negotiator), should engage in this niggardly haggling procedure. They were not "willing sellers," but rather saw themselves as victims, with their backs to the wall. The experience was new and appalling, informants averred, and they were unprepared to cope with it (some persons certainly must have been affected by highway construction or relocation, but loss of a few feet of fields or pastures was not equated with loss of their entire properties).

Many relocated persons were described as expressing the thought, "If I had it to do over again, I'd do it differently." Reference was to various aspects of interaction with appraisers and negotiators, of course, but principally to the decision to settle rather than submit to condemnation proceedings. Such individuals did not understand their rights in such proceedings. They foresaw lengthy cases, with legal fees wiping out any final benefits. They did not understand that the total amount of the appraised value of the property would be deposited with the court when the action was filed, and that they would have access to these funds for early purchase of replacement property (this fact was clearly stated in a Corps of Engineers leaflet, which obviously few people ever bothered to read).

We do not have detailed statistical data on condemnation proceedings in Green River Reservoir. A Corps official offered a casual estimate that title to about 10% of the tracts taken were acquired through condemnation. This figure seems low when compared with the overall 21% of "ownerships condemned in whole or in part" reported by the Corps on 23,755 land acquisitions made between February 1, 1961 and
December 31, 1963 (Committee on Public Works, Table 19). As previously noted, awards by the Court were consistently 15% to 20% above Corps appraisals and some ran considerably higher -- which usually meant substantial gain even after deducting the lawyers' retainer and 33 1/3% fee on the amount in excess of appraised value. Consequently, those who did not go the condemnation route now wish they had "done it differently." They feel they were deprived of their rights, blaming pressures created by Corps of Engineers negotiators, not their own failure to inform themselves of their rights in the condemnation process. Antagonism toward the Corps and its works increased. This effect of lively animosity toward the U.S. Army Corps of Engineers had a very negative effect on the whole relocation process, as will be brought out.

Taylor and Adair Counties are large in area, as Kentucky counties go, and had fair-sized populations, which meant that the annual turnover in real properties was sufficient to accommodate most of the reservoir displaced persons. However, once Federal land acquisitions began, and displacees began to search for replacement farms and homes, a sellers' market developed so that land prices rose rapidly. Local informants cite increases in lands formerly valued at between $200 to $300 per acre to prices ranging from $400 to $500. Men continuing in farming had to utilize any savings and/or borrow to buy replacement land. The problem of whether even by scraping and taking on new financial burdens one could obtain a new farm that would be "equivalent" to the taken one, in the sense of producing the same net income, became critical. Yet by strict
application of the Miller rule which states that the Fifth Amendment does not require the payment of an enhanced value for property taken for public use when the enhancement is created by the very project for which the land is needed, (United States v. Miller, 317 U.S. 369 [1943]), the increased local prices could not be taken into account either in the Corps of Engineers land appraisals nor in computing the awards in condemnation suits. Search for replacement property thus became anxiety-creating. The shift from bottom land to upland farming, those who made the change soon discovered, involved new concepts, new costs, new (or improved) skills. Heavier use of fertilizer becomes necessary, contour plowing is more important. Not all replacement farms produced the same net profits as bottom land farms of comparable acreage.

Prior to January 2, 1971, the effective date of provisions of Public Law 91-646, relocation cost reimbursements were much less ample than under the present law, but most people were glad to get some restitution of their expenses in searching for replacement property and moving. But they resented having to fill out the requisite forms with the detailed breakdown on expenditures. Not familiar with nor understanding the need for accuracy in accounting for disbursements of Federal monies, they considered it petty and niggardly in the extreme that an agency planning to spend 30 to 40 millions of dollars on a project should make an issue of whether a trip to inspect a possible replacement property should involve 17 or 19 miles of travel at 7¢ per mile. The relocation compensation law, with limitations on amounts payable, had been passed by the United States Congress,
the accounting procedures followed regulations of the General Accounting Office, but the Corps of Engineers was blamed by dislocatess for niggardliness and inconveniences. The Corps could do nothing right in the eyes of the dislocatess and their friends.
CHAPTER III: CONCLUSIONS AND RECOMMENDATION

This study of the reactions and attitudes of populations of prospective and accomplished displaced persons has produced meaningful results which will be discussed in the present chapter. As originally indicated, the study has both a theoretical orientation and a practical one which is the production of recommendations of practical significance.

From the standpoint of methodology, the anthropological procedures for data collection, described in an early section of this report, demonstrate their efficacy. Significant causative factors, real and/or perceived, which cannot always be derived from the rigid structure of pre-designed protocols no matter how lengthy, emerge readily. The arbitrarily assigned significances of arithmetic differences in "quantified" materials do not compensate for the explicative values recoverable from the non-quantifiable data collected by use of standard anthropological field methods. This is clear corroboration of sociologist E. Jackson Baur's conclusions (1973, p. 22) concerning the importance of qualitative data in certain areas of social impact in which attempts to quantify produce inadequate results. Baur wrote his insightful study of social impact of public works project while Resident Scholar (1972-73) for the Board of Engineers for Rivers and Harbors.

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The hypotheses examined provide the significant conclusions. First it is most clear that the predictable social effects: break-up of kin and friendship associations, are not perceived by prospective targets of the impact as extremely threatening and tension-producing. This does not mean that the prospective dislocates do not foresee such effects, or that they are not concerned by them. What it does mean is that they perceive this sort of impact as "more of the same" -- the process of breakdown of family and associational ties that has been going on for many decades in rural United States. The steady shrinking of the profit-margin of the small farm, the established pattern of urbanization -- sons, other kinsmen, and neighbors drifting to the city, hopefully to better pay, shorter hours, more comforts -- is viewed as an inevitable trend. Dislocation by the stream-control project simply speeds up the process a little. This interpretation was most clearly expressed by the attitudes of the members of the three church congregations destined for extinction in the Taylorsville Reservoir area. They do not relish the prospect, but they see the process as one that had to happen sooner or later. For this reason "attachment to place" has come to be interpreted in terms of "county", a geographical unit with which one identifies. When driven from your home, you can manage the tension by thinking that after all, the county is your "home". If you can hope to relocate in the county you can still maintain your social identity, and hopefully most social ties.

Perception of economic loss very obviously was tension-producing. The attitude differences between those predicting economic benefits,
or even the likelihood of maintaining their economic status quo, and those who foresee economic disaster are extreme. Green River Reservoir experiences show that potential economic benefits from relocation result from unusual conditions. Such circumstances were almost non-existent on Green River. However, even where they occur with some frequency, as in the Taylorsville Reservoir area, there remains a group of persons who perceive themselves as certain to be disastrously disadvantaged, their life styles and plans completely disrupted. That they number less than the totality of the displaced persons does not mean that they do not merit consideration. They include men who see being forced out of farming and into wage work as a repugnant change of quality of life. They include elderly persons whose plans for a modestly comfortable retirement are perceived as converted into a future of bitter poverty.

It was precisely for the purpose of precluding economic disasters by displaced person households that the Congress of the United States enacted Public Law 91-646. This law is, on careful reading, remarkably well-designed and liberal. Its provisions for supplementary funds to ensure acquisition of "decent, safe, and sanitary dwelling" by dislocates, and of a fixed payment "equal to the average annual net earnings of a business or farm operation, except that such payment shall be not less than $2500 nor more than $10,000," should ward off the perils of being forced into substandard living conditions and economic failure.

Public Law 91-646 authorizes substantial expenditures to reduce or eliminate the economic hazard of dislocation. One economic study,
that on the proposed Falmouth Lake, Kentucky, estimates "the additional cost due to Public Law 91-646 constitutes about 32 percent of the total acquisition cost ... Public law 91-646 adds about 30 percent to the costs of land and structures." (Lynch, Sena, and Watts, 1972, p. 13.) (However, some peculiar arithmetic is involved in this analysis, since the authors [op. cit., pp. 14, 15, Tables 11 and 12], give "Raw Acquisition Costs (land and structures)" (in 1971 dollars) as $7,432,000 and "Acquisition Costs Associated Directly with Public Law 91-646 "as $1,777,580, which produces an increase of just under 24%).

Whether this increase in cost of a project estimated at 64 million dollars, more or less (Commonwealth of Kentucky, Legislative Research Commission, 1971, p. 7) is significant is moot. Nonetheless at whatever cost, it is clear that it was the intent of the Congress of the United States to eliminate the possibility of economic disaster to dislocates.

An obvious question is, if there is a law that provides assistance and financial protection to displaced persons otherwise likely to be negatively affected by the public works project, why should displaced persons continue to be considered a problem? The reasons are to be found in the poor level of communication maintained by the U.S. Army Corps of Engineers with the rural sector of the population in reservoir area, and the characteristic attitude of distrust and dislike of the agency prospective dislocates develop. The Corps prepares leaflets and brochures for each reservoir area explaining land acquisition procedures and
legal rights relevant to condemnation, reservation of buildings, compensation for moving costs and other assistance under existing laws. These information items are carefully and well prepared. They typically provide clear explanations in non-technical language, meant to be easily understood. However, it is not necessary to recur to complex theories of social psychology to be able to predict that persons who have handled stressful tensions by converting their anxieties into resentment and dislike of the Corps may not call at the Corps' Project Real Estate Office to request such literature. When the appraisers and negotiators bring such materials and hand them to prospective dislocates, the recipients may not read them, or at least not read them carefully. Recent data are not available to us, but for the period reported on by the Corps of Engineers to the Committee on Public Works, of 3,928 families and persons displaced (including both owners and non-owners), 3,374, or just under 86%, received "resettlement expense payments to families and individuals." In other words, slightly over 14% of the displaced persons did not receive assistance to which they were legally entitled (Committee on Public Works, p. 262, Table 9). It seems highly probable that some or most of those persons were among those who most needed such resettlement assistance as was available to them at that time.

The U.S. Army Corps of Engineers does not perceive itself as an adversary of the dislocates. It proceeds in accordance with existing law, as correctly as possible. But its public relations program is completely inadequate to deal with the persons so vitally
affected. The following steps could improve it markedly:

(1) Simultaneously with the beginning of field engineering studies, social surveys of the reservoir area should be made. Such surveys should utilize anthropologic field techniques for data recovery for formulation of protocols after the sociological survey pattern to permit extensive sampling. The social surveys should be designed to sample the prospective displaced person sector thoroughly, but in addition the non-take area population. The goal of the study of the probable displaced person sector would be to: (a) identify major problems, (b) identify households that can be predicted to have more critical problems in relocation. The non-take area population should be adequately sampled to determine probable problem situations from reservoir impact on local government, local educational systems, reservoir-related changes in economic patterns, etc. The prospective dislocatee population should as indicated receive especially intensive study. This procedure for establishing a data base to define potential sociocultural problems has been standard practice on TVA projects:

"As in other TVA reservoir areas, field surveys were made as soon as the project was authorized in order to obtain basic information on the social and economic situation in the area and to estimate the effects of the flooding of the reservoir." (Tennessee Valley Authority, 1949, p. 43).

(2) To overcome the communications gap between the agency and
prospective displaced persons, the Corps should develop or acquire a corps of contact persons whose function would be:
(a) to establish rapport through use of the county extension agent intensive relationship techniques. These agents would assist in all aspects of the land acquisition/relocation process advising on procedures for dealing with appraisers and negotiators, explaining rights in connection with condemnation proceedings, recommending methods for finding relocation sites, explaining procedures for recovering moving and search expenses, financial assistance in acquiring decent, safe, and sanitary housing, etc.

Such rapport based on close contact public relations pattern has been highly successful, as used by TVA.

"About 14,000 families were living in the reservoir areas which TVA has purchased. In order to give the families maximum assistance in relocating, TVA relied heavily upon existing agencies of the States, particularly the extension services of the land grant colleges. The extension services, reimbursed by TVA for the extra expense involved, were of great assistance to rural families in finding new farms for rent or for sale and helping with other removal problems." (Tennessee Valley Authority, 1950, p. 23.)

Although TVA prior to 1950 expended very little money in the form of cash reimbursement and/or compensation for removal expenses, its relocation program was very successful. The anxieties and stresses of relocation were ameliorated by the friendly relationships, the trust in the personalized communications, and the effective guidance of the extension agents. One measure of the effectiveness of the agents in the
land acquisition process may be seen in TVA's lower frequency of condemnation proceedings, 7% as compared with the Corps' 21% (Committee on Public Works, p. 285, Table 19).

(3) Finally, after completion of a project the Corps of Engineers should carry out a series of post-removal studies on relocatees and the reservoir area in general to evaluate successes and failures of the improved removal procedures and local assistance programs. This too has been a standard TVA procedure which has been of value to the agency in planning new projects (Tennessee Valley Authority, 1950, p. 23).

The comparisons made with TVA procedures on land acquisition and relocation are not fortuitously selected. Both TVA and the U.S. Army Corps of Engineers acquire extensive tracts of land and construct large public works projects. TVA, however, from its inception has planned to stay in "the Valley." It has sought to develop and maintain good public relations with the local population. It has a continuing interest in the region. The Corps, on the other hand, constructs its stream-control device and then closes its Project Office and moves on (of course a limited number of personnel remain to regulate water levels, operate locks, etc. but they are few, with little official contact with the local community.

The lack of communications and poor public relations have alienated local communities, and sometimes in ways which have hampered the Corps itself. Since the period of data collection for this report a number of efforts have been made to organize groups...
in the proposed Taylorsville Reservoir area to block construction of the dam or at least the establishment of the large recreational park, an important component of the Corps' justification for the reservoir. Effectively organized groups, strongly based among prospective displaced persons, have blocked construction of the proposed Falmouth project on the Licking River, Kentucky, for nearly 30 years. The proposed Red River and Paintsville projects, both in Kentucky, have run into strong opposition. Such problems are widely reported by the media, so that an unfavorable image of the Corps may precede it as the agency moves into new regions.

To improve its image, it is essential that the U.S. Army Corps of Engineers amplify and improve its public relations program, seeking ways to eliminate hardships and to reduce anxieties among the populations affected by its projects. Personal-level communications in which the representatives of the agency seek out persons likely to be affected, and seek to assist them, can reduce sociocultural costs and augment the benefits to communities to be affected by the stream-control measures.
BIBLIOGRAPHY

Baur, E. Jackson


Burdge, Rabel J. and Sue Johnson

in press Socio-cultural aspects of resource development, in: McEvoy, James III, ed., Social Impacts of Environmental Change, John Wiley and Sons, Inc. (See also: Johnson and Burdge, 1974.)

Commonwealth of Kentucky: Legislative Research Commission

1972 Falmouth Reservoir. Legislative Research Commission Research Report Number 100, Frankfort, Kentucky.

Douglas, George V. and A. B. Mackie


Drucker, Philip, J. E. Clark, and L. D. Smith


Drucker, Philip, Charles R. Smith, and A. C. Turner


Johnson, Sue and Rabel J. Burdge

Lynch, L. K., J. A. Sena, and J. M. Watts

Smith, Charles R.

U.S. Bureau of the Census


U.S. Congress: House of Representatives, 84th Congress, 2nd Session.

1966 Salt River Basin, Kentucky. Letter from the Secretary of the Army, transmitting a letter from the Chief of Engineers ... on an interim survey of the Salt River Basin, Kentucky... House Doc. Number 502.

U.S. Department of the Army: Corps of Engineer Division, Ohio River
1969 Water Resources Development ... in Kentucky. Cincinnati, Ohio.

U.S. Department of the Army: Corps of Engineers, Louisville District

U.S. Tennessee Valley Authority


U.S. Tennessee Valley Authority, National Fertilizer Development Center

APPENDIX A
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COMMITTEE ON HUMAN INVESTIGATIONS AND STUDIES

July 13, 1972
Date

TO WHOM IT MAY CONCERN:

This is to certify that the Committee on Human Investigations and Studies, established for the purpose of reviewing Research, Development and Demonstration protocols for programs or projects involving human investigations, has reviewed and approved the protocol submitted by Dr. Philip Drucker and _____________, Program Director(s).

TITLE: "Anthropological Analysis of Social and Cultural Benefits and Costs from Stream-Control Devices ---Phase 5"

CERTIFICATION IS BASED ON DETERMINATION THAT:

(1) The Program Director(s) is/are professionally experienced and qualified to accomplish the proposed protocol;

(2) The Program Director(s) is/are responsible for the obtaining of voluntary subject informed consent in writing from the participants in the study or from their responsible relatives or guardians;

(3) The Program Director(s) has/have submitted data that substantiates that the proposed protocol is necessary to obtain knowledge that cannot be ascertained by any other means;

(4) The procedures and methods in the protocol are believed safe, in so far as adequate precautions are provided as an integral part of the investigative procedure, and

(5) That the rights and welfare of the subjects involved are adequately protected, and the risks to an individual are outweighed by the potential benefits to him or by the importance of the knowledge to be gained.

Chairman, Committee on Human Investigations and Studies

Mr. Carl B. Delabar
Associate Director
University of Kentucky
Research Foundation