CONSULTANT AND DESIGN SERVICES DESIRED BY RESIDENTIAL BUILDERS

by

Eva Hicks Feldman

A thesis submitted to
the Faculty of
The Consolidated University of North Carolina
in partial fulfillment
of the requirements for the degree
Master of Science in Home Economics

Greensboro

1961

Approved by

Clara A. Kidder

Adviser

ACKNOWLEDGMENT

The author wishes to express appreciation to her adviser, Dr. Clara A. Ridder, Professor Home Economics, for her help and guidance during the planning and the development of this thesis.

Grateful acknowledgment is expressed for the assistance given by Miss Elizabeth Hathaway, Mrs. Madeleine B. Street, Mr. E. E. Loewenstein, and Mr. R. W. Greenfield.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

American homemakers have voiced general dissatisfaction with the way the houses in which they live fulfill their family's needs and desires. That the design of houses is related to the quality of family life is recognized. Since the location of a house and its relation to the community, the church, the school, the business, and the social activities all need to be considered, it is difficult for a family to find a house that also will meet that family's living needs. The problem of how to improve the quality of the design of the majority of houses is difficult of solution.

From a review of current literature, it appears to be of concern to the leaders in the American Institute of Architects and the National Association of Home Builders that the quality of design in the houses being constructed be improved. Architects cannot be expected to spend the time required to design individual houses of average price; therefore the family is dependent on the contractor-builder for the plans of their houses. The builders' interest in the design of houses is linked closely with cost. Builders are interested in house design, but their main concern is to build houses that will sell.

Since the majority of the houses are built for the speculative market, if more livability is to be built into houses, the builders will have to put it there. The gap between families' housing needs and the builders' offerings needs to be bridged. Since home economists are

trained to consider the well-being of individuals and families, the improvement of homes, and the preservation of values significant to home life, perhaps with sufficient training in the field of housing design, they could fulfill this need. It may be that a new type of designer service which encompasses family living, functional planning, and aesthetic qualities needs to be made available to the builders. Therefore by focusing on the builders' felt needs for additional design services, a realistic approach might be made to the solution of the problem of improving the quality of design of homes on the market.

The purpose of this study was to determine the types of consultant and design services residential builders indicate they would use in the planning and designing of houses to meet the physical and aesthetic housing needs of their clients.

Literature relative to this thesis is reviewed in the next section, and this is followed by the method used for obtaining the data. The findings, which are presented in detail, precede the summary and conclusions.

CHAPTER II

REVIEW OF LITERATURE

A review of literature on the status of housing in the United States indicated that since a large number of housing units now are available the quality of the design of houses is gaining attention.

For each of the past fifteen years the building industry has built more than a million houses for families in the United States. In 1950, according to the Bureau of Census, the more than 150,000,000 Americans had approximately 46 million housing units. This represented a net gain since 1940 of 8,658,000 units, or approximately 23 per cent, even though the volume of construction was very small during the four war years.[1]

A progress report on housing by the editors of House and Home in January, 1961, stated, "During the Fifties 12,444,765 new units were added to the housing inventory while population was growing only 6,018,000 families (plus 3,038,000 "unattached persons," i.e., bachelors, unmarried girls, widows, etc.) In other words, we have added far more new housing units than were needed to keep up with net new-family formation, so we have turned the shelter shortage into a numerical oversupply."[2]

---

[1]United States Bureau of Census, Seventeenth Census of the United States: 1950. Population Census and Housing Census (Washington: Government Printing Office, 1952).

[2]"A New Look at These Golden Sixties," House and Home, XIX (January, 1961), p. 118.

There are more units, and there has also been an increase in the percentage of the total housing units that are owned. Actually, 53.4 per cent of the nation's occupied houses were owned in 1950. This represents an increase of 12.4 per cent of owner-occupied houses since 1940. The Federal Reserve Board stated that by 1955, owner-occupancy had reached 55 per cent.[3]

That the housing market is entering a new era was indicated when the editors of a prominent housing magazine stated, "Housing at long last has followed clothing and food into the area of discretionary spending. From now on, just providing a shelter will be a factor of less and less importance in the housing market, just as keeping us from starving has become a minor factor in the food market, and covering our nakedness has become a minor factor in the clothing market."[4]

These viewpoints are reinforced by other statements in the Progress Report such as: "The problem now is how to make new housing good enough and desirable enough so people will want to buy what they can afford;"[5] and "Tomorrow's new house will have to be much better planned and much better designed."[6] A survey conducted by the Stanley Edge Associates during 1959 and 1960 revealed that the builders were not offering potential

---

[3]Federal Reserve Board, "1955 Survey of Consumer Finance - Housing Arrangements of Consumers.", Federal Reserve Bulletin, (Washington: Federal Reserve System, August, 1955). p. 859.

[4]"A New Look at These Golden Sixties", op. cit., p. 119.

[5]Ibid., p. 119.

[6]Ibid., p. 121

home buyers what they wanted.[7]

The results of the Women's Congress on Housing[8] and the Congress on Better Living[9] indicate dissatisfaction by American homemakers with the kind of houses that are available to them. The women who gathered in Washington, D. C., in April, 1956, for the first Women's Congress on Housing concluded that the house was not just a machine for making the physical tasks of homemaking more convenient, but that the house also must serve a complex of less tangible human requirements - psychological, social and spiritual. Such requirements are related not only to women's work, but to the individual's relationship to his family, neighbors and community.[10] Such needs are also pointed up by a Committee of Consultants gathered together by the Woman's Foundation who suggested that "the family, if it is to realize to the full the values and benefits of family living, must be so housed that its development spiritually, mentally and physically is facilitated and encouraged. Only if such development is assured will the family be an effectively functioning social unit."[11]

It would seem that individual and family values would have a direct influence on housing requirements. Perhaps a sound understanding of

---

[7]"A New Year Demands New Ways to Sell a Tough Housing Market," American Builder LXXXIII (January, 1961), p. 89.

[8]Woman's Congress on Housing, Housing and Home Finance Agency. (Washington, October, 1956). p. 6.

[9]Report of Congress on Better Living, McCall's, (New York, 1959).

[10]Woman's Congress on Housing, op. cit., p. 6.

[11]Improved Family Living Through Housing. Prepared by the Committee of Consultants on Housing for the Family, issued from the Office of the Woman's Foundation. (New York, August, 1945). p. 6.

these values and how they influence housing requirements could lead to house plans and designs that would more clearly fit families' needs for functional and satisfying homes. Virginia F. Culter, who devised a test for measuring home values, said that if any satisfactory progress was to be made in improving housing conditions, there would have to be a better understanding of the basic directive factors of human conduct.[12]

Asahel D. Woodruff's study of the directive factors in individual behavior, provides evidence that values are at the root of human motivation. He found that values in daily living which, consciously or unconsciously, became of great importance to the individual, exerted a magnetic power which drew the individual toward situations which were most likely to yield positive satisfaction for him.[13]

Most housing in America satisfies what Maslow calls the lower level needs such as physical protection, comfort, and convenience. Maslow further suggests that new and different values are appearing as the lower level needs are satisfied.[14] The relationship of housing to social prestige and leisure are becoming the concern of many people, and perhaps in the future such values as beauty, privacy, freedom and

---

[12]Cutler, Virginia F., Personal and Family Values in the Choice of a Home. (Ithaca, New York: Cornell University Agricultural Experiment Station Bulletin 840, November, 1947). pp. 102-103.

[13]Woodruff, Asahel D., A Study of the Directive Factors in Individual Behavior. (Chicago: Distributed by the University of Chicago libraries), p. 165.

[14]Maslow, A. H., Motivation and Personality. (New York: Harper and Brothers, 1954), pp. 80-98 and pp. 146-154.

equality will be related to housing.[15]

Agan says houses should provide for rest and quiet, relaxation and a sense of peace, opportunity for self-expression and freedom of action, ease in carrying out routine activities, and companionship. She thinks the house should be a supporting element of family life rather than hampering the freedom and development of the family members and should also provide for satisfactory social contact between the family and the outside world.[16]

It is generally agreed that an individual seeks and gets different satisfactions from his home life than he seeks from activities in the business, professional, or political world. Hocking classes the two as the private order and the public order respectively. The private order, which he considers being made up of the family and the recreational and social activities centered about family life, is concerned with the satisfaction of the whole man by satisfying his needs for social life and his desire for love and affection. Hocking further states that the public order lies in the world of work and endeavor outside the home, and these experiences can be summed up as man's marketable talents. He stresses the importance of the home and family life since, as he maintains, the success of any man's service in the public order depends upon a state of mind which the private order, the family, keeps alive.[17]

---

[15] Beyer, Glenn H., Housing and Personal Values. (Ithaca, New York: Cornell University Agricultural Experiment Station, Memoir 364, July, 1959), pp. 8-16.

[16] Tessie Agan, The House, (Chicago: L. B. Lippincott Company, 1939), p. 17.

[17] W. E. Hocking, Human Nature and Its Remaking, (New Haven: Yale University Press, 1929), pp. 304-306.

The improvement of houses to meet the needs and values of families is dependent on the awareness of those who design and build them. The need for professional help in the design of houses was pointed out by Beyer:

> The role of the architect, who is a professional man, is to act in an objective and impartial capacity with regard to his client--the family. He must assure the family of getting a home that meets its particular needs, and yet be the best building within its budget.
>
> Unfortunately, the average person does not usually seek out an architect. And when he does, perhaps even more unfortunate is the fact that the economics of design often does not permit the architect to accept a job for a house because he cannot perform his full service and ask the necessary commission. The fact of the matter is, that a house, being made up of many diverse requirements and elements, is a very complex and time consuming design problem. It is easily as complex as any number of larger building types, but the fee, being based on total building costs rather than degree of complexity, is disproportionately small for the average house.[18]

The extent to which builders are interested in using professional help in improving the design of their product to meet the needs of families has not, to the writer's knowledge, been studied.

---

[18] Beyer, Glenn H., Housing: A Factual Analysis, (New York: The Macmillan Company, 1958), p. 198.

CHAPTER III

METHOD

This study is concerned mainly with the types of consultant and design services that builders would find helpful in planning the houses that they build. In order to verify the assumption that few of the houses in the county are designed by the architects, all of the architectural firms in Forsyth County, North Carolina, were contacted by letter in an effort to determine the extent to which they were contributing to or participating in house designs in this county. A sample letter is given in the Appendix. These firms were asked to state the number of architects, draftsmen, and other employees they had; the percentage of their work that was residential, commercial, industrial and public; and the number and price range of houses that they designed annually.

Twenty-six, approximately 17 per cent, of the builders in Forsyth County were interviewed during the early Spring of 1960. In an effort to obtain a range in the price, style, location, and size of houses being built in Forsyth County, the writer traveled the county extensively, and on noting new housing construction, consulted workmen for the name of the builder. Interviews were obtained when the builder or a qualified superintendent was available.

A questionnaire was developed and used for the interviews in order that the data obtained could be combined and analyzed. A sample

questionnaire is given in the Appendix. The questionnaire was concerned with the type, volume and price range of houses built; the source of house plans; the thought given to furniture placement, storage, traffic patterns, arrangement of equipment, wiring, lighting; design work needed for the interior, exterior and site; coordination of colors and textures; the selection of finishing materials and household equipment; securing financial information regarding the buyers; and the establishment of fee payment for services the builders would use.

The data obtained from these interviews were combined, studied, and interpreted.

CHAPTER IV

FINDINGS

Preliminary to the study of the types of consultant and design services the builders in Forsyth County would use and that presumably would result in better quality housing design, the availability of architects to perform this service and the extent of their residential design work was investigated.

The Architects

All of the eight architectural firms in Forsyth County returned a questionnaire regarding the size of their firms, the types of buildings designed, and the extent of their residential work. These eight firms reported that they designed about 34 houses per year. During 1959 there were 1186 houses built in Forsyth County. By the number of houses, only 2.8 per cent of the total residential work was designed by architects. This percentage is based on the assumption that if any of the 34 architecturally designed houses were built out of Forsyth County, they would be balanced by houses built in the County and designed by architectural firms from other counties. The dollar volume of these 34 houses was approximately $1,590,000. This was 6.5 per cent of the total dollar volume of $24,335,745 for residential construction in the county (Table I).

The average price of an architecturally designed house was $46,765 as compared with $20,528 for the average price house built in the county during 1959.

TABLE I

AMOUNT AND PRICE OF RESIDENTIAL CONSTRUCTION FOR ALL OF THE ARCHITECTS IN FORSYTH COUNTY AND FOR THE EIGHT ARCHITECTURAL FIRMS

Total number of architectural firms in Forsyth County	8
Total number of architectural firms studied	8
Per cent of the architectural firms in Forsyth County studied	100
Total number of houses built in Forsyth County*	1,186
Total number of houses designed by the architectural firms studied	34
Per cent of the total houses designed by the architectural firms studied**	2.8
Total dollar volume of the houses built in Forsyth County*	$24,335,745
Total dollar volume of houses designed by the architectural firms studied	1,590,000
Per cent of the total dollar volume designed by the architectural firms studied**	6.5
Average price of house built in Forsyth County	$ 20,528
Average price of house designed by the architectural firms studied	46,765

*Total figures for Forsyth County were obtained from the Forsyth County building permit office, and are for the year 1959.

**This percentage is based on the assumption that if any of the 34 architecturally designed houses were built out of Forsyth County they would be balanced by houses built in the County and designed by architectural firms from other counties.

These are clear indications that only a very few comparatively expensive houses are designed by architects in Forsyth County.

The data obtained are summarized in Table II. A total of 20 architects were connected with the eight architectural firms. The number of architects per firm ranged from one to five, with an average of 2.5 architects per firm. The total number of draftsmen was 22, and ranged from none to eight per firm, with an average of 2.75 per firm. In addition to these staff members, the eight firms had a total of 19 engineers and other employees, which ranged from none to eight per firm and averaged 2.4 per firm. The total number of staff members was 61, which was an average of 7.6 per firm.

Table II shows that the 20 architects connected with the eight architectural firms designed a total of 34 houses in 1959. This was an average of 1.7 houses per architect.

Each firm designed from one to twelve houses, with an average of approximately 4.2 houses per firm. Two of the firms designed the majority, 65 per cent, of the 34 houses. These two firms designed 10 and 12 houses each. The remaining six firms designed a total of 12 houses.

The number of architects per firm and the number of houses a firm designed were not related. One firm with 5 architects designed one house per year, another firm with 4 architects designed one house per year, while another firm with 4 architects designed 12 houses per year. On the other hand, a firm with 2 architects designed 10 houses per year.

On the average, a fifth (21.1 per cent) of the design work per

TABLE II

NUMBER AND TYPE OF PERSONNEL, TYPE OF BUILDINGS DESIGNED, AND NUMBER, PERCENTAGE AND PRICE RANGE OF RESIDENTIAL WORK OF THE ARCHITECTURAL FIRMS IN FORSYTH COUNTY

Firm Number	Personnel Number of Arch.	Draft.	Other	Types of Buildings Designed Percentage Resid.	Comm., Industrial and Institutional	Residential Work No. of Houses Yearly	Price Range of Houses
1	1	0	0	75	25	2	$50,000-100,000
2	1	2	1	10	90	2	30,000-100,000
3	1	0	1	25	75	4	20,000-100,000
4	2	2	2	varies		10	20,000-100,000
5	2	1	0	30	70	2	30,000-100,000
6	4	8	4	0.5	99.5	1	over-100,000
7	4	6	3 Engr.	0.5	99.5	12	20,000-100,000
8	5	3	8 Engr.	0.5	99.5	1	50,000-100,000
Totals	20	22	19			34	
Average	2.5	2.75	2.38	21.1	78.9	4.2	

architectural firm was devoted to residential buildings. The range for residential work for the architectural firms in Forsyth County was from none to 75 per cent. Note that for one architect, 2 houses per year were designated as 75 per cent of his work. He had no draftsmen or other help. For another architect, 2 houses per year were designated as 10 per cent of his yearly work. This architect had 2 draftsmen and one other staff member. The other lone architect indicated 4 houses as 25 per cent of his yearly load. He had another staff member, but not a draftsman. Firms with four or more architects indicated only a very small percentage, 0.5, of their yearly load as residential even though one of these firms designed the largest number of houses, 12, per year per firm. The firms with four or more architects also had from 3 to 8 draftsmen and from 3 to 8 engineers or other members on their staff.

One of the architectural firms indicated that all of the houses they designed were over $100,000 in price, while two of the firms indicated that the houses they designed were in the 50 to 100 thousand dollar classification. Two of the firms said the price of their houses ranged from $30,000 to $100,000 and two firms indicated a price range of from $20,000 to $100,000. Only one firm stated their residential work was in the $20,000 - 50,000 classification, and they designed the largest number of houses, 12 per year, of the eight architectural firms. The price range of the houses is also shown in Table II.

The number of architects per firm was not related to the price of houses designed, and likewise there was no relationship between the number of houses designed and the price of the houses; although the firm that designed the largest number of houses, 12, also designed in the less

expensive catagories.

The indications are that the house designs in Forsyth County are not greatly influenced by the architectural profession since the number of houses designed by architects each year was quite small and tended to be in the more expensive price range. It would seem then, that the builders have the main responsibility for the residential designs in this county.

The Builders

The amount and price of residential construction for all of the builders in Forsyth County and for the twenty-six builders interviewed is summarized in Table III. Note that the twenty-six builders interviewed represent 16.9 per cent of the total builders in the county, and that this percentage of builders built 16.7 per cent of the houses built in 1959. The average price of all of the houses built in Forsyth County was $20,528, whereas the average price house built by the twenty-six builders interviewed was somewhat larger, $23,293. This price differential may be due to the construction of some inexpensive shell houses which are often finished by the buyers, and perhaps to the construction of some small inexpensive houses by people who do not hire a builder. Hence, the percentage of total dollar volume for residential building in the county for the builders interviewed, 19.27, was somewhat larger than the percentage of the total number of builders, 16.9 of the county that were interviewed for this study.

Data regarding the total number of builders, the total number of houses built, and the total dollar volume of residential construction

TABLE III

AMOUNT AND PRICE OF RESIDENTIAL CONSTRUCTION FOR ALL OF THE BUILDERS IN FORSYTH COUNTY AND FOR THE TWENTY-SIX BUILDERS INTERVIEWED

Total number of builders in Forsyth County*	153
Number of builders interviewed	26
Per cent of the builders in Forsyth County interviewed	16.9
Total number of houses built in Forsyth County*	1,186
Number of houses built by builders interviewed	198
Per cent of the total houses built by the builders interviewed	16.7
Total dollar volume of the houses built in Forsyth County*	$ 24,335,745
Dollar volume of houses built by builders interviewed	4,612,000
Per cent of total dollar volume of houses built by builders interviewed	19.27
Average price of house built in Forsyth County	$ 20,528
Average price of house built by builders interviewed	23,293

*Total figures for Forsyth County were obtained from the Forsyth County building permit office, and are for the year 1959.

for Forsyth County, North Carolina, for the year 1959 were obtained from the Forsyth County building permit office.

Since the majority, eighty per cent, of the twenty-six builders built either entirely or partially for speculative sale, it became apparent that the majority of houses were built for speculative sale (Table IV). It would seem that only by working through the builders could such houses be designed for better living. It is true that clients have the opportunity to accept or reject houses, but many must make selections with other factors paramount. For example, closeness to work, school, scarcity of housing, and price in relation to income are contributing decision factors. Perhaps speculative built houses could be designed for better living without greatly increasing the price. Certainly the choosing of harmonious colors and good site orientation, for example, should not add to the final price. It may be that only when builders and buyers become interested in better design will the large volume of speculative built houses be improved.

TABLE IV

NUMBER OF BUILDERS STUDIED IN FORSYTH COUNTY WHO BUILD HOUSES FOR SPECULATIVE SALE AND FOR SPECIFIC CLIENTS

Builders	Number	Percent
For specific client only	5	19.2
For speculative sale only	7	26.9
For specific client and speculative sale	14	53.9
Totals	26	100.0

As indicated in Table V, none of the builders interviewed built more than sixteen houses per year. The number of houses they built per year ranged from 2 to 16, with an average of about seven houses per builder per year.

Whether for speculative sale or for specific clients, the builders who built five or fewer houses annually built more expensive houses than those builders who built nine or more houses annually (Table VI). The average price of the speculative built houses for those builders who built five or fewer houses per year was $26,458, whereas, the average price of the speculative built houses for those builders who built nine or more houses per year was $18,693. The custom built houses averaged $31,300 per house for those builders who built five or fewer houses per year and averaged $20,648 per house for those builders who built nine or more custom houses per year.

The custom built houses tended to be more expensive than the speculative built houses. The average price of all the custom built houses was $25,698 as compared with an average price of $21,029 for the speculative built houses.

The builders interviewed for this study also constructed other buildings in addition to houses. Such structures, which included store buildings, warehouses, a school, a church, an office building, an animal hospital and a garage, tended to be small in size and few in number. They ranged in price from $7,000 for a garage to $50,000 for a school and also for a church, with an average price per building of $24,042 for the twelve non-residential buildings which they built (Table VII).

TABLE V

NUMBER OF HOUSES BUILT ANNUALLY BY TWENTY-SIX FORSYTH COUNTY BUILDERS

Number of houses	Number of builders
2 - 3	3
4 - 5	4
6 - 7	9
8 - 9	2
10 - 11	3
12 - 13	3
14 - 15	1
16 -	1
Total	26 Builders
Median per builder	6.5 Houses
Mean per builder	7.2 Houses

TABLE VI

AVERAGE PRICE OF SPECULATIVE AND CUSTOM BUILT HOUSES
ACCORDING TO NUMBER OF HOUSES BUILT ANNUALLY
BY THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Number of houses built annually per builder	Speculative houses		Custom houses	
	Average price per house	Number of builders	Average price per house	Number of builders
5 or less	$26,458.00	5	$31,300.00	4
6 - 8	21,847.00	9	32,685.00	7
9 or more	18,693.00	7	20,648.00	8
Overall average	$21,029.00		$25,698.00	

TABLE VII

ANNUAL TYPES, DOLLAR VOLUME, NUMBER, AND AVERAGE PRICE PER CONSTRUCTION UNIT BUILT BY THE TWENTY-SIX FORSYTH COUNTY BUILDERS INTERVIEWED

Types of construction	Total dollar volume	Number of units	Average price per unit
Houses	$4,614,000	198	$23,293
Other than houses:			
Stores	91,500	5	18,300
Warehouses	45,000	2	22,500
School	50,000	1	50,000
Church	50,000	1	50,000
Office building	25,000	1	25,000
Animal hospital	20,000	1	20,000
Garage	7,000	1	7,000
Total other than residential	288,500	12	24,042
Overall totals	$4,902,500	210	$23,345

The average total dollar volume for the twenty-six builders per year was $188,558. By far, the greater part of this, $177,462, was concerned with residential building. On the average, the twenty-six builders built a total of 8.1 units during 1959, and on the average, 7.6 of these units were houses (Table VIII).

TABLE VIII

AVERAGE DOLLAR VOLUME AND NUMBER OF UNITS PER BUILDER ACCORDING TO THE TYPE OF CONSTRUCTION FOR THE TWENTY-SIX FORSYTH COUNTY BUILDERS INTERVIEWED

Type of construction	Average dollar volume per builder	Average number units per builder
Residential	$177,462	7.6
Commercial and public	11,096	.5
Total construction	$188,558	8.1

The twenty-six builders studied had a combined total dollar volume of less than five million dollars, $4,902,500, for the price of the buildings they constructed for the year (Table IX). The largest proportion of this amount, 94.1 per cent, was for residential buildings. Conversely, only 5.9 per cent was for commercial and public buildings.

The twenty-six builders built a total of 210 building units during 1959, and 198 of these, 94.3 per cent, were residential buildings. Only 12 of the building units, 5.7 per cent, were commercial or other type buildings.

The average total dollar volume for the twenty-six builders per year was $188,558. By far, the greater part of this, $177,462, was concerned with residential building. On the average, the twenty-six builders built a total of 8.1 units during 1959, and on the average, 7.6 of these units were houses (Table VIII).

TABLE VIII

AVERAGE DOLLAR VOLUME AND NUMBER OF UNITS PER BUILDER ACCORDING TO THE TYPE OF CONSTRUCTION FOR THE TWENTY-SIX FORSYTH COUNTY BUILDERS INTERVIEWED

Type of construction	Average dollar volume per builder	Average number units per builder
Residential	$177,462	7.6
Commercial and public	11,096	.5
Total construction	$188,558	8.1

The twenty-six builders studied had a combined total dollar volume of less than five million dollars, $4,902,500, for the price of the buildings they constructed for the year (Table IX). The largest proportion of this amount, 94.1 per cent, was for residential buildings. Conversely, only 5.9 per cent was for commercial and public buildings.

The twenty-six builders built a total of 210 building units during 1959, and 198 of these, 94.3 per cent, were residential buildings. Only 12 of the building units, 5.7 per cent, were commercial or other type buildings.

TABLE IX

THE COMBINED TOTAL ANNUAL CONSTRUCTION FOR ALL THE TWENTY-SIX FORSYTH COUNTY BUILDERS INTERVIEWED

Type of construction	Dollar volume Amount	Dollar volume Per cent	Number of units Number	Number of units per cent
Total residential	$4,614,000	94.1	198	94.3
Total commercial and public	288,500	5.9	12	5.7
Total annual construction	$4,902,500	100	210	100

The Consultant and Design Services

The findings in this section were focused on the main purpose of this study, the types of consultant and design services builders would like to have. The idea of having such services performed by a consultant or designer, who up to this time has not existed in most areas of the United States, was new to the builders and their reactions might change somewhat with further consideration.

The data were separated according to the types of consultant and design services the builders were using and the additional services which they felt would be helpful to them in the future. In the tables in this section, "Would like help in future", represents help in addition to any the builders were already using. In other words, if a builder was using some assistance such as an architect, decorating consultant, or electrical contractor, and was satisfied with this working arrangement, this builder was not included in the number who desired help in the future.

In addition to services already used over one-fourth, 26.9 per cent, of the builders indicated they would be interested in obtaining professional assistance with the design of house plans, elevation drawings and special features for the houses they build (Table X).

Nearly one-half, 46.2 per cent, of the builders said they drew their own house plans, and 42.3 per cent stated they drew whatever they used in the way of elevations. The latter percentage of builders also designed any special features such as built-ins, fireplaces, entrances and patios they used. Six of the builders, 23.1 per cent, said they did not use any special design features in the houses they built.

Further questioning revealed that half of the builders started with stock plans for part of their houses and that an additional seven builders started with client's or architect's plans part of the time. Only six of the builders indicated they always drew their own plans (Table XI).

The majority, 62 per cent, of the twenty-six builders indicated that they made any needed changes in house plans themselves. Seven of the twenty-six builders said they made their own house plan changes with the help of an architect or draftsman, while two builders said they had an architect make all the necessary changes. The combined methods for changes in house plans, regardless of whether houses were for specific clients or were built for speculation, are summarized in Table XII.

Of the nineteen builders who built houses for specific clients, over one-half of them, 57.9 per cent, thought it would be helpful to have a professional person work with the families in an effort to work out design problems and to help them make decisions regarding their houses.

TABLE X

THE DESIGNING OF HOUSE PLANS, ELEVATIONS AND SPECIAL FEATURES FOR THE HOUSES OF THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Drawing designs for:	Who does now*							Would like help in future**		
	B	B C	B A	A A	A C	C	N	For Sale	For Client	For Both Sale & Client
	Number							Number		
Floor plans	12	1	1	5	1	1	5	3	1	3
Elevations	11	1	1	5	1	1	6	3	1	3
Special features such as built-ins, fireplaces, entrances, patios, etc.	11	1	1	5	1	1	6	3	1	3
Special lighting effects	11	1	1	5	1	1	6	3	1	3

* A - Architect
B - Builder
C - Client
N - None used

** In this study, "Would like help in future", in all cases represented help in addition to any the builders were already using.

TABLE XI

SOURCE OF HOUSE PLANS BUILT BY TWENTY-SIX FORSYTH COUNTY BUILDERS

Source	Number of builders	
Stock plans only	2	
Stock plans and also client's plans	4	
Stock plans and also architect's plans for specific clients	4	
Stock plans and also original builder-drawn plans	3	13
Builder-drawn plans only	6	
Builder-drawn and also client's plans	3	
Builder-drawn and also architect's plans	1	10
Client furnishes only	3	3
Total		26

TABLE XII

EXECUTION OF NECESSARY CHANGES IN HOUSE PLANS FOR THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Changes made by:	Number
Builder	16
Builder and architect	5
Builder and draftsmen	1
Builder, draftsman, and architect	1
Builder and client	1
Architect	2
Total	26

In the general discussion during the interview, nine of the builders voluntarily suggested that they thought a design consultant service would be very valuable to the home owner in planning his house, and that the homeowner should seek and pay for this service.

Only seven, 26.9 per cent, of the builders indicated they would like additional help in checking their house plans for logical furniture placement, good storage facilities, traffic and noise control, and adequate space for family and individual living activities (Table XIII). However if an added one-fourth of the builders in the county would begin to use professional help in checking their house plans for such items, the quality of design should be affected. Perhaps other builders would thereby be influenced to change their product.

Fifty per cent of the builders indicated they did all of their own checking of house plans for logical furniture placement, good storage facilities, traffic and noise control, and adequate space for family and individual living activities. An additional 26.9 per cent of the builders said that the client, or that the builder working with the client, did the checking. An architect checked the plans for 11.5 per cent of the builders, and an additional 11.5 per cent stated that an architect did this with the builder or the client. Six of the builders, 23.1 per cent, indicated that they consulted an architect, and this was the only type of professional help used for checking the plans for the vital livability of house factors listed above. Traditionally architects are not accustomed to provide a service of checking someone else's plans for the adequacy of such features, so it is assumed that the plans of these six builders were either executed or redesigned

TABLE XIII

THE CHECKING OF HOUSE PLANS FOR FURNITURE PLACEMENT, STORAGE FACILITIES, AND FAMILY LIVING AREAS OF THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Checking house plans for:	Who does now*						Would like help in future**		
	B	B C	B A	A	A C	C	For Sale	For Client	For Both Sale & Client
	Number						Number		
Logical furniture placement	13	5	2	3	1	2	2	2	3
Storage facilities									
Located where needed	13	5	2	3	1	2	2	2	3
Properly sized	13	5	2	3	1	2	2	2	3
Adequate	13	5	2	3	1	2	2	2	3
Location of areas to assure									
Good traffic patterns	13	5	2	3	1	2	2	2	3
Control of noise	13	5	2	3	1	2	2	2	3
Privacy	13	5	2	3	1	2	2	2	3
Provisions for indoor & outdoor living	13	5	2	3	1	2	2	2	3
Space for individual & group activities	13	5	2	3	1	2	2	2	3

* A - Architect
B - Builder
C - Client

** In this study, "Would like help in future," in all cases represented help in addition to any the builders were already using.

by architects.

It is interesting to note that all of the builders indicated they checked their plans for all of these features. Perhaps they thought them important, and that they should not admit any lack of concern about any of these livability features.

Table XIII also points up that each builder answered each item on this list with exactly the same response. Whoever checked one of these items checked all of them. It may have been that some of the responses were answered automatically or that having committed himself one way, the builder tended to continue with the same response. None of the builders differentiated in kind of help used for checking these items.

Almost one-fourth of the builders, 23.1 per cent, indicated they would like additional professional help in checking their plans for good kitchens and bathrooms (Table XIV). Due to the number of shelter and women's magazines that emphasize these areas, homemakers probably are more aware of the importance of good design for bathrooms and kitchens than for other parts of the house. Homemakers often judge a house by its kitchen, and the sale of a house might be influenced by the plan of the kitchen.

Six builders, 23.1 per cent, stated the designs for the bathrooms and kitchens of their houses were checked by architects. Twelve, 46.2 per cent, of the builders indicated this checking was their responsibility and six, 23.1 per cent, said they used the assistance of their wives or the clients to check kitchen and bathroom plans.

It will be noted that all twenty-six of the builders indicated

TABLE XIV

THE CHECKING OF HOUSE PLANS FOR KITCHENS AND BATHROOM DESIGNS FOR THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Checking Plans for:	Who does now*							Would like help in future**		
	B	B C	B A	B W	A	A C	C	For Sale	For Client	For Both Sale & Client
	Number							Number		
Efficient kitchen plans	12	5	2	1	3	1	2	1	2	3
Proper location of equipment	12	5	2	1	3	1	2	1	2	3
Good bathroom designs:										
Proper location of fixtures	12	5	2	1	3	1	2	1	2	3
Storage facilities	12	5	2	1	3	1	2	1	2	3

* A - Architect
B - Builder
C - Client
W - Builder's wife

** In this study, "Would like help in future," in all cases represented help in addition to any the builders were already using.

these areas were checked by someone. Apparently they were aware of the importance of the design of kitchens and bathrooms.

The planning of adequate artificial lighting requires consideration of problems concerned with the provision of both practical and aesthetic features. These problems need to be taken into consideration at the time the wiring layout is made for a house. Only three builders, 11.5 per cent, indicated that they were interested in getting assistance with the planning of lighting and wiring layouts for their houses in the future. Two of these builders said they were interested in such help for their custom houses, and one of these builders was interested in help for both speculative and custom houses (Table XV).

Of the twenty-six builders interviewed, approximately one-fifth, 19.2 per cent, said they used an architect to check their lighting designs and do the wiring layouts. Over one-fourth of the builders, 26.9 per cent, stated they left these decisions entirely to the electrical contractor, and 15.4 per cent indicated they worked with an electrical contractor in an effort to work out these problems. Approximately one-fourth, 23.1 per cent, of the builders made these decisions themselves regarding their houses. Only one of the builders used the services of a professional trained lighting specialist, the electrical engineer of the local electrical public utility company, and he was used only to solve problems for special lighting and wiring features. No doubt the wiring of the houses passed the safety regulations set up by the local building code. Perhaps the builders have found that the consumers do not demand the plus features of convenience, flexibility, and aesthetics that could be provided by well designed wiring and lighting.

TABLE XV

THE CHECKING OF HOUSE PLANS FOR WIRING AND LIGHTING DESIGNS
FOR THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Checking of plans for:	Who does now*										Would like help in future**		
	A	A C	A B	B	B E	B A C	B C	C	P	E	For Sale	For Client	For Both Sale & Client
	Number										Number		
Adequate for present and future	2	1	1	6	4	1	2	2	0	7	0	2	1
Proper location of fixtures	2	1	1	6	4	1	2	2	0	7	0	2	1
Proper location of outlets	2	1	1	6	4	1	2	2	0	7	0	2	1
Proper location & types switches	2	1	1	6	4	1	2	2	0	7	0	2	1
Special requirements:													
Door bells or chimes	2	1	0	6	4	1	2	2	1	7	0	2	1
Fire alarms	2	1	0	6	4	1	2	2	1	7	0	2	1
Television antenna outlets	2	1	0	6	4	1	2	2	1	7	0	2	1
Intercommunication connections	2	1	0	6	4	1	2	2	1	7	0	2	1
Telephone connections	2	1	0	6	4	1	2	2	1	7	0	2	1
Different types of lighting	2	1	0	6	4	1	2	2	1	7	0	2	1
Outdoor lighting for:													
Beauty	2	1	0	6	4	1	2	2	1	7	0	2	1
Fun	2	1	0	6	4	1	2	2	1	7	0	2	1
Convenience	2	1	0	6	4	1	2	2	1	7	0	2	1
Safety	2	1	0	6	4	1	2	2	1	7	0	2	1

* A - Architect
B - Builder
C - Client
E - Electrical Contractor
P - Electrical Power Company's electrical engineer

** In this study, "Would like help in future," in all cases represented help in addition to any the builders were already using.

Table XVI shows that four builders, 15.4 per cent, indicated they would be interested in having some further professional assistance with furniture arrangements, renderings, and working drawings for their houses.

Eighteen, 69.2 per cent, of the builders do not use renderings or working drawings, and seventeen do not use floor plans with suggested furniture arrangements. Six builders stated they depended on an architect to do any of this work that was needed, two builders said they did any renderings or working drawings they used, and three builders said they drew their own floor plans with suggested furniture arrangements.

The builders showed very little interest in model houses. Only nine builders, 34.6 per cent, showed model houses, and just one builder of this number displayed his model houses furnished. A local furniture store provided a decorator who did the furniture arrangements and colors for the furnished model houses.

The builders manifested the greatest interest in improving the coordination of colors and textures for their houses. Over one-half of the builders, 53.8 per cent, expressed interest in gaining assistance with colors and textures used in the future. Almost all of these builders built for the speculative market, which seemed to indicate the builders felt proper handling of colors and textures increased the sales value of their houses (Table XVII).

Ten of the builders coordinated the colors and textures for their houses. The others let the clients make the choices, or were helped by their wives, architects, or paint consultants. Several of the local

TABLE XVI

THE PREPARATION OF PRESENTATION MATERIALS FOR THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Preparation of presentation materials such as:	Who does now*				Would like help in future**		
	B	A	B A	N	For Sale	For Client	For both Sale & Client
	Number				Number		
Floor plans with suggested furniture arrangements	3	1	5	17	1	1	2
Renderings of exteriors	2	1	5	18	0	1	2
Renderings of special features such as sunken rooms, window walls, built-ins	2	1	5	18	0	1	2
Working drawings of kitchens, storage closets, built-ins	2	1	5	18	1	1	2

* A - Architect
B - Builder
N - None used

** In this study, "Would like help in future," in all cases represented help in addition to any the builders were already using.

TABLE XVII

THE COORDINATION OF COLORS AND TEXTURES FOR THE HOUSES OF THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Coordination of colors and Textures for:	Who does now*							Would like help in future**		
	B	W	B PC	B A C	A C	PC	C	For Sale	For Client	For both Sale & Client
	Number							Number		
Harmony of exterior and interior	10	2	4	2	1	4	3	7	1	6
Blending of individual rooms as related to the house as a whole	10	2	4	2	1	4	3	7	1	6
Pleasing Combination within each room	10	2	4	2	1	4	3	7	1	6

* A - Architect
B - Builder
C - Client
PC - Paint store Consultant
W - Builder's wife

** In this study, "Would like help in future," in all cases represented help in addition to any the builders were already using.

paint stores provided their customers with consultants to coordinate colors, and eight, 30.8 per cent of the builders studied, availed themselves of this service.

The selection of finishing materials such as paints, papers, floor coverings, counter tops and ceramic tiles was another area in which a large percentage of the builders indicated they would like additional professional assistance, and again, this was shown mainly by the builders who were building houses for speculative sale. Perhaps the home buyers are becoming more aware of available products and are exerting some influence on the housing market.

Over 50 per cent were interested in further help with interior paints, wallpapers, and counter tops; and 50 per cent wanted assistance with the selection of ceramic tiles. Almost one-half, 46.2 per cent, wanted more help with the selection of floor coverings, and 42.3 per cent of the builders were interested in additional help with the selection of panelling and light fixtures. Note that 43.3 per cent of the builders were interested in help in the selection of their light fixtures, even though only 11.5 per cent of the builders wanted help with planning the wiring and lighting for their houses. Less interest was indicated in having help with the selection of hardware, windows and doors. Note that when the builders were asked about the finishing materials on the exterior of their houses, their main concern was assistance with the selection of exterior paints. Nine, 34.6 per cent, indicated they would like help in the selection of exterior paints and only two, 7.7 per cent, of the builders wanted help in the selection of exterior bricks, stone, siding, and shingles (Table XVIII).

TABLE XVIII

THE SELECTION OF FINISHING MATERIALS FOR THE HOUSES OF THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Selection of finishing materials such as:	Who does now*										Would like help in future**		
	B	B W	B PC	B A	B A C	A C	C	PC	SC	DC	For Sale	For Client	For Both Sale & Client
	Number										Number		
Interiors:													
Paints	10	1	3	1	1	1	4	3	0	2	7	1	6
Wallpapers	10	1	3	1	1	1	4	3	0	2	7	1	6
Panellings	11	2	2	1	1	1	4	2	0	2	4	1	6
Ceramic tile	10	1	2	1	1	1	4	2	2	2	6	1	6
Counter tops	11	1	2	1	1	1	4	2	1	2	7	1	6
Floor coverings	12	2	1	1	1	1	4	2	0	2	6	1	5
Hardware	14	2	1	1	1	1	4	0	0	2	2	1	3
Light fixtures	11	1	1	1	1	1	4	2	2	2	7	1	3
Windows	16	1	0	1	1	1	4	0	0	2	1	1	1
Doors	16	1	0	1	1	1	4	0	0	2	1	1	1
Exteriors:													
Paints	14	1	0	1	1	1	4	2	1	1	6	1	2
Bricks	18	1	0	1	1	1	4	0	0	0	0	1	1
Stone	18	1	0	1	1	1	4	0	0	0	0	1	1
Siding	18	1	0	1	1	1	4	0	0	0	0	1	1
Shingles	18	1	0	1	1	1	4	0	0	0	0	1	1

* A - Architect
B - Builder
C - Client
W - Builder's wife
DC - Decorating Consultant
PC - Paint store Consultant
SC - Sub-Contractor

** In this study, "Would like help in future," in all cases represented help in addition to any the builders were already using.

Generally, finishing materials were selected by the builders. A few of the builders, 11.5 per cent, were assisted by architects in their selections. Eight, 30.8 per cent, were using the assistance of paint store consultants and decorating consultants to assist in the selection of certain of their finishing materials. However, they did not use consultants in selecting windows, doors, hardware, brick, stone, siding or shingles. A decorating consultant did select hardware for one builder. Perhaps cost influenced the selection of these items. It could be that building supply houses used special discount prices on these items as a wedge to secure the builders' building supply business for their firms.

The builders showed little interest in obtaining further assistance with the selection of household equipment. Only three, 11.5 per cent, indicated any interest, and one of these builders said he was interested in help only from the standpoint of the color selection of the equipment.

As shown in Table XIX, five builders left this selection to the client and the architect; the remaining twenty-one builders made their own selections with help from their wives or clients. Several of the builders stated that price often determined their selections.

The builders indicated very little desire for assistance with site planning of their houses. Either they felt they were achieving a harmony of the plan with the exterior and landscaping designs for their houses, or they were not aware that this might influence their house sales. Only two, 7.7 per cent, expressed any interest in having help in the future with site planning (Table XX).

TABLE XIX

THE SELECTION OF HOUSEHOLD EQUIPMENT FOR THE HOUSES OF THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Selection of household equipment such as:	Who does now*					Would like help in future**		
	B	B C	B W	C	A C	For Sale	For Client	For Both Sale & Client
	Number					Number		
Kitchen:								
Stove	18	2	1	4	1	1	1	1
Oven and range top	18	2	1	4	1	1	1	1
Exhaust hoods	18	2	1	4	1	1	1	1
Sinks	18	2	1	4	1	1	1	1
Disposals	18	2	1	4	1	0	1	1
Dishwashers	18	2	1	4	1	1	1	1
Refrigerators and freezers	18	2	1	4	1	0	1	1
Utility:								
Hot water heaters	18	2	1	4	1	0	1	1
Heating equipment	18	2	1	4	1	0	1	1
Plumbing:								
Lavatories	18	2	1	4	1	0	1	1
Tubs	18	2	1	4	1	0	1	1
Showers	18	2	1	4	1	0	1	1
Water closets	18	2	1	4	1	0	1	1

* A - Architect
B - Builder
C - Client
W - Builder's wife

** In this study, "Would like help in future," in all cases represented help in addition to any the builders were already using.

TABLE XX

SITE PLANNING FOR THE HOUSES OF THE
TWENTY-SIX FORSYTH COUNTY BUILDERS

Site planning for:	Who does now*								Would like help in future**		
	B	B C	B A C	B C SC	B SC	B A	SC	C	For Sale	For Client	For Both Sale & Client
	Number								Number		
Location of house on lot	19	4	2	0	0	1	0	0	0	1	1
Orientation - Climate control	19	4	2	0	0	1	0	0	0	1	1
Choice of house plan for lot	19	4	2	0	0	1	0	0	0	1	1
Location of driveways, turn-arounds, parking facilities	19	4	2	0	0	1	0	0	0	1	1
Placement of terraces, play areas, gardens, swimming pools	19	4	2	0	0	1	0	0	0	1	1
Landscaping	9	1	2	1	3	0	8	2	0	1	1

* A - Architect
B - Builder
C - Client
SC - Sub-contractor

** In this study, "Would like help in future," in all cases represented help in addition to any the builders were already using.

Almost three-fourths (73.1 per cent) of the builders did their own site planning with the exception of landscaping, and 34.6 per cent stated they did their own landscaping without outside assistance. Nearly half of the builders (46.2 per cent) received some help from the landscape contractor, but only 7.7 per cent of the builders used architects to help plan the landscaping. Three builders used an architect in locating the house on the lot, planning the driveways, and placing the terraces and outside areas.

None of the builders wanted assistance in securing financial information regarding the purchasers of their houses. Generally speaking, they thought this was a matter the builder should handle. Eighteen, 69.2 per cent, of the builders secured this information and two had the architect get it. Three builders, 11.5 per cent, left the financial details entirely up to the clients, and three, 11.5 per cent, had the lending agency secure the necessary information (Table XXI).

More than half (57.7 per cent) of the builders were interested in paying for any services themselves, and all of these felt that having a fixed charge would be the preferred form for payment. Ten builders, 38.5 per cent, believed the client should absorb this charge, and one builder thought the building material supply houses should pay for such services.

As was specifically pointed out by several of the builders, speculative houses are on a competitive market and added costs may price them out of the market.

In general, the builders depended on their own knowledge and

TABLE XXI

SECURING FINANCIAL INFORMATION REGARDING PURCHASER
FOR THE TWENTY-SIX FORSYTH COUNTY BUILDERS

Securing financial information such as:	Who does now*					Would like help in future**		
	B	B A	B LA	C	A	For Sale	For Client	For both Sale & Client
	Number					Number		
Family's financial position	18	1	3	3	1	0	0	0
Whether size and cost of house fits income	18	1	3	3	1	0	0	0
How financing is to be handled	18	1	3	3	1	0	0	0

* A - Architect
B - Builder
C - Client
LA - Lending agency

** In this study, "Would like help in future," in all cases represented help in addition to any the builders were already using.

experience in making decisions regarding the designs and materials concerned with the houses they built. The independence of a few of these builders is indicated by the following information volunteered by three of them. One suggested that he did not want any outside interference because it was faster and easier to do things the way he wanted. He felt he knew what the public wanted and said, "They well - just put them in the right places. People want to live in certain sections regardless and will buy whatever is available there."

Another builder also indicated he wanted no more outside interests. He said, "Let every sub-contractor come in and do his job. They put in enough to know what is best, so let them pick the colors and so forth."

The third individualist said, "I just build a house and sell it. When I get ready to build a house, I take this ruler and lay her off, and I put in the house just what I like."

Some interest was shown in having professional assistance in the future with all the aspects of planning, designing, and selection of materials for their houses; however, the greatest interest was shown in having help with those features that seem to exert the greatest influence on the sale of houses - the selection of finishing materials.

There was an awareness of need for help in the future. By focusing on the areas that the builders were most receptive to receiving help, a housing designer or consultant might be able to offer a service that would be helpful to both builders and home buyers in making houses more livable and better designed.

CHAPTER V

SUMMARY AND CONCLUSIONS

Twenty-six builders in Forsyth County, North Carolina were interviewed during the spring of 1960 in an effort to determine the kinds of consultant and design services that would be helpful to them in planning and designing houses that would better meet the needs of families. The builders interviewed for this study represented 16.9 per cent of the builders in Forsyth County, and they built 16.7 per cent of the total number of houses built in 1959.

All the builders interviewed would be considered small volume builders since the number of houses they built annually ranged from two to sixteen, with an average per builder of 7.2 houses per year. They constructed some buildings other than houses, but these structures tended to be small in price and few in number.

A few of the builders in this study restricted their work to houses for specific clients only, and a small number built only for the speculative market. The majority of the builders built houses for both the speculative market and for specific clients. The average price, $25,698, on the custom houses was larger than the average price, $21,029, for the speculative built houses.

The number of builders desiring additional help for the houses they built in the future varied with the different categories of planning, designing, and material selection. The sameness of the responses to many of the individual entries may be indicative of lack of concern

on the part of the builders to the specifics of individual entries within a general area. In other words there seemed to be a tendency on the part of the builders either to accept or reject an area as a whole as worthy of consideration. Although some interest was shown in all of the areas included in the interview, the majority of the builders indicated little interest in, or need for, consultant or design services for most of the areas. The interviewer felt that some of the interest shown was due to a desire to impress the interviewer.

The majority could appreciate the value of having a professionally trained person work with the families in making their decisions in planning or designing houses. Of the nineteen builders who built houses for specific clients, over one-half, 57.9 per cent, thought it would be helpful to have a professional person work with the families in an effort to determine the families needs and to help them incorporate their needs into a well designed house.

Perhaps a study of the reactions of homemakers living in speculative built houses would indicate how such houses might meet needs in real family situations. Over one-half of the builders, 53.8 per cent, indicated an interest in obtaining more professional help in the coordination of colors and textures for their houses. In particular, they wanted help with the color selection of interior and exterior paints, wallpapers, counter tops, ceramic tiles, and floor coverings. Since some of the paint stores provide color consultants, it could be the builders have already realized the results of proper color, texture, and material combinations, or it could be that home buyers are making the builders conscious of the value of good colors, textures, and materials.

About 75 per cent of the builders interviewed did not want help in the main design or plan of their houses. About one-fourth of the builders did indicate a desire for added professional assistance in designing and checking their house plans to include such items as logical furniture placement, good storage facilities, traffic and noise control, adequate space for family and individual living activities and functional kitchens and bathrooms.

Almost 90 per cent of the builders studied did not indicate a need for help in planning or checking wiring and lighting layouts. Since only 11.5 per cent wanted additional help in these areas, this may indicate that perhaps the consumers are not asking for convenience, flexibility, and aesthetic features in the lighting and wiring designs. A larger percentage, 43.3, of the builders did indicate that they could use some help in the selection of their light fixtures.

Only a few of the builders interviewed, 11.5 per cent, indicated any interest in obtaining assistance in the selection of household equipment and these builders were more interested in getting help in the selection of color rather than the selection of equipment.

A few of the builders, 7.7 per cent, said they could use some further help in the planning of the sites for their houses, while none wanted help in securing financial data from their prospective clients.

As a whole, very little professional help of any type was being used by the twenty-six builders studied. A few builders consulted architects, but their assistance was used mainly for custom built houses. The builders also received some help from paint store consultants, electrical and other contractors and their wives.

From a hundred per cent response to a questionnaire sent to all eight of the architectural firms in Forsyth County, it was found that of the total houses built in the county in 1959, only 2.8 per cent by number and 6.5 per cent by dollar volume were designed by the architects or their staffs. The average price house designed by an architectural firm was $46,765 as compared to an average price of $20,528 for all of the houses built in the county. These data clearly indicate that the architecturally designed houses were few in number and expensive in price.

This lack of professional help indicates that there is a need for professionally trained consultants or designers in the field of housing if they can offer the kind of services builders want and will use. The openings might be slow and the builders will have to be shown that the service adds true value and sales demand for their houses.

Such a consultant or designer might work with the building industry in planning flexible designs which would be energy-saving, more livable, have better separation of noisy and quiet areas, and be more emotionally aesthetically satisfying. It would seem they would need to know as much as possible about the housing needs, desires, values, economic resources, and expectations of families as well as have an understanding of the problems of the builder if they are to be successful in bringing the families and the builders into a more understanding working relationship. Perhaps once such services were used and the results observed, such services would be demanded more and more.

Only about one-half of the builders indicated they would be willing to pay for additional consultant designer services and all of

these preferred payment in the form of a fixed charge. However it was felt that willingness to pay would depend on highness of cost. It was pointed out by several of the builders that they would not be able to absorb any extensive costs in their speculative houses which are competively priced. Several of the builders pointed out that speculative houses are on a competitive market and added costs may price them out of the market. Building with better design without greatly increasing the cost may be possible in some areas of design. The choosing of harmonious colors, the planning of spaces for logical furniture and equipment placement and traffic control, for example, should not add greatly to the final price.

Work towards establishing such a consultant-designer role for a home economist is in line with the objectives of the American Home Economics Association. It is stated in their New Directions that "The object of the American Home Economics Association shall be to provide opportunities for professional home economists and members from other fields to cooperate in the attainment of the well-being of individuals and families."[1] Ellen H. Richards, the first president of the American Home Economics Association, said many years ago that home economics stands for "the simplicity in material surroundings which will most free the spirit for the more important and permanent interest of the home and society."[2]

---

[1] Home Economics New Directions, A Statement of Philosophy and Objectives. Prepared by the Committee on Philosophy and Objectives of Home Economics of the American Home Economics Association. (Washington, June, 1959) p. 5.

[2] Ibid., p. 4.

BIBLIOGRAPHY

BIBLIOGRAPHY

"A New Look at These Golden Sixties," House and Home, XIX (January, 1961), p. 118.

"A New Year Demands New Ways to Sell a Tough Housing Market," American Builder, LXXXIII (January, 1961), p. 89.

Agan, Tessie The House. Chicago: L. B. Lippincott Company, 1939.

Beyer, Glenn H., Housing: A Factual Analysis. New York: The Macmillan Company, 1958.

_____. Housing and Personal Values. Ithaca, New York: Cornell University Agricultural Experiment Station, Memoir 364, July, 1959.

Cutler, Virginia F., Personal and Family Values in the Choice of a Home. Ithaca, New York: Cornell University Agricultural Experiment Station Bulletin 840, November, 1947.

Federal Reserve Board, 1955 Survey of Consumer Finance - Housing Arrangements of Consumers, Federal Reserve Bulletin. Washington: Federal Reserve System, August, 1955.

Housing and Home Finance Agency, Woman's Congress on Housing. Washington: October, 1946.

Hocking, W. E. Human Nature and Its Remaking. New Haven: Yale University Press, 1929.

Improved Family Living Through Housing. Prepared by the Committee of Consultants on Housing for the Family, issued from the Office of the Woman's Foundation. New York, August, 1945. p. 6.

Maslow, A. H. Motivation and Personality. New York: Harper and Brothers, 1954.

McCall's. Report of Congress on Better Living. New York, 1959.

United States Bureau of Census. Seventeenth Census of the United States: 1950. Population Census and Housing Census. Washington: Government Printing Office, 1952.

Woodruff, Asahel D. A Study of the Directive Factors in Individual Behavior. Chicago: Distributed by the University of Chicago libraries.

APPENDIX

The Architect Firm
x Street
Winston-Salem, North Carolina

Gentlemen:

Would you like to know the percentage of houses in this area that are designed by architects? Well, so would we.

We know you're busy, but please, just answer our three questions and we promise to send you a summary of the results. If you don't answer, we won't know how to count you!

Sincerely,

Jerry Fedlman
Research Department

1. How many employees do you have in your firm? Architects (No.) _____

   Draftsmen (No.) _____

   Other (No.) _____

2. What types of buildings constitute your main volume?

   Residential (%) _____

   Commercial (%) _____

   Other (%) _____

3. Did you design any residential work last year? Yes _____ No _____

   The last few years? Yes _____ No _____

   Yearly average: Under 10 _____

   10 - 50 _____

   50 -100 _____

   over 100 _____

   Price range of houses:

   Under $20,000 _____ $50,000 - 100,000 _____

   $20,000 - 30,000 _____ over $100,000 _____

   $30,000 - 50,000 _____

Firm Name_____ Interviewee_____

Do you build for:

	Yes	No
Speculative sale	____	____
Specific client	____	____

Types of construction:	Total $ Volume	No. Units
Houses	____	____
Stores	____	____
Offices	____	____
Factories	____	____
Schools	____	____
Churches	____	____
Other	____	____

Number of houses you build annually:	For Sale	For Client
Under $10,000	____	____
$10,000 - 15,000	____	____
15,000 - 20,000	____	____
20,000 - 30,000	____	____
30,000 - 50,000	____	____
50,000 - 75,000	____	____
over 75,000	____	____

Where do you get your house plans?

Stock_____ Observation of other houses_____
Magazine_____ Original_____
Newspaper_____ Other (where)_____

Who makes changes and does necessary designing and drawing of your plans?

	For Sale	For Client
Builder	____	____
Draftsman	____	____
Architect	____	____
Designer	____	____
Other (who?)	____	____

Would it be helpful to you to have a trained person CHECK YOUR PLANS for:

	Who does now?	Would like help For Sale	Would like help For Client
Logical furniture placement throughout house	____	____	____
Storage facilities:			
Located where needed	____	____	____
Properly sized for intended use	____	____	____
Adequate for family needs	____	____	____
Areas are Located to assure:			
Good traffic patterns	____	____	____
Control over noise	____	____	____
Privacy	____	____	____
Provisions for indoor & outdoor living	____	____	____
Space for individual & group activities	____	____	____

1.

	Who does now?	Would like help For Sale	Would like help For Client
Efficient kitchen plans	____	____	____
Proper location of equip. in kitchen	____	____	____
Good bathroom designs:			
Proper location of fixtures	____	____	____
Storage facilities	____	____	____
Wiring is designed:			
Adequate for present and anticipated future needs	____	____	____
Light fixtures properly located for type of illumination required	____	____	____
Convenience outlets are located in relation to furniture placement	____	____	____
Wall switches located at most convenient place and at proper heights	____	____	____
Special requirements provided where needed and/or desired:			
Door bells	____	____	____
Door chimes	____	____	____
Fire Alarm	____	____	____
Television antenna connections	____	____	____
Intercommunication systems	____	____	____
Telephone connections	____	____	____
To accomodate various types of lighting	____	____	____
Outdoor lighting for:			
Beauty - floods or spots on flowers, trees, house, etc.	____	____	____
Fun - games, cookouts, etc.	____	____	____
Convenience - outdoor living & entertaining, garden and yard work	____	____	____
Safety - prevent accidents, discourage trespassers	____	____	____

Would you be interested in having someone who is trained help with DESIGN work on your houses?

Drawing floor plans	____	____	____
Drawing elevations	____	____	____
Special features such as built-ins, fireplaces, entrances, patios, etc.	____	____	____
Special lighting effects	____	____	____

How about other types of PRESENTATION MATERIAL?

Floor plan with suggested furniture arrangement	____	____	____
Renderings of exteriors	____	____	____
Renderings of special features such as sunken rooms, window walls, built-ins, etc.	____	____	____
Working drawings of kitchens, storage closets, built-ins, etc.	____	____	____

Do you show MODEL HOUSES? Yes_____ No_____
Furnished_____ Unfurnished_____

Who furnished your model houses?_____

Would you like to have a trained person assist you with the furnishing?
Yes_____ No_____

Who CHOOSES your FINISHING MATERIALS such as counter tops, floor coverings, paints and papers to coordinate your colors and textures throughout the house and blend your exteriors with the interiors?

You_____ Buyer_____
Your wife_____ Other (who?)_____
Sub-contractor_____

Would it be helpful to have a trained person COORDINATE the COLORS AND TEXTURES in your houses for:

	Who does now?	Would like help For sale	For client
Harmony of exterior and interior	____	____	____
Blending of individual rooms as related to the house as a whole	____	____	____
Pleasing combination within each room	____	____	____
SELECT FINISHING MATERIALS:			
Interiors:			
Paints	____	____	____
Wallpapers	____	____	____
Panellings	____	____	____
Ceramic tile	____	____	____
Counter tops	____	____	____
Floor coverings	____	____	____
Hardware	____	____	____
Light fixtures	____	____	____
Windows	____	____	____
Doors	____	____	____
Exteriors:			
Paints	____	____	____
Brick	____	____	____
Stone	____	____	____
Siding	____	____	____
Shingles	____	____	____

Is the selection of HOUSEHOLD EQUIPMENT such as stoves, refrigerators, dishwashers, etc. a problem as to:

Color coordination	____	____	____
Convenience features	____	____	____
Sizes and styles for house plans	____	____	____

Would you like a trained person's help in the selection of:

Kitchen			
Stove	____	____	____
Oven and range top	____	____	____
Exhaust hoods	____	____	____
Sinks	____	____	____
Disposals	____	____	____
Dishwashers	____	____	____
Refrigerators and freezers	____	____	____
Utility			
Hot water heater	____	____	____
Heating equipment	____	____	____
Plumbing			
Lavatories	____	____	____
Tubs	____	____	____
Showers	____	____	____
Water closets	____	____	____

Would you be interested in having someone help in SITE PLANNING?

	Who does now?	Would like help For sale	Would like help For client
Location of house on lot	____	____	____
Orientation - climate control	____	____	____
Choice of house plan for lot	____	____	____
Location of driveways, turn-arounds, parking facilities	____	____	____
Placement of terraces, play areas, gardens, swimming pools, and other outdoor features	____	____	____
Landscaping	____	____	____

Would it be helpful to have a person WORK DIRECTLY WITH THE FAMILY on custom houses in an effort to work out their problems and help them make decisions?

Yes_____ No_____

Who does this now? _____

How about securing information regarding the BUYER'S ABILITY TO PAY?

	Who does now?	Would like help For sale	Would like help For Client
Family's financial position	____	____	____
Whether size and cost of house fits income	____	____	____
How financing is to be handled	____	____	____

Method of handling FEES for above services used:

Hourly_____

Fixed_____

Percentage_____

Monthly retainer_____

Are there OTHER SERVICES I have not mentioned that you would like to have?