

26 Apr 1972

## Communicating Housing Needs and Strategies

Bruce Yandle

Herbert Busching

Follow this and additional works at: <https://scholarsmine.mst.edu/islchp>



Part of the [Civil Engineering Commons](#)

---

### Recommended Citation

Yandle, Bruce and Busching, Herbert, "Communicating Housing Needs and Strategies" (1972).

*International Symposia on Low Cost Housing Problems*. 105.

<https://scholarsmine.mst.edu/islchp/105>

This Article - Conference proceedings is brought to you for free and open access by Scholars' Mine. It has been accepted for inclusion in International Symposia on Low Cost Housing Problems by an authorized administrator of Scholars' Mine. This work is protected by U. S. Copyright Law. Unauthorized use including reproduction for redistribution requires the permission of the copyright holder. For more information, please contact [scholarsmine@mst.edu](mailto:scholarsmine@mst.edu).

## COMMUNICATING HOUSING NEEDS AND STRATEGIES

by

Bruce Yandle\* and Herbert Busching

### INTRODUCTION

Housing shortages or inadequacies may be viewed as a problem of resource allocation. The goal of providing basic shelter to society has been espoused by governmental bodies at every level, and with the acceptance of the goal have come numerous governmental programs and budgeted funds. Thus, in an economic sense, a supply of basic shelter exists. On the other hand, there are well-known, and well-documented housing needs. And though these needs may not be represented as effective demand in the private market, they are nevertheless recognized. There is then a "supply" and "demand" situation which exists in society's effort to "limit the domain of inequality" in housing. (1) Good information is necessary for the proper functioning of any market. Somehow demand and supply must be brought together.

Large segments of the world's population live in inadequate housing. Significant capability for improving housing often resides, however, with persons who are well housed and not exposed to the plight of less fortunate persons. Conversely, those who are poorly housed (See Figure 1) are often unaware of strategies that can be employed to improve housing. Mobilizing all available resources of the well-housed and poorly-housed appears to be the best way to increase housing. This approach includes involvement not only of financial resources but attitudinal, technical, and educational resources as well.



Fig. 1. This house lacking sanitary facilities and running water formerly rented for \$6 per month, but provided shelter for a family who could not afford other housing.

Communicating housing needs and strategies for any regional or political subdivision is a requisite activity in any major program of improvement and can stimulate improved lower-cost housing. This activity has received attention in South Carolina through a program of community service and continuing education carried on by staff of the State's land grant university. An IMPACT project funded at Clemson University under Title I (HEW) of the Higher Education Act of 1965 has been directed toward making more persons in South Carolina aware of housing needs and strategies. Activities of the program have utilized Clemson University's resources in education, research, and especially those resources in extension services.

Although South Carolina's entire population (2,590,000) is less than that of some of the major urban areas, it is nevertheless a region where a demonstrated need exists for low-income housing. Of 804,755 year-round housing units in the state, 491,144 (61%) of these units are outside standard metropolitan statistical areas (SMSA's), indicating that a large percentage of the state's housing stock is non-urban in character. (2) Provision of good housing in non-urban areas can be effective in reducing rural-to-urban migration which has already taxed many of our major cities' housing. (3)

Housing problems are complex and involve more than just shelter. The services required to upgrade housing such as transportation, water supply, sanitation and education must be communicated as a part of any solution to the problem. Otherwise, good housing will not result. Clouded titles to land, poor drainage, large family size, inadequate income and other constraints make it difficult or impossible to procure housing. The literature is replete with plans and comments on housing and urban conditions (4) and statistics on housing production and demand. (5)

The 1970 housing census (2) indicates that 149,300 units in South Carolina lack some or all plumbing facilities. Hence, these units together with those which are deteriorating and those which will be needed to satisfy population growth in the State comprise a significant statistic. Some programs have reflected this need. During the past year, subsidy programs of the Farmers Home Administration for low and moderate income families have provided greater support for housing in South Carolina than in any other state. The availability of this and other programs must be publicized where there is a substantial housing need.

### PROGRAM DESCRIPTION

To reach the largest possible target audience, the program of community service involved a number of activities, including the production of two thirty-minute films for use on the statewide educational television network. The films are also suitable for use on commercial stations where public service time is available.

The first film delineates by interview and narration some of the housing problems that confront South Carolina families. Persons from all areas of the state were visited, interviewed, and in many instances photographed by a motion picture crew from Clemson University. The sound-on-film monologues provide evidence of housing problems confronting families. Clouded titles, unsanitary conditions, lack of plumbing facilities, and difficulty in obtaining housing were cited as problems by persons who were interviewed.

Interviews were arranged with assistance of Clemson University's program aides who did field work in several South Carolina counties to improve diet and nutrition. A flow diagram for planning the meetings is shown in Figure 2. The project investigators first met with program aides to familiarize them with the housing education program's objectives and to solicit their assistance with filming. These meetings involved approximately 15-20 program aides at each location. The project investigators asked those program aides who had time to assist with housing education to schedule an initial meeting with families who would be potential subjects for filming. Within a day or two appointments with interested families were made.

The initial visits involving families and filmmakers were intended only to introduce the subject families to the objectives of the film and to request their participation. Some families declined to assist in filmmaking, but the majority were most cooperative and assisted in developing the filming appointment schedule. Not all the participants who were photographed could be used in the film.

\*Assistant Professor, Department of Economics, and Associate Professor, Department of Civil Engineering, respectively; Clemson University, Clemson, South Carolina.

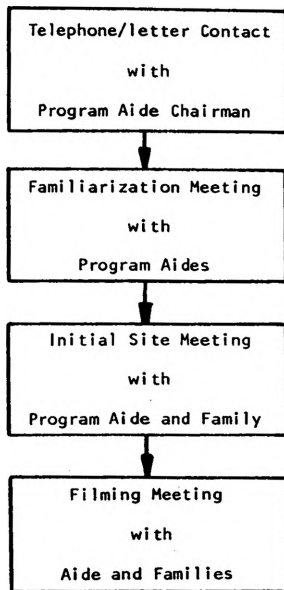


Fig. 2. Flow diagram for meeting program aides and photographing families for the educational films.

Following the initial familiarization appointment, the film crew returned to photograph and record the subjects. Figure 3 shows some of the crew at work. Sound-on-film and silent film were used. Workprints of the developed film were made and viewed by the project directors after interviews were completed. Approximately eight minutes of film were made for each minute of film used in the finished motion picture. The script was written and edited after the workprint was reviewed and a professional narrator was employed during the final phase of production.

In order to identify those areas in South Carolina where housing was most needed, data accumulation and research was an important part of the project. Questionnaires were designed and mailed to the mayors of every town and city in the state having a population of 5,000 or more. The responses to the questionnaires were then compiled and used as background information for film-making as well as for reports which were made available to state and local governments. Advance computer printouts from the 1970 Census of Housing were purchased and analyzed to determine housing conditions and trends across the state.



Fig. 3. A cameraman and recording technician (foreground) were some of the personnel involved in producing two educational films on housing needs and strategies.

The project directors performed limited statistical analyses in an effort to identify some of the linkages which might explain the presence of substandard housing. Linear regression models were developed and their results were used to gain further insight into the problem.

Whereas the first film depicted problems prevalent in some areas of South Carolina, the second film, also approximately 28 minutes long, described existing strategies that could be used to improve housing. Although specific programs were not mentioned by their technical names, the general features of these programs and examples of their successful implementation in South Carolina were discussed and shown.

Programs that were described included home ownership and rent subsidy programs of the U.S. Department of Housing and Urban Development and the Farmers Home Administration's programs of home-ownership for low and moderate income families and their loan programs for home improvements. The script for this film was written by the project directors and coordinated with the Governor's office.

Strategies for improving housing were also described in the second film. The functions of local or regional housing authorities were discussed since these often provide the first step toward an organized effort to improve housing. Emphasis was placed on the importance of planning and its relationship to housing. Non-profit sponsors and housing foundations which have tax exempt, non-profit status can also be instrumental in increasing the supply of sound housing.

In a very real sense, technological change has occurred in housing. Though seldom recognized as a technological advance, the mobile home has provided a major breakthrough in low-cost housing and for many families, mobile homes provide a significant improvement. Clean, warm housing can be substituted for old, drafty homes.

Public housing projects and subsidy programs involving rent supplements can effect substantial improvements in housing, particularly in cities. Homeownership remains a paramount goal for many families, however. In South Carolina, the Farmers Home Administration is a very active organization in home finance for non-urban areas. Families with low or moderate incomes who qualify for Farmers Home Administration loans may have a large portion of the interest cost reduced and may be able to move into a new home with only a small down payment. The Farmers Home Administration has an office in each county in South Carolina and information about their many programs and loans may be obtained from these offices.

Housing is the most expensive item for any family and persons with low incomes have an especially difficult time in obtaining and maintaining sound housing. Information about housing is available from most realty companies as well as from banks and savings and loan associations.

Because a major portion of the project involved housing education, the films were made available to any group interested in housing. In some instances the project investigators used the film with introductory and concluding remarks as the basis for educational meetings with a number of groups including the League of Women Voters, the American Association of University Women, various civic clubs and churches and the regional planning commissions. Copies of the film were purchased by the Governor's Office and used independently in other housing meetings throughout the state.

Another aspect of the project involved bridging the information gap in communities where housing was most needed. This portion of the project was implemented with cooperation from nutrition and housing aides employed in several counties to improve nutrition, use of food stamps and housing. Each fulltime program aide, employed by the Extension Service of Clemson University, contacted, on a regular basis, approximately 60 to 120 homemakers in predominantly low-income families. Each program aide attended a short class offered by the housing educators regarding strategies for improving housing in the counties in which they worked. Packets of educational materials for the aides were distributed at orientation meetings. Since the aides already called on many households where there was demonstrated need for new housing, it was important to provide them with a means to deliver assis-

tance. Small home improvement loans, self-help housing, interest or rent supplement housing were described in brochures and at meetings for the program aides. Full utilization of existing programs administered through the U.S. Department of Housing and Urban Development and the Farmers Home Administration was stressed. As auxiliary activities, newspaper articles relating local housing census data were made available to several counties.

The project investigators also assisted in the production of a short film on a low-cost method of erecting walls using surface-bonded concrete blocks. In this method, concrete blocks can be stacked without placing mortar between the blocks. A coating of a mixture of cement, lime, glass fibers, calcium stearate, calcium chloride and water is troweled on the interior and exterior surfaces of the block. After curing, the blocks can be painted or finished conventionally.

This film, together with a demonstration of surface bonding techniques, was shown in several counties to homebuilders' associations. The technique can be used by unskilled laborers with some experience to erect concrete block walls. Because no mortar is used, it is possible to erect walls in less time than required by conventional construction techniques. The bonding mixture, containing calcium stearate, waterproofs the walls in most locations.

The technical aspects of constructing surface bonded walls were readily understood and most builders expressed considerable interest in this type of construction. Surface bonding was offered as a possible construction technique to be used by homeowners involved in self-help projects. (6)

#### CONCLUSIONS

Any educational project generates spill-over activities and this project was no exception. The project directors and team members became involved in several classroom projects within the University. Undergraduate and graduate students in civil engineering became interested in the surface-bonding technique and explored its technical properties through a series of strength tests. Students in sociology adopted housing studies as term projects and were directed by project members to sources of infor-

mation and to key individuals in the State's housing program.

A Master's thesis was written by a student in economics using data supplied from the project as the basis for studying the filtering concept. (7) Students in city and regional planning participated in a six-county housing study under the direction of project team members. In addition to these activities, the project provided materials for two continuing education programs conducted on the Clemson campus.

The interest in housing problems generated by the project has led to two research proposals which deal with a systems approach to the provision of low-cost housing, and an investigation of the linkage between housing and employment. In efforts to communicate the problem of low-cost housing to others, the project staff have assisted many persons to make additional progress toward understanding the housing problem and its solution.

#### REFERENCES

1. Tobin, James, "On Limiting the Domain of Inequality," Journal of Law and Economics, Vol. XIII, No. 2, October 1970, pp. 263, ff.
2. U.S. Department of Commerce, Bureau of Census, 1970 Census of Housing - South Carolina, (Advance Reports) Washington: U.S. Department of Commerce, 1971.
3. Advisory Commission on Intergovernmental Relations, Urban and Rural America: Policies for Future Growth (Washington: Government Printing Office), 1968.
4. Forrester, Jay W., Urban Dynamics, MIT Press, Cambridge, Mass., 1969.
5. Committee on Banking and Currency, House of Representatives, Papers submitted to Subcommittee on Housing Panels, June 1971.
6. U.S. Department of Agriculture, "Surface Bonding of Concrete Blocks," Agriculture Information Bulletin No. 343, Washington, D.C., 1970.
7. Black, Ralph Buck, "Housing Demand Theory, Filtering Theory, and Filtering in South Carolina Housing," (Unpublished Master's Thesis, Department of Economics, Clemson University, 1971).