

RETIREMENT VILLAGE PLANNING FOR FLORIDA

The Need for an Engineering Approach

By

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PREFACE

A major objective of the Retirement Research Program launched by the Florida State Improvement Commission in November, 1949, was the stimulation of research by educational institutions and governmental agencies in Florida. Because its resources are limited, the Improvement Commission, which functions in this area through the Retirement Research Division, can undertake few research projects with its own staff. The effectiveness of a program intended to focus attention on and seek solutions to the problems of the aged in the State will obviously be much greater if the research potential represented chiefly by our institutions of higher learning is made use of.

This report is the product of close cooperation between the Florida Engineering and Industrial Experiment Station and the Florida State Improvement Commission. Early in 1952 the Experiment Station set up a research project under the title, "An Engineering Study of Retirement Village Planning for Florida." Mr. Richard S. Sahlie, a graduate student in the College of Engineering, was made project leader and subsequently worked with the Retirement Research Division in developing the questionnaire and arranging for its distribution to retired employees of a large industrial firm in the Northeast as well as retirees and near-retirees on the mailing list of the Division. Mr. Sahlie was solely responsible, however, for analyzing the data and preparing this report, which was submitted to the College of Engineering, University of Florida, as a thesis.

Acknowledgement is due also to several other persons who made contributions during the course of the project. These include Dr. R. A. Morgen, until recently Director of the Engineering and Industrial Experiment Station; Prof E. P. Martinson, Head, Department of Industrial Engineering, College of Engineering, University of Florida, under whose supervision Mr. Sahlie worked; Prof. F. H. Crabtree and Prof. John C. Reed, of the College of Engineering; and Mr. Frederick H. Bair, Jr., Supervisor, Development Division, Florida State Improvement Commission.

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INTRODUCTION

The work described herein had two objectives. The first was to determine whether the retirement village idea has found wide enough acceptance among older people to justify an engineering study of retirement village planning. This was accomplished by means of a questionnaire sent to a large number of older persons.

The second objective was to present a proposed plan for an engineering study of the problem if the acceptability of these villages was determined. This proposed plan has been developed and is herewith presented.

R. S. SAHLIE

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CHAPTER I

THE PROBLEM

The desire of many older persons to spend their years of retirement in Florida is a phenomenon which has been recognized for many years. The concentration of retired persons in communities such as Saint Petersburg has been noticed by all who are familiar with them. But, until recent years, few have realized the extent of the increase in older population in Florida, the prospect of further increases, and the potential social and economic effects of this increase. To gain a better understanding of the magnitude of the percentage increase and of the rate of increase let us consider some significant facts from a recent research report.¹

From 1940 to 1950 the number of persons age 65 and older increased by 106,278, from 131,217 to 237,495, representing a percentage increase of 81. Since the turn of the century the older population of Florida has increased by 1604 per cent. During the same period of time the population under age 65 was increasing 392 per cent.²

What factors contributed to this remarkable increase in the population of older persons? Can this trend reasonably be expected to continue in the future? The answers to these questions are provided in data from the census of the United States. Analysis of these data show the following factors which, we may logically conclude, are causing the proportion of older persons in our population to increase.

Life expectancy is increasing. The life span of Americans has been steadily increasing for many years. White persons in 1900 had a life expectancy of 47.6 years, but by 1948 white persons could expect an average life of 68.0 years.³ There is little reason to believe that this long term trend will be reversed in the future. That we may look forward to ever-increasing life expectancy is further illustrated in Figure 1 which shows the trends of death rates both for Florida and for all states where death-registration records are kept (since 1933 the death-registration areas have included all states in the country). This figure shows very clearly the long-term decreasing trend in the death rate, which is a reflection of the ever-increasing life span.

Migration of older persons into Florida is significant. In the decade 1940-1950 an estimated 40,906 persons over 64 years of age came to Florida to live. An additional 55,669 persons of the age group 55-64 came to the state during the same period and reached age 65 by 1950.⁴ These 96,565 new citizens represented 40 per cent of the state's older population in 1950. Thus in 1950, 40 per cent of persons over 64 years of age had come to Florida in the previous decade.⁵ It is evident that migration is playing a large role in the increase of Florida's older population.

¹T. Stanton Dietrich, "Florida's Older Population" (Retirement Research Division, Florida State Improvement Commission, January, 1952). (Mimeographed)

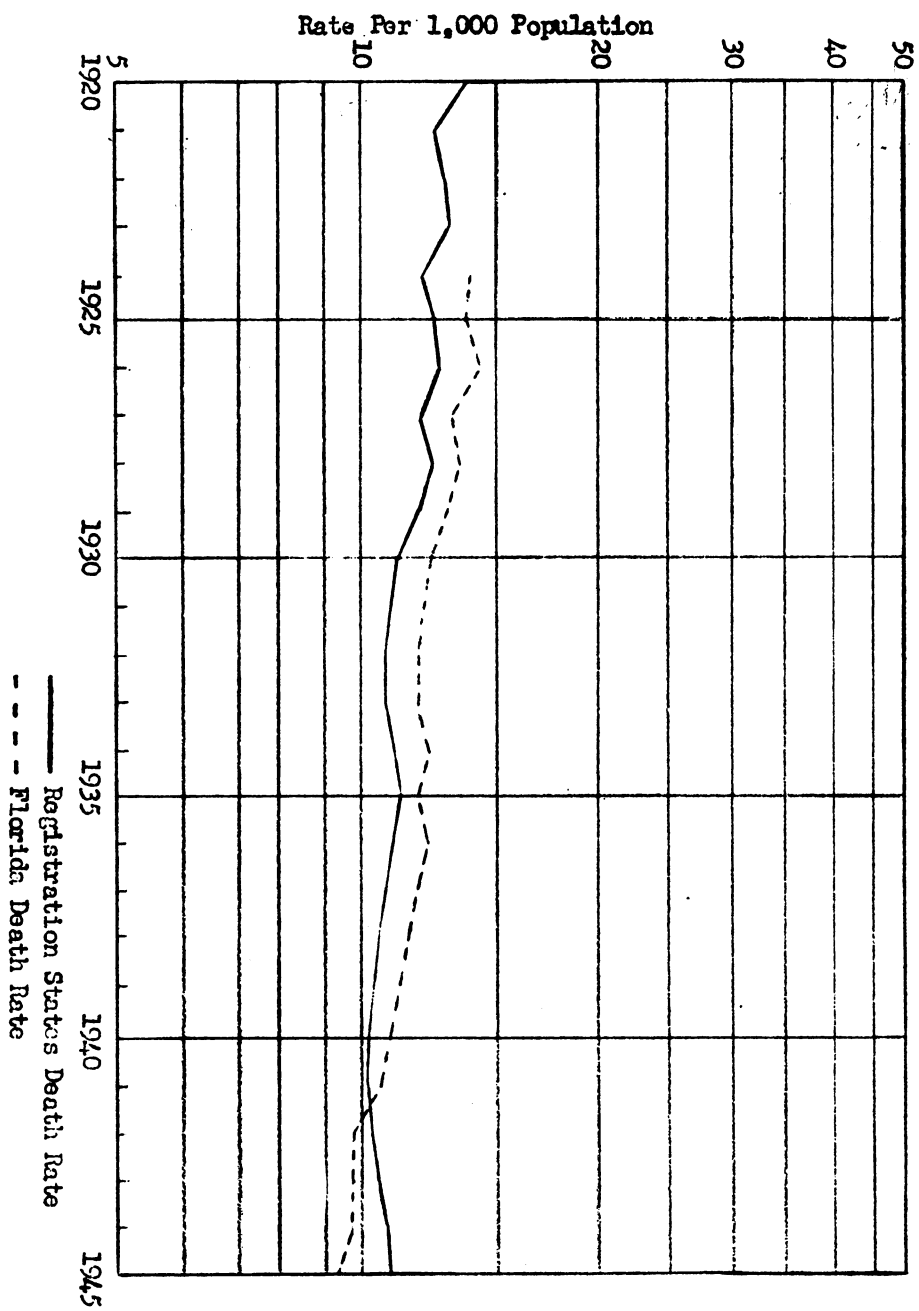
²*Ibid.*, p. ix.

³U. S. Federal Security Agency, *Estimated Average Length of Life in the Death-Registration States*, (Vital Statistics—Special Reports, Selected Studies), Vol. 33, No. 9, Feb. 16, 1951.

⁴Dietrich, *Op. cit.*, p. 21.

⁵*Ibid.*, p. viii.

Figure 1.--Trends of Crude Death Rates



There is a long term trend of decreasing birth rate. The prospects of a larger older population takes on greater significance when we realize that the birth rate both in Florida and the United States as a whole shows a long term decreasing trend. A look at Figure 2 will reveal that the birth rate steadily decreased until the wartime "baby boom" developed.¹ It seems reasonable that this long term trend will continue. An increased life expectancy plus a declining birth rate means that the ratio of older persons to younger persons will increase, placing a greater burden on younger persons to support old persons unless the old persons are able to pay their own way. This is the crux of the problem which faces Florida today and is growing in importance with the passage of time. Obviously, a very desirable solution to this problem is to find ways to help older citizens to be self-sufficient.

The seriousness and urgency of this problem has not gone unrecognized. On October 6, 1950, Governor Fuller Warren of Florida issued the following proclamation:

PROCLAMATION

State of Florida

Executive Department

Tallahassee

WHEREAS, Florida has long been the vacation and retirement goal of millions of citizens of this country, and

WHEREAS, recently adopted industry pension plans and the broadening of the National Social Security program will make it possible for hundreds of thousands of retired workers to spend their declining years in a place of their own choosing, and

WHEREAS, large numbers of these retired workers will come to Florida, where they may find warmth, comfort, and the kind of recreational and social activities which make for good health and long life, and

WHEREAS, the coming to Florida of large numbers of retired persons will have a profound effect upon the economic and social life of Florida and will create many problems for the retired workers themselves, and

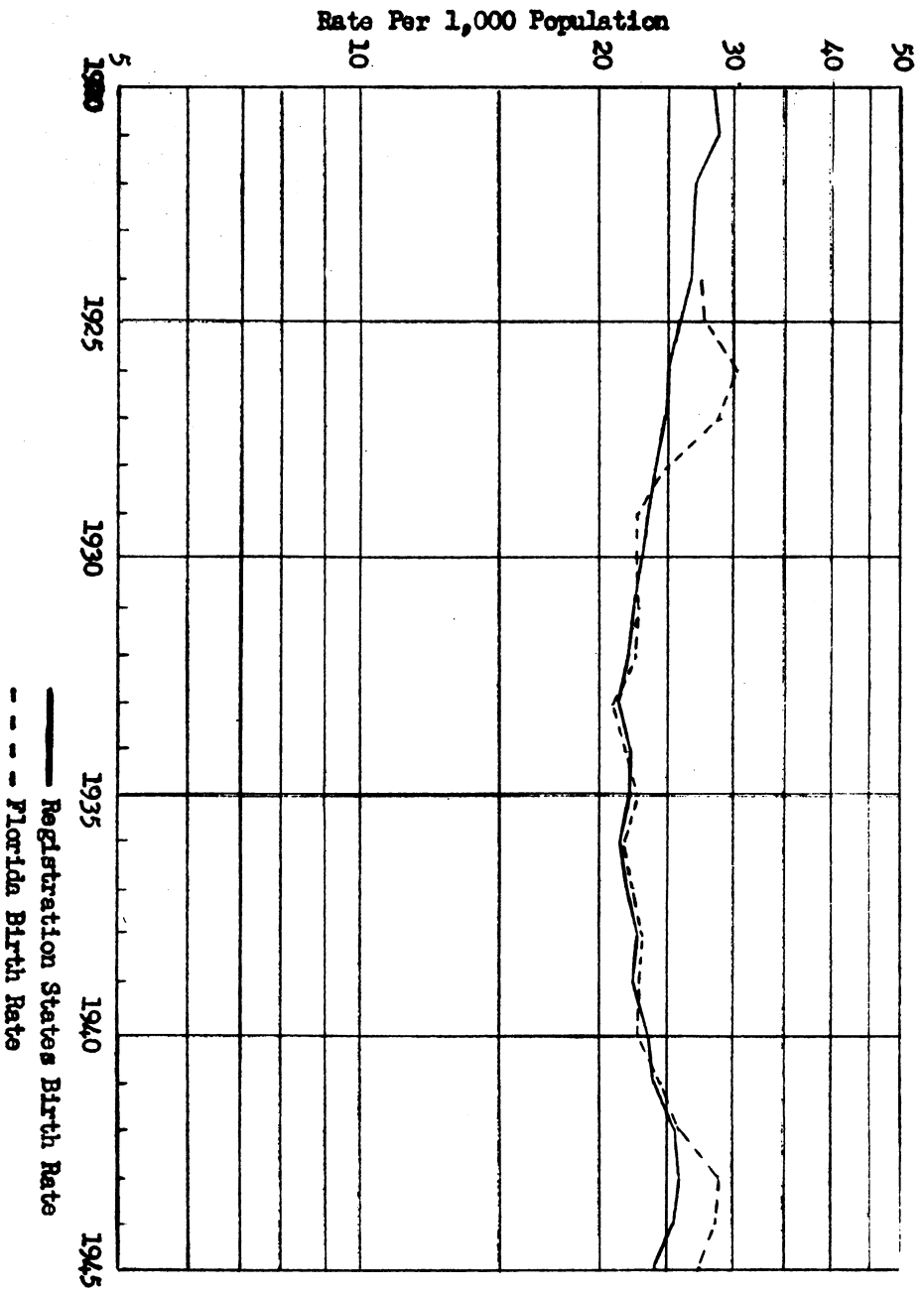
WHEREAS, in the interest of the happiness and welfare of these new citizens of Florida, and the general social and economic well-being of our entire state, careful study and organized assistance should be given to this movement:

NOW, THEREFORE, I, Fuller Warren, by virtue of the authority vested in me as Governor of the State of Florida, do hereby:

1. Designate the Florida State Improvement Commission as the State agency with primary responsibility in the field of studying, investigating, making plans for and assisting in the movement of retired persons to Florida. Inquiries in this field addressed to other state agencies may be referred to the Improvement Commission for official response. The Improvement Commission shall give assistance to and coordinate the work of state, local and private agencies in this field.

¹*Ibid.*, p. 10.

Figure 2.--Trends of Crude Birth Rates



2. Establish the Citizens Committee on Retirement in Florida to advise the Florida State Improvement Commission with respect to the movement of retired persons to Florida. The Citizens Committee on Retirement in Florida shall consist of not more than 15 members to be named by the Governor. The members of the Citizens Committee on Retirement in Florida shall serve without pay; shall elect one of their number as Chairman; and shall report progress from time to time to the Governor and the public.

3. Authorize and direct all State agencies, boards, bureaus and departments to assist and cooperate with the Citizens Committee on Retirement in Florida and the Florida State Improvement Commission in this movement.

IN WITNESS WHEREOF, I have hereby set my hand and caused to be affixed the Great Seal of the State of Florida at Tallahassee, the Capital, this 6th day of October, A. D. 1950.

/s/ FULLER WARREN, Governor

Attest:

/s/ R. A. GRAY, Secretary of State

As a result of this proclamation, the Florida State Improvement Commission set up a Retirement Research Division with the responsibility of directing and coordinating efforts to solve the problem. This group has been active in collecting information and informing persons who inquire about retirement in Florida about what to expect when they come to this State. The Retirement Research Division has also made several studies of retired persons and persons considering retirement and has published the findings of these studies; which will be discussed in greater detail in another section.

As a result of their studies of the problem of older persons with low fixed incomes migrating to Florida to retire, the various divisions of the Florida State Improvement Commission have advanced the idea of the "Sponsored Neighborhood Village" as a partial answer to the problem. The Improvement Commission suggests that large employers, labor unions, and other interests sponsor communities in Florida to meet the needs of retired persons. These villages would be privately owned and operated without contributions from State funds. They would be a short distance from one of Florida's larger towns. The houses would be designed to meet the special needs of older persons, would be of good quality and the rental would be low. The village would be made up of five hundred or more living units, to permit savings in construction and operation. It would have a manager who would direct maintenance work and plan various community activities. A community center would include a food store, shops, recreational facilities and a community meeting hall. It is hoped that through this plan retirees and their families will get low cost, high quality housing, and the State of Florida will head off potential social and economic problems.¹

The location and planning of a village of this type, the design of the dwelling units, selection of equipment, and the analysis of economic feasibility require research of an engineering nature.

¹"Florida Newsletter on Retirement Research" (Retirement Research Division, Florida State Improvement Commission, P. O. Box 930, Tallahassee, Florida), n.d.

It was the intent of this thesis first to propose a tentative outline for a study of this problem, and second to investigate the acceptability of the retirement village idea to older persons, and if acceptable to determine the features which they would desire in such a village. The results of this investigation then led to modification of the tentative outline. The investigation was conducted by sending questionnaires to two distinct groups of older persons and analyzing their replies to the questions.

CHAPTER II

AN ENGINEERING APPROACH TO RETIREMENT VILLAGE PLANNING FOR FLORIDA

The idea of retirement villages has been the subject of nation-wide publicity, leading to some unfavorable comment. Those who criticize the plan argue that older persons do not want to live in villages made up largely of retired people, but would rather live in neighborhoods made up of people of all ages. Critics also hold that retired persons prefer to go on living in the same communities after retirement rather than having to adjust to entirely new surroundings. It was in order, therefore, to determine the reactions of retired persons or persons contemplating retirement toward the retirement village idea. This was accomplished by the use of a questionnaire sent to older persons. This questionnaire not only determined the reaction to the retirement village idea, but also sought opinions about various features of the village, dwelling units, rentals, and other information needed in the planning of such a village. The balance of the research program and the questionnaire phase were mutually dependent; that is, wording of the questionnaire depended upon the work which followed; also the course of the research was partially determined by the results of the questionnaire survey. In view of this relationship, a tentative program was set forth and later modified on the basis of the survey results. The research thus planned included the following items for study:

Factors affecting choice of location for the village.—Determine the advisability of locating the village near a large city; the importance of traffic hazards, noise, transportation facilities, and climate; the desirability of locating near a lake, river, or ocean.

Village needs for services.—Study the possibility of including a food store, service station, drug store, barber and beauty shop, laundry and dry cleaning shop, auditorium, recreation facilities, cafeteria, library, and hobby shop.

Village layout.—Suggest layouts for the village which provide for routing of traffic around the perimeter; allow residents to walk to the shopping center without crossing traffic, and provide ease of movement for persons confined to wheelchairs. Plan should orient houses so that all residents have a pleasing vista.

Design of dwelling units.—Present plans which are adapted to the special needs of older persons. Safety, comfort, convenience and privacy should be provided for. Kitchen design should receive special attention. A resident should be able to prepare a meal with a minimum of stooping or stretching, and design should plan for motion economy. The entire dwelling should be designed for economies of construction in large numbers.

Choice of equipment for dwellings.—Careful consideration should be given to the choice of standard equipment for the dwellings from the standpoint of safety, convenience, and economy.

Design of special equipment.—Special equipment designs should be developed in cases where standard equipment is not suited to the special needs of the village resident.

Economic analysis.—Study the village plan from the financial standpoint; recommending depreciation rates and methods of financing.

Management policies.—Study various plans of payment; i.e., monthly or yearly rental, life estate, outright purchase. Recommend maintenance procedure. Determine the desirability of having a planned program of recreation.

These items were then incorporated in the following tentative research program:

Outline of program

- I. Survey of need and acceptability (questionnaire testing of retired people).
- II. Location factors (climate, transportation, communication, job opportunities).
- III. Village facilities (stores, recreation, laundries, hobby shops, etc.).
- IV. Village layout (general types of areas, streets, parking, etc.).
- V. Building layout design (floor space, utility space).
- VI. Building specifications (general types of buildings; single or multiple).
- VII. Selection of standard equipment (heating, refrigeration, lighting, etc.).
- VIII. Choice of utilities (heat, light, water, sewage, etc.).
- IX. Design of special equipment (special refrigerators, stoves, etc.).
- X. Economic analysis—breakeven chart.
- XI. Management policies.
- XII. Special problems and alternatives.

The questionnaire study determined the acceptability of the retirement village idea to older persons, and ascertained certain features they would need in the village and dwellings. The research program was then modified on the basis of the survey results.

CHAPTER III

REACTIONS OF OLDER PERSONS TO THE FLORIDA RETIREMENT VILLAGE IDEA

The Retirement Research Division of the Florida State Improvement Commission has conducted two studies which provide data of particular value to an engineering study of retirement villages. The first of these is a study of the retired population of Saint Petersburg,¹ which was made in July and August, 1950.² Information was obtained by direct questioning of a representative sample of that city's retired population. A total of 441 questionnaires were completed, containing information about 802 persons. While the questionnaire used in this study contained no direct questions about the retirement village idea, it did request information about the retiree's income and preference in living arrangements.

Of the persons questioned, 78.7 per cent indicated that they preferred to own a house, while 17.2 per cent preferred to rent a house or apartment. The remaining 4.1 per cent of persons questioned did not reveal their preference. Of the same group of people, 83.2 per cent lived in houses, 11.8 per cent lived in apartments, 2.5 per cent lived in hotels or rooming houses, and the remaining .9 per cent had other living arrangements. When evaluating these data it should be remembered that this study was conducted during the months of July and August when many of the hotels were closed and the apartment and rooming house population was at a seasonal ebb.

Persons who did not own their living quarters were questioned as to the monthly rentals paid. Of the 74 persons in this category, 6.7 per cent paid less than \$25 rent, 39.2 per cent paid \$25 to \$49 rent, 33.8 per cent paid \$50 to \$74 rent, 12.2 per cent paid \$75 to \$98 rent, and 2.7 per cent paid rentals of \$99 or more. The remaining 5.4 per cent did not disclose the amount of rent paid.

Unmarried retired persons were asked to indicate the type of living arrangements they would prefer if they were to retire at that time. Of 147 unmarried persons, 47.6 per cent preferred to live alone in a house or an apartment, 34.0 per cent preferred to live with another person of the same age and sex in a house or an apartment, and none preferred to live in a rooming house with central dining facilities. The other 18.4 per cent of unmarried did not reveal their preference as to living arrangements.

Retired persons were also questioned as to their income. More than one-third of those questioned would not disclose the amount of their income. The indicated monthly income of those answering this question are shown in Table 1.³

While a study of persons already retired in Florida provides an insight into retirement conditions as they now exist, future planning should be based on means and preferences of those persons who are actually considering future retirement in Florida.

¹Similar studies have been conducted in Orlando and West Palm Beach, but results of these studies were not available at the time of this writing.

²Irving L. Webber, "The Retired Population of St. Petersburg—Its Characteristics and Social Situation," (Florida State Improvement Commission, November, 1950). (Mimeographed)

³*Ibid.*, p. 123.

TABLE I
MONTHLY INCOME OF RETIRED PERSONS
Saint Petersburg, 1950

Income per Month	Number	Per Cent
Less than \$25.	11	4.0
\$25. - \$49.	35	12.6
\$50. - \$74.	32	11.5
\$75. - \$99.	29	10.4
\$100. - \$124.	39	14.0
\$125. - \$149.	27	9.7
\$150. - \$174.	24	8.6
\$175. - \$199.	10	3.6
\$200. - \$299.	34	12.2
\$300. - \$399.	19	6.9
\$400. - \$499.	5	1.8
\$500. - \$699.	8	2.9
\$700. - \$998.	3	1.1
\$999. or more	2	.7
TOTAL	278	100.0

Recognizing the need for a study of this type, the Florida State Improvement Commission in August, 1951, sent questionnaires to persons who had previously requested information about retirement in Florida. In a letter accompanying the questionnaire, the recipients were told that a neighborhood village was actually in the planning stage; that basic monthly rental for a one-bedroom home would be \$33; and that if 500 or more persons were willing to live in it, the sponsors would go ahead with the project.¹ Persons were asked to complete and return the questionnaire only if they were interested. A total of 306 questionnaires were returned, representing a response of approximately 40 per cent. The questionnaire included the following questions of value here:

1. Would you like to live on or near the Gulf of Mexico?
2. How many bedrooms would you need?
3. How many people would live with you permanently?
4. Would you need an automobile garage?

Of the 306 persons responding, 84.4 per cent indicated that they would like to live on or near the Gulf of Mexico; 3.9 per cent indicated that they would not like such a location. The remaining 11.7 per cent were undecided, gave other replies, or gave no reply at all to this question.

In answer to the second of these questions 50.6 per cent felt they would need 1 bedroom; 8.2 per cent wanted 1 or 2 bedrooms; 36.6 per cent indicated they would require 2 bedrooms; 2.3 per cent wanted 2 or 3 bedrooms; 1.3 per cent desired 3 bedrooms; and the remaining 1.0 per cent gave no reply.

Of the respondents 16.3 per cent would be alone in his or her household; 54.3 per cent would live in a household of 2 persons; 21.2 per cent would have a total of 3 persons in the household; while 6.9 per cent would live in a group of 4 or more persons. The other .7 per cent gave no reply to this question.

Almost two-thirds, 65.7 per cent, desired some form of shelter to house their automobiles; 32.0 per cent felt they would not need such shelter; while 2.3 per cent did not reveal their preference.

¹"Housing Needs of Retired People," (Prepared by the Florida State Improvement Commission, Tallahassee). (Mimeographed)

The results of these two studies provided much valuable information as to the needs, preferences, and financial resources of older persons. The fact that 40 per cent of persons receiving questionnaires in the second of these studies definitely indicated a desire to live in a Florida retirement village would certainly seem to indicate a great potential market for villages of this type. To complete an engineering study of this problem, however, information of much broader scope is needed.

The next step in the program, then, was to obtain this needed information. To this end, the author conducted an extensive questionnaire survey of older persons.

CHAPTER IV

THE SURVEY

The questionnaire survey conducted in this project had several objectives. The first of these was to ascertain whether it is reasonable to believe the retirement village idea would receive wide acceptance among persons who wish to retire in Florida. If this plan is acceptable to large numbers of older persons, then a complete engineering study of the problem is justified. Secondly, it was desired to learn the preferences of those persons who would actually like to retire in such a village. Lastly, the study was designed to give an indication of the rentals that could be paid by persons desiring to live in one of these villages. It was believed that knowledge of these facts would provide a sound basis for further study of the village idea.

The first problem met in this study was finding a suitable group of persons to question. In order to be sure of obtaining an accurate estimate of the proportion of older persons who would like to retire in Florida, the sample group had to be selected at random from all older persons. Obviously this is out of the question for this study. It was not necessary to estimate accurately the number of persons who might be expected to retire in Florida or the number who would favor the retirement village idea. It was sufficient to show that there is good reason to believe that the retirement village idea would be acceptable to large numbers of retired persons.

Two groups of persons were questioned in the course of this study. The first group was made up of persons who have written to the Florida State Improvement Commission asking about retirement in Florida. The Improvement Commission has a mailing list of approximately 2,200 such persons. The second group questioned was made up of approximately 1,800 pensioners of a large corporation in upstate New York. This corporation agreed to cooperate in the conduct of this study, but asked that its name, and the names of persons questioned not be published. The nature of these two groups placed a certain bias on the results obtained. In order to determine whether the answers to the questions differed significantly between them, the questionnaires were marked so that they could be easily identified by group.

The questionnaire was designed to give as much of the desired information as possible without being too lengthy. An explanatory letter (see Appendix) was attached to each questionnaire. Questionnaires to persons on the Improvement Commission mailing list were accompanied by a letter of transmittal, a sample of which appears in the Appendix. The corporation cooperating in this study mailed questionnaires to its annuitants with an appropriate cover letter. A copy of this letter with identifying parts deleted is included in the Appendix.

The corporation mailed 900 questionnaires to its annuitants, and the author mailed 861 questionnaires to persons on the Improvement Commission mailing list. As of June 29, 1952, 137 returns had been received from the corporation annuitants and 334 returns had been received from persons on the Improvement Commission list. This represented an overall response of 26.7 per cent.

To facilitate tabulation, and to permit rapid cross-classification of answers, the responses to the questionnaires were coded on McBee Keysort cards. Answers to the questions were coded by punching slots in the out-

side edge of one of these cards. The cards could then be sorted rapidly by use of a sorting needle. A sample coded card is shown in the Appendix.

The city and state postmarked on each return was recorded and coded on the cards along with answers to the questions, in order that geographical distribution of the returns might be tabulated.

CHAPTER V

RESULTS OF THE SURVEY

Of the 1,761 questionnaires mailed, 471, or 26.7 per cent had been returned by June 29, 1952. From the corporation annuitants 137 out of 900 were returned, giving a 15.2 per cent response. Persons on the Improvement Commission mailing list returned 334 out of 861, or 38.8 per cent of questionnaires mailed. For comparative purposes answers from the two groups were tabulated separately and are presented so as to facilitate comparison.

The first four questions were included to test the acceptability of the retirement village as it is now conceived and as outlined at the beginning of the questionnaire. A look at the answers given to these four questions will show wide acceptance of the idea among those questioned.

Questions five through seventeen were designed to provide information on which to plan villages of this type. In general, persons based the answers to these questions on the type of accommodations they expected to live in whether or not they wanted to live in a retirement village. For example, persons wanting to retire on a Florida farm would answer these questions with a farm in mind. In order to make sure that the information taken from these questions was applicable to Florida retirement villages, only persons who answered "yes" to all of the first four questions were included for analysis of questions five through seventeen. Persons in this category included more than 60 per cent of all persons returning questionnaires. Of the corporation group, 84 of 137 persons returning questionnaires answered "yes" to the first four questions; while 208 of 334 persons replying from the Improvement Commission group answered "yes" to these four questions. All persons returning questionnaires were included in the analysis of questions eighteen, nineteen, and twenty.

The geographical distribution of the returned questionnaires was recorded and analyzed. For purposes of this analysis the country was divided as follows:

Southeast.—Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee were included in this area.

Northeast.—Connecticut, Delaware, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, Wisconsin, and the District of Columbia were included in the Northeast area.

Midwest.—Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Wyoming were placed in this classification.

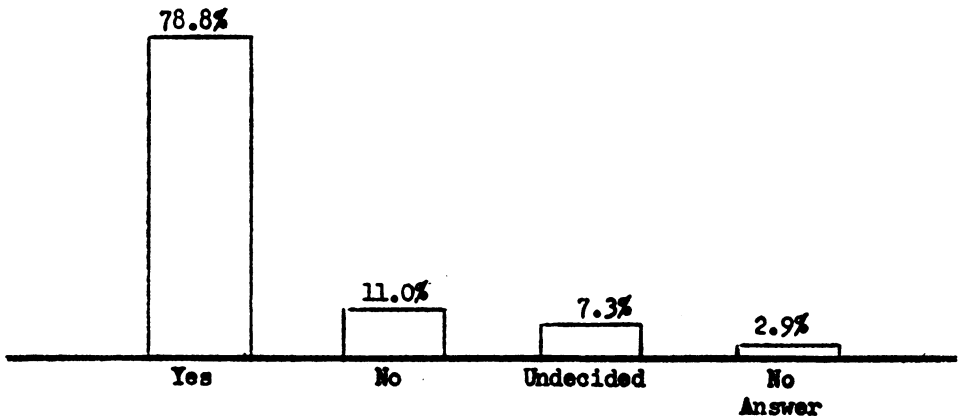
Southwest.—New Mexico, Oklahoma and Texas were included in this area.

Far West.—Arizona, California, Idaho, Nevada, Oregon, Utah, and Washington made up this classification.

Figure 3.—Analysis of Replies to Question 1

Do you think you would enjoy living in a village such as this?

Corporation Group
137 Replies



Improvement Commission Group
334 Replies

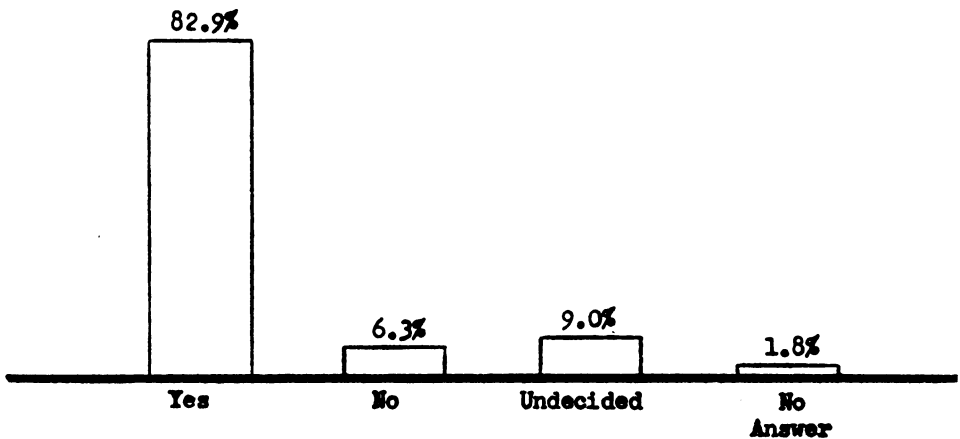


Figure 4.--Analysis of Replies to Question 2

Would you consider moving to this type of retirement village if you went to Florida to live?

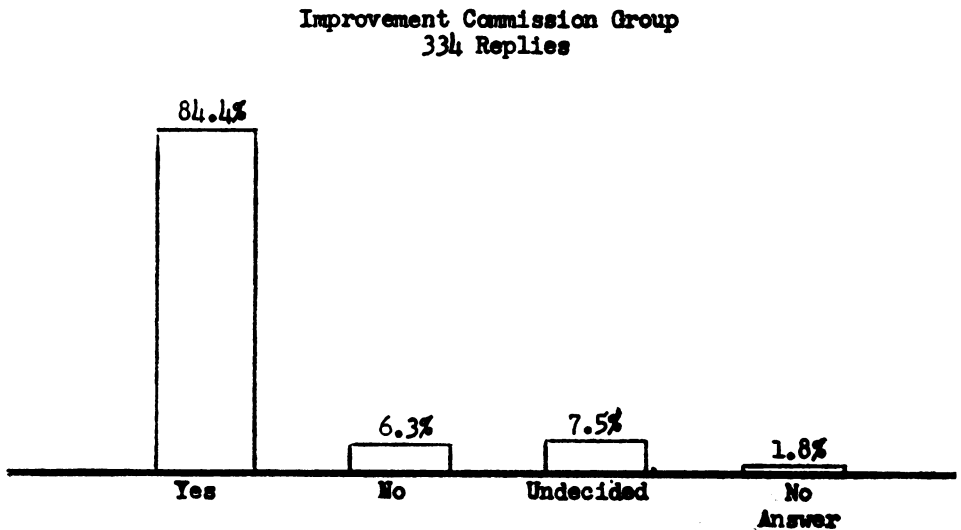
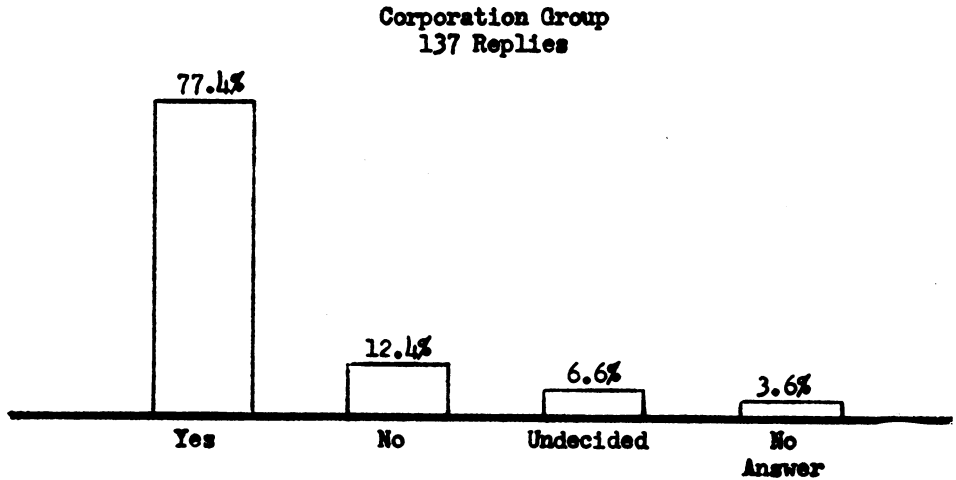


Figure 5.--Analysis of Replies to Question 3

Would you like to live in a village made up largely of retired people?

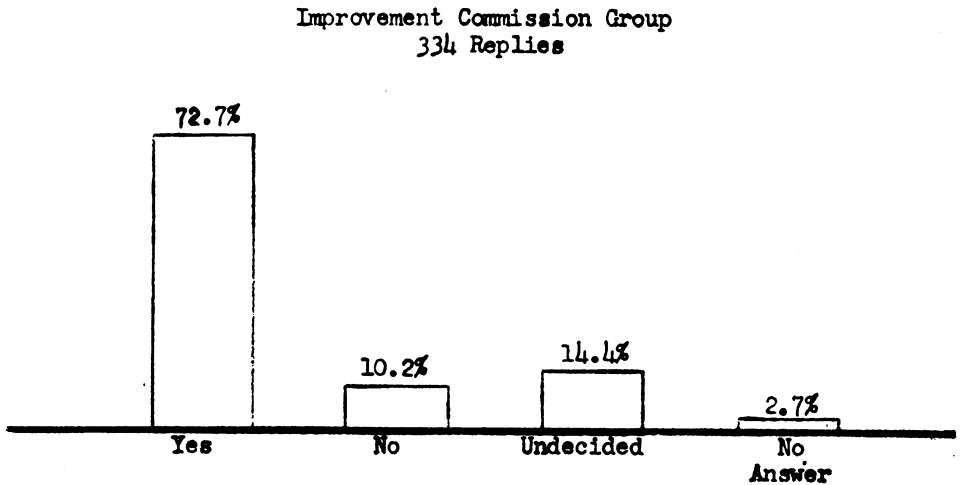
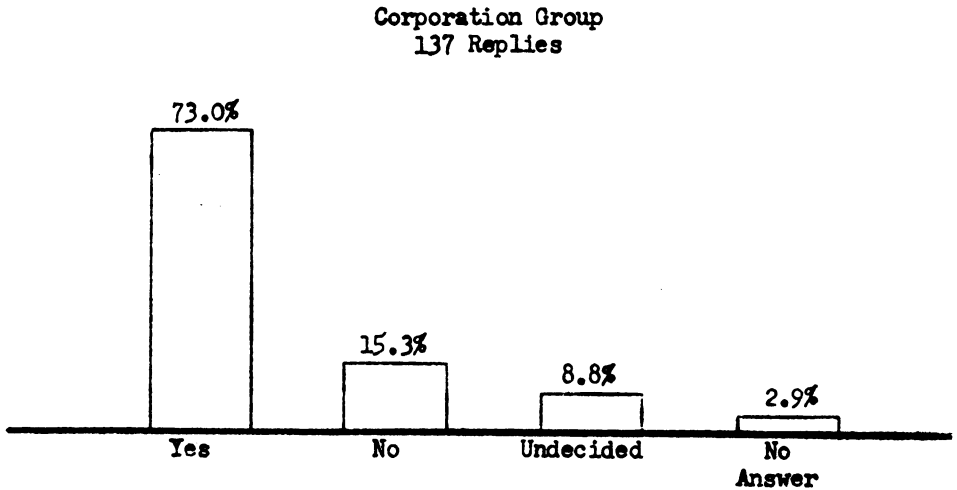


Figure 6.--Analysis of Replies to Question 4

Would you like to live in Florida?

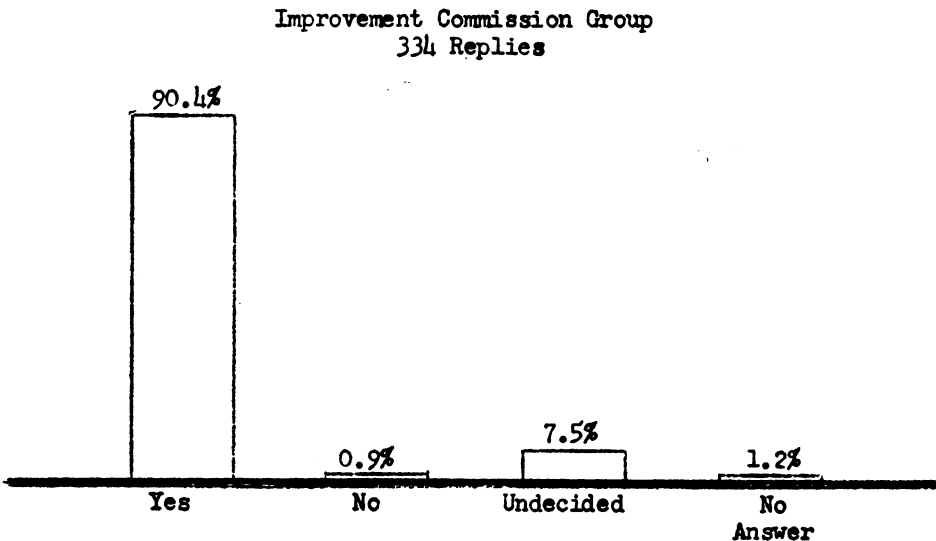
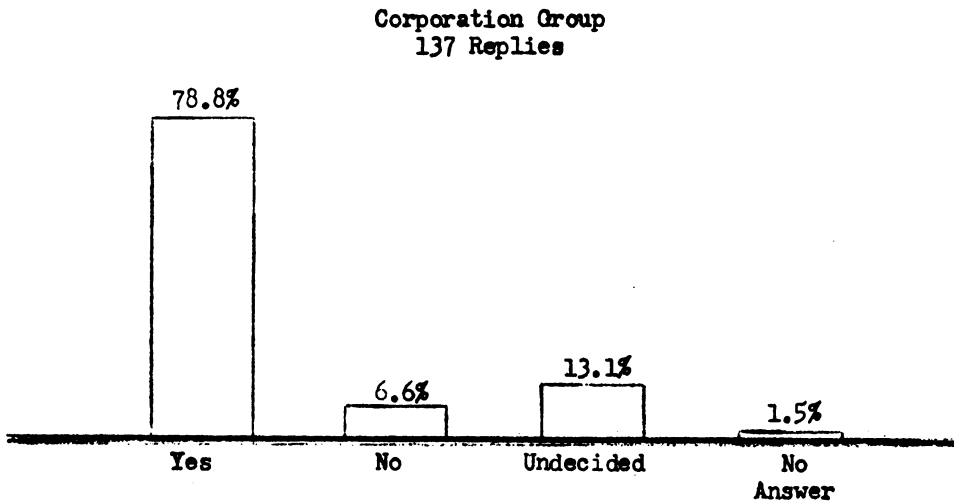
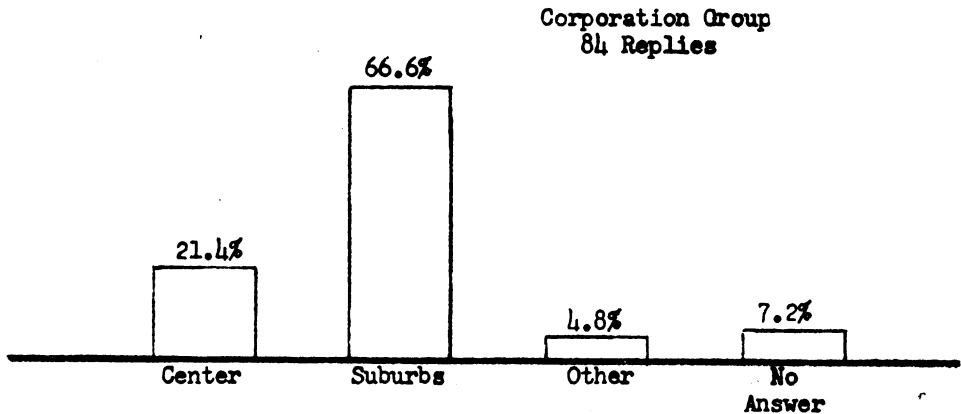


Figure 7.--Analysis of Replies to Question 5

Would you rather live:

Near the center of a city of 50,000 or more
In the suburbs of such a city
Other



Improvement Commission Group
208 Replies

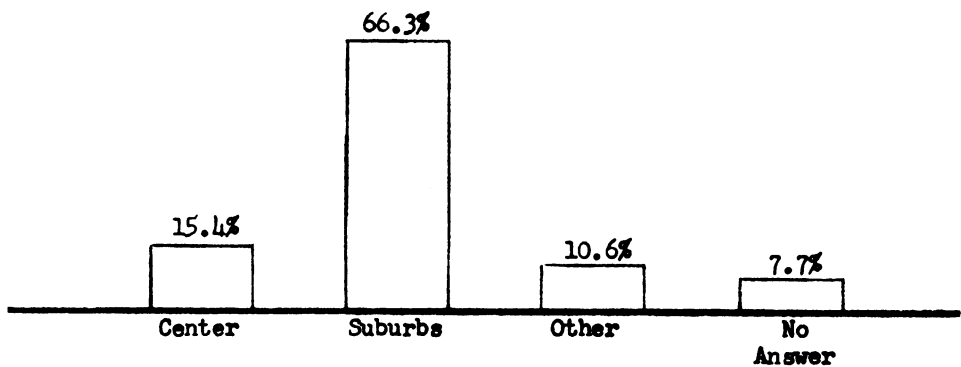
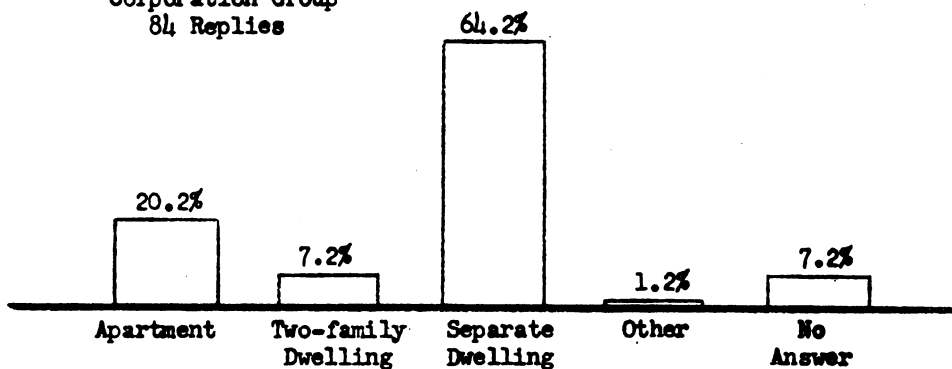


Figure 8.—Analysis of Replies to Question 6

Would you rather live:

In an apartment
In a two-family dwelling
In a separate dwelling
Other

Corporation Group
84 Replies



Improvement Commission Group
208 Replies

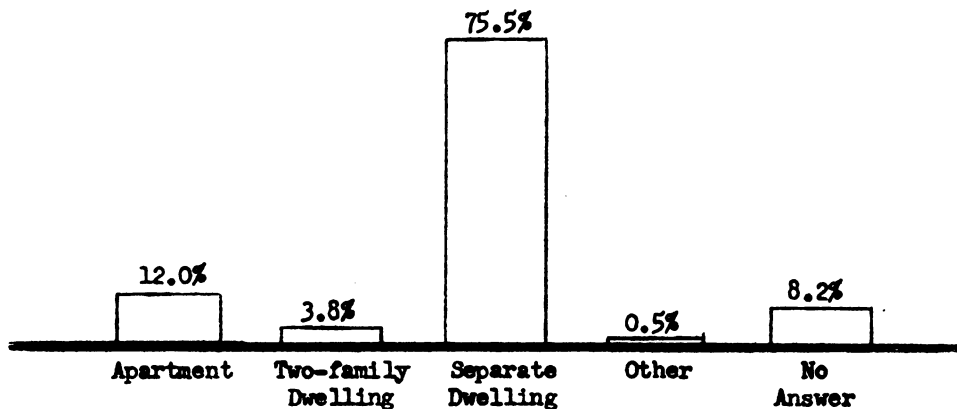
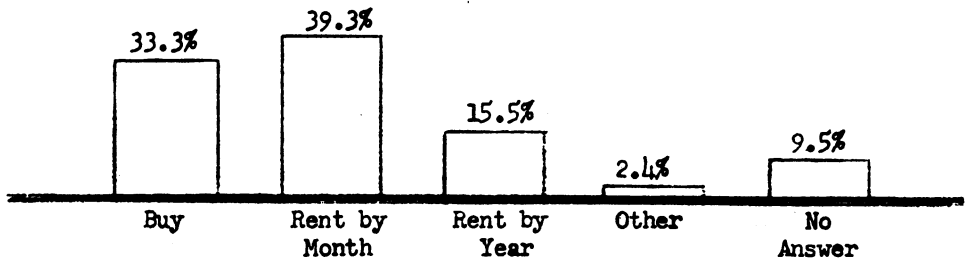


Figure 9.--Analysis of Replies to Question 7

Would you rather:

Buy your dwelling
Rent by the month
Rent for a year at a time
Other

Corporation Group
84 Replies



Improvement Commission Group
208 Replies

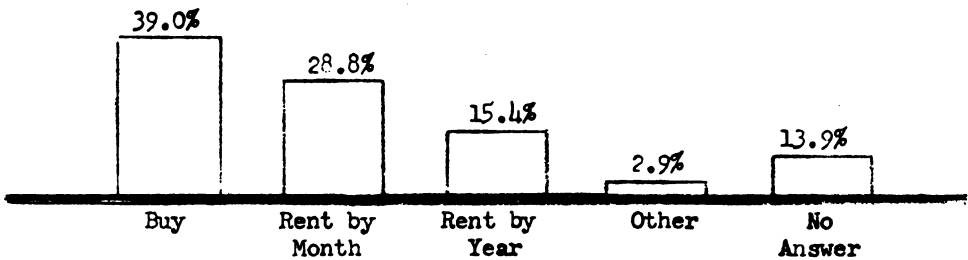


Figure 10.--Analysis of Replies to Question 8

Would you plan to live in Florida all year round (except for occasional trips)?

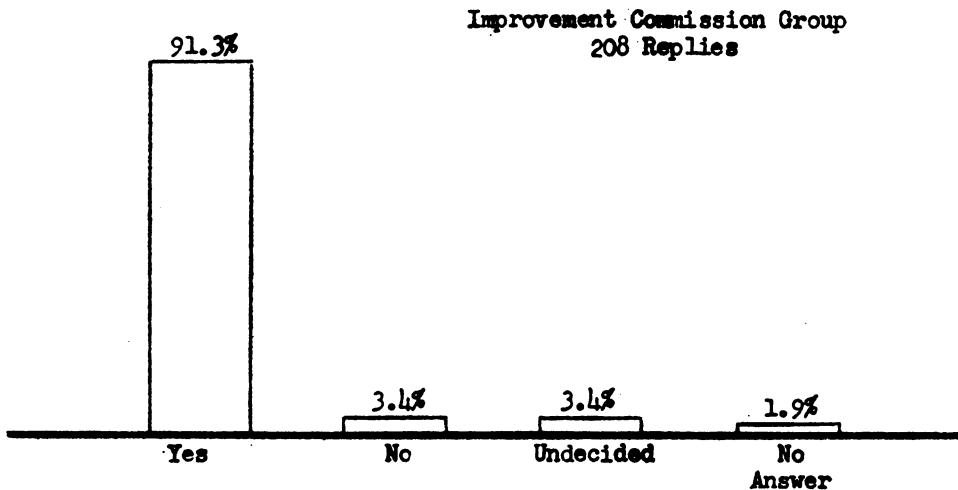
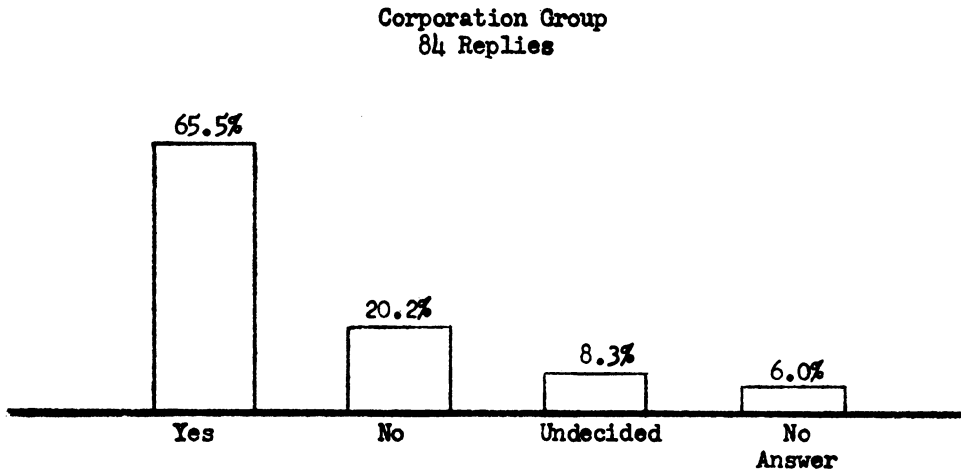


Figure 11.--Analysis of Replies to Question 9

How many bedrooms would you need?

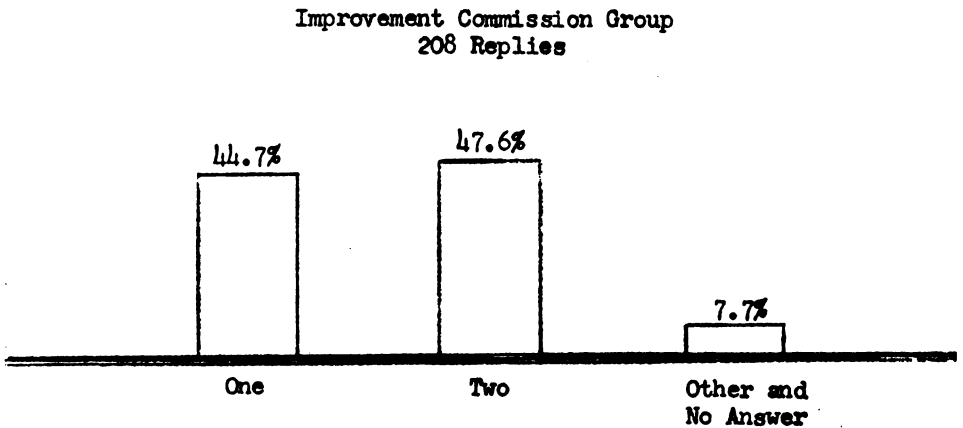
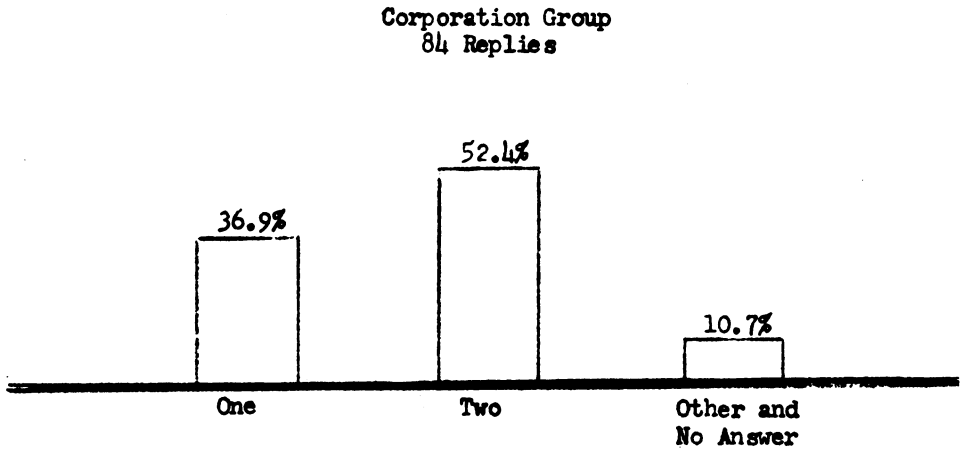


Figure 12.--Analysis of Replies to Question 10

Would you rather live in:

A one-story dwelling
A two-story dwelling

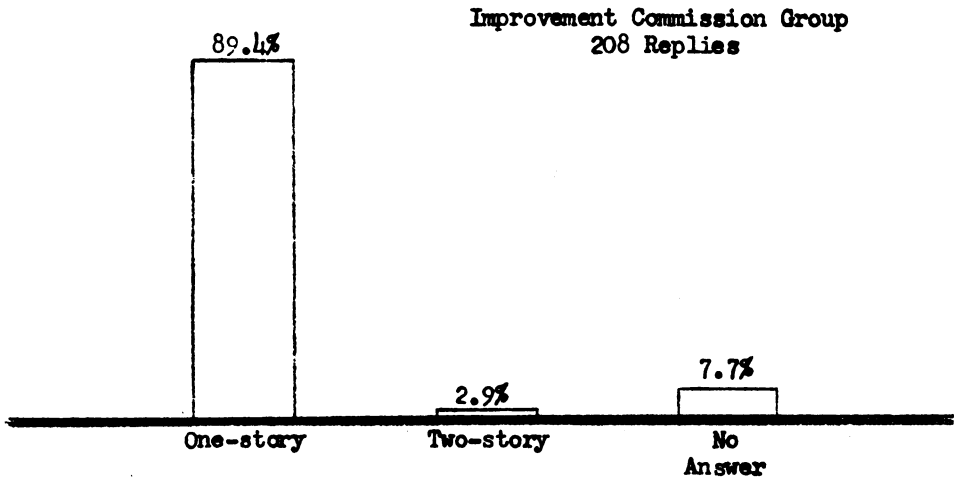
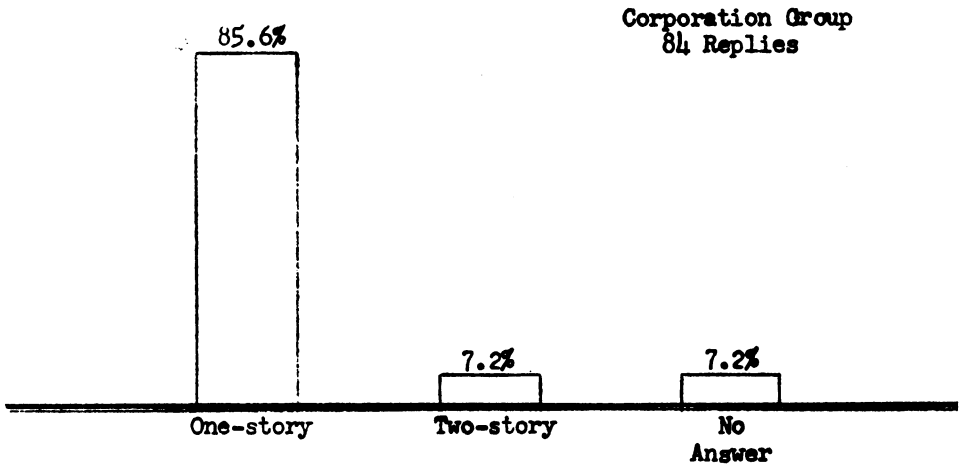


Figure 13.--Analysis of Replies to Question 11

How many people would live in your house permanently?

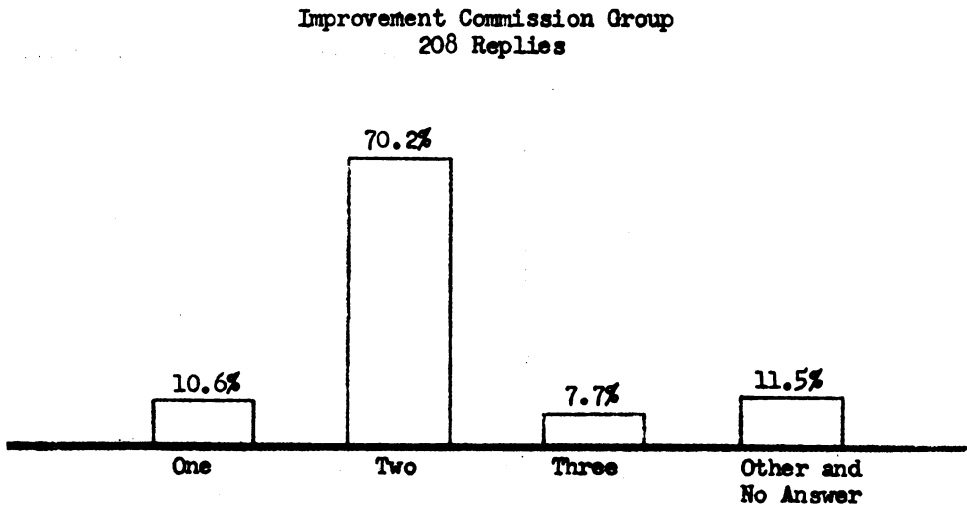
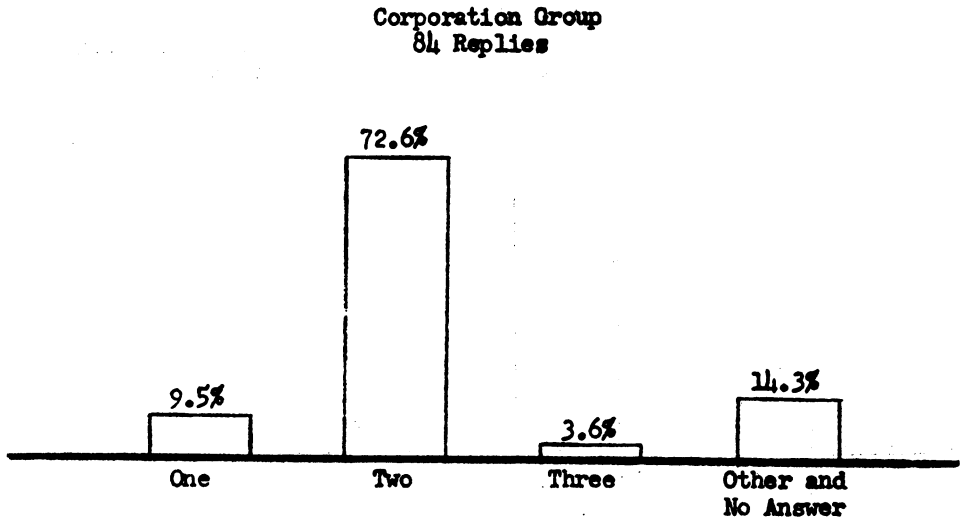


Figure 14.--Analysis of Replies to Question 12

Would you object to a house having a combination living and dining room?

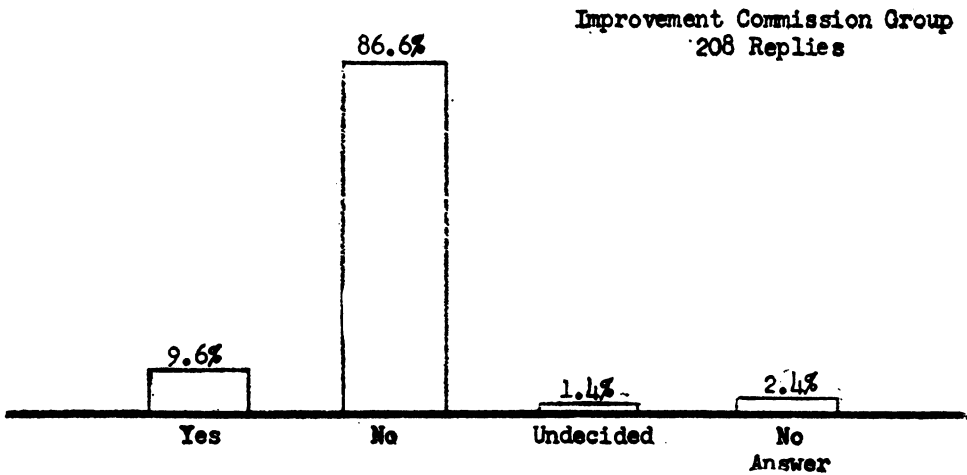
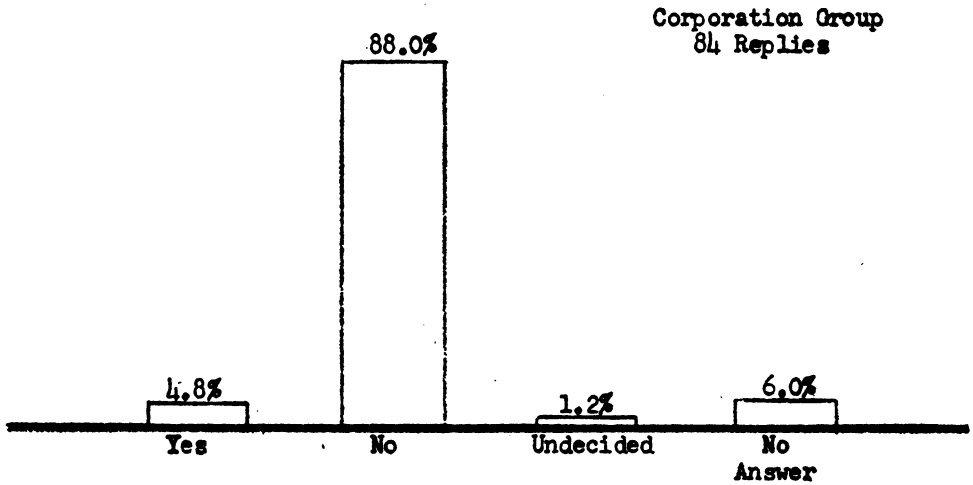


Figure 15.--Analysis of Replies to Question 13

Would you have an automobile?

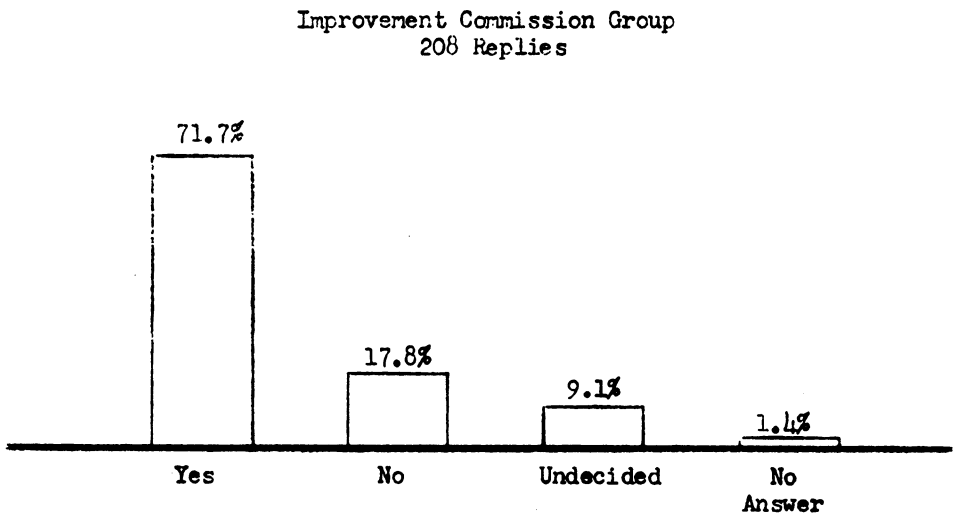
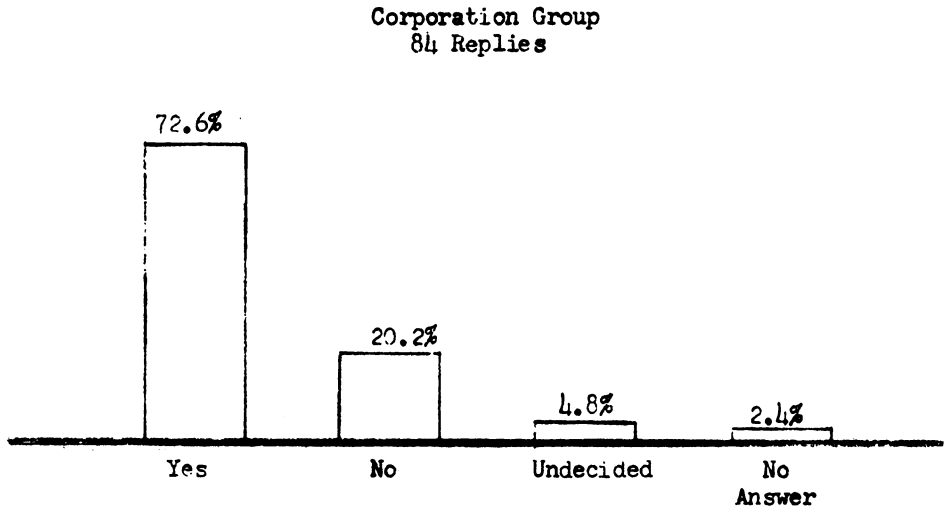


Figure 16.--Analysis of Replies to Question 14

Would you need a garage?

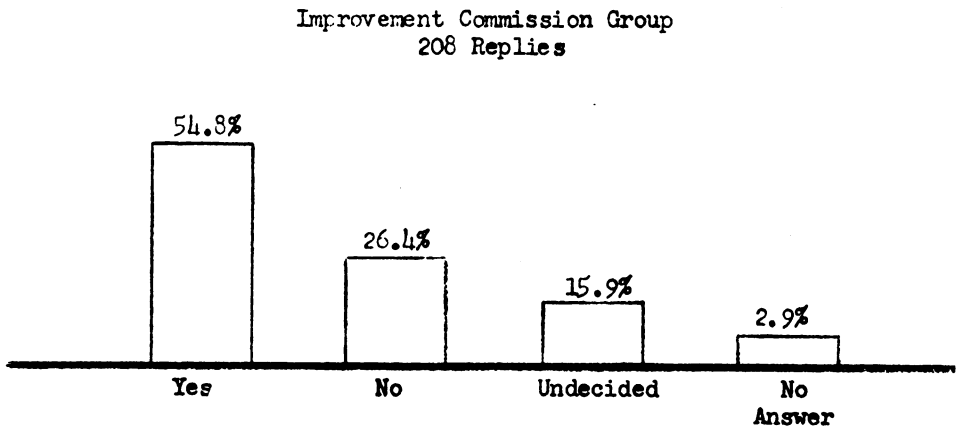
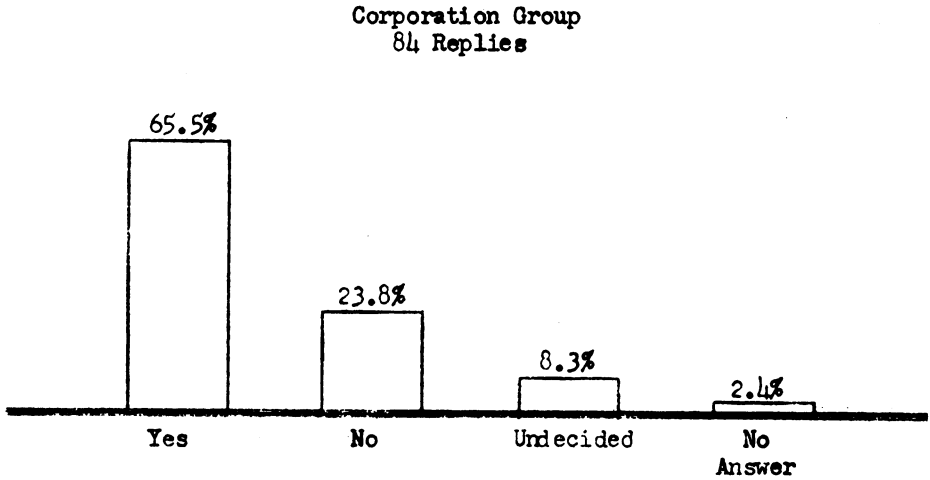


Figure 17.—Analysis of Replies to Question 15

Would you like a planned program of recreation such as shuffleboard, horseshoes, checkers, chess, bridge, canasta, etc.?

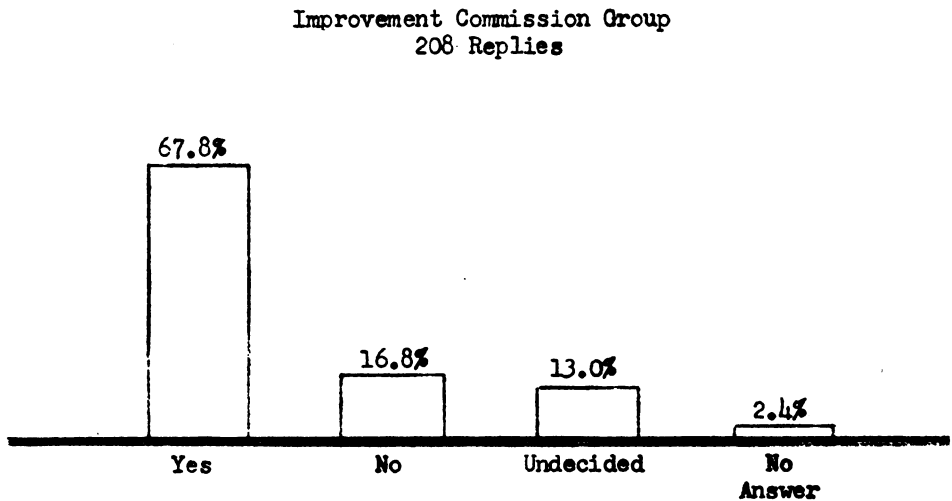
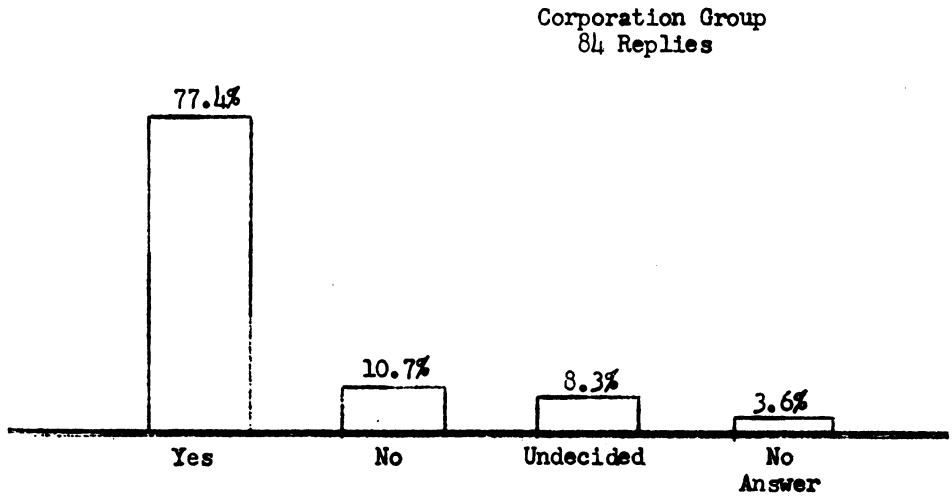


Figure 18.--Analysis of Replies to Question 16

About how much rent per month would you be willing to pay?

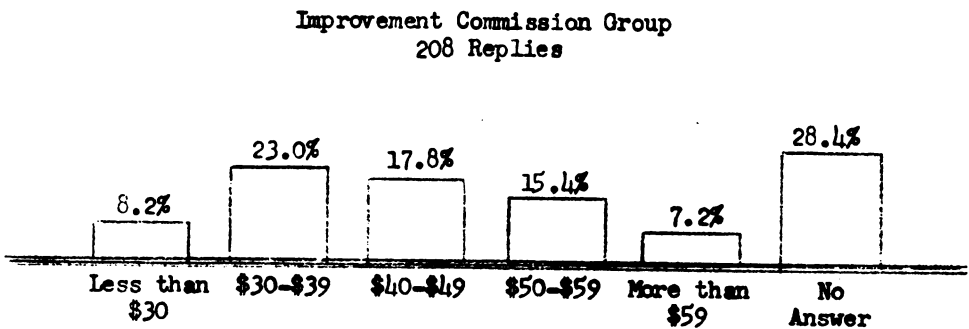
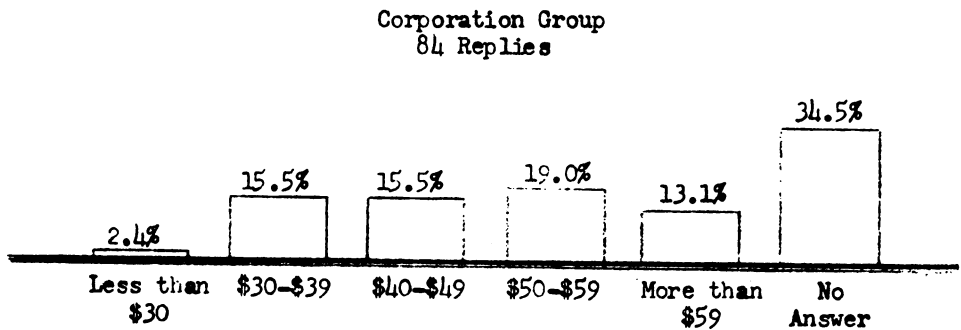


Figure 19.—Analysis of Replies to Question 17

About how much per month would you plan to spend in addition to rent

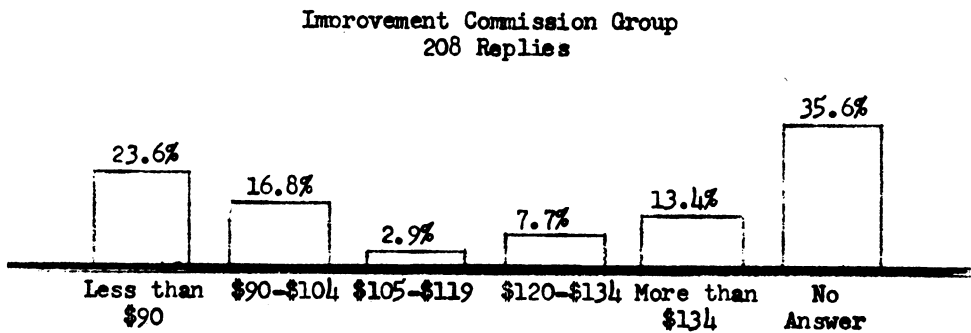
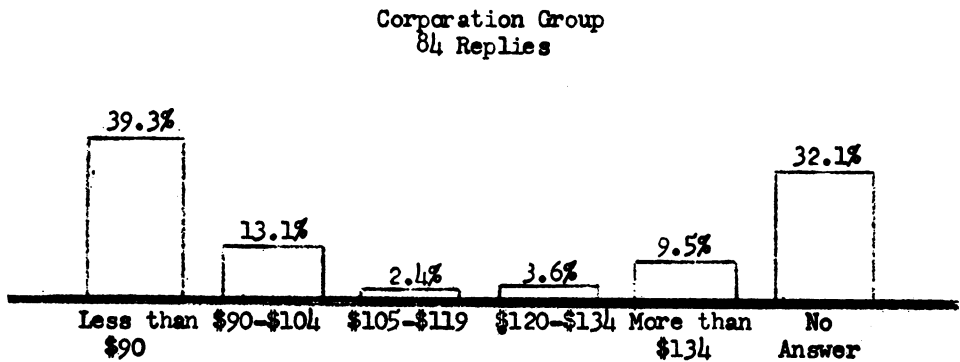


Figure 20.--Estimated Total Monthly Income

Based on Replies to Questions 16 and 17

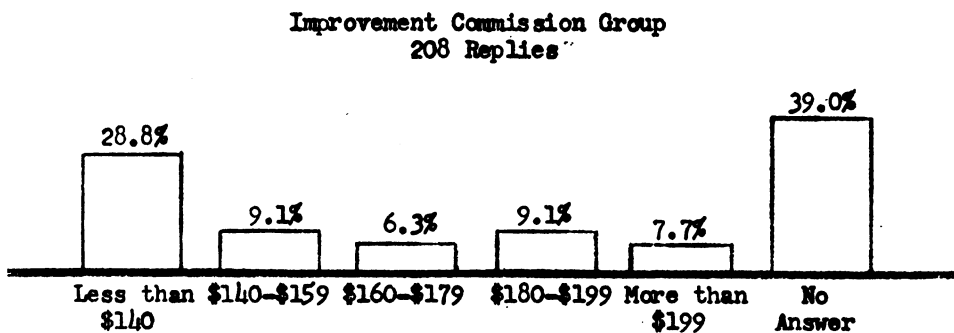
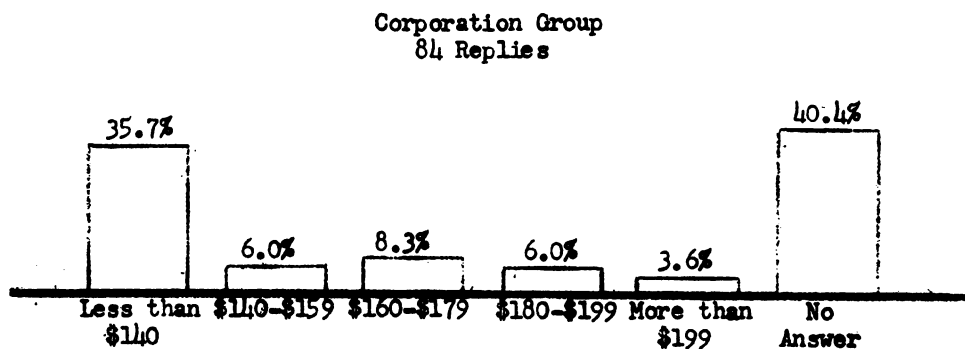
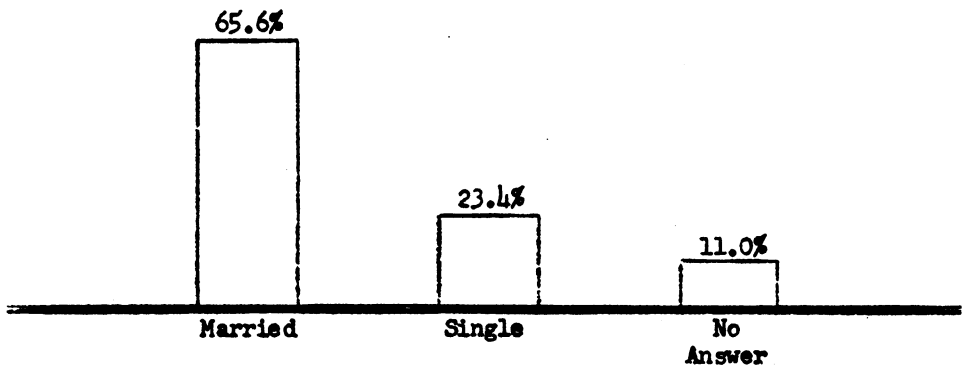


Figure 21.—Analysis of Replies to Question 18

Are you:

Married
Single

Corporation Group
137 Replies



Improvement Commission Group
334 Replies

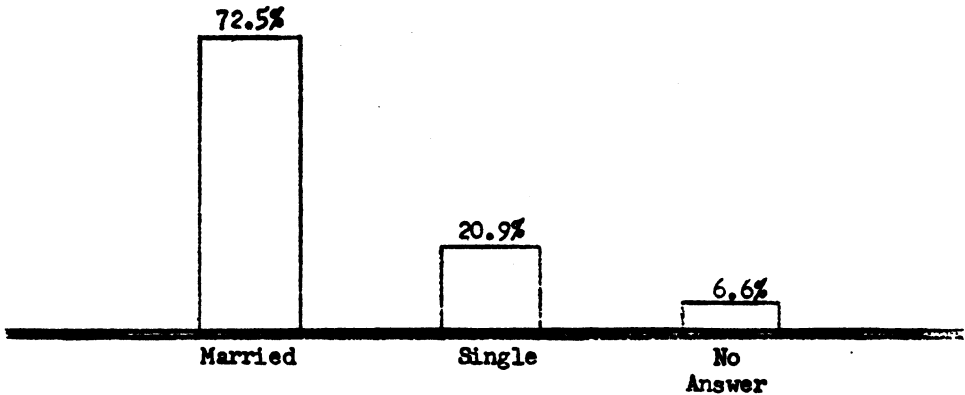
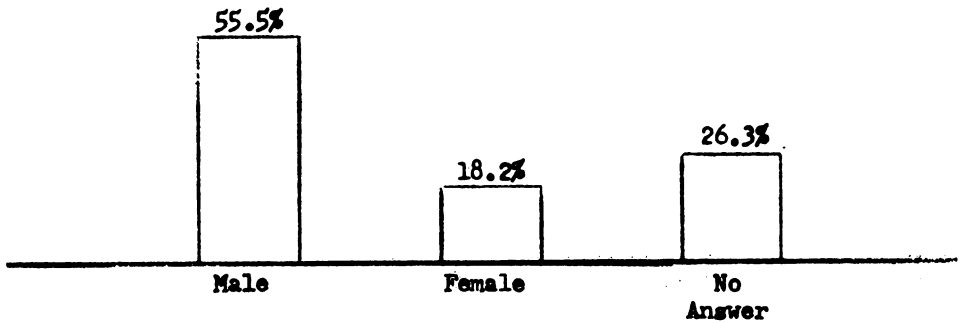


Figure 22.--Analysis of Replies to Question 19

Are you:

Male
Female

Corporation Group
137 Replies



Improvement Commission
334 Replies

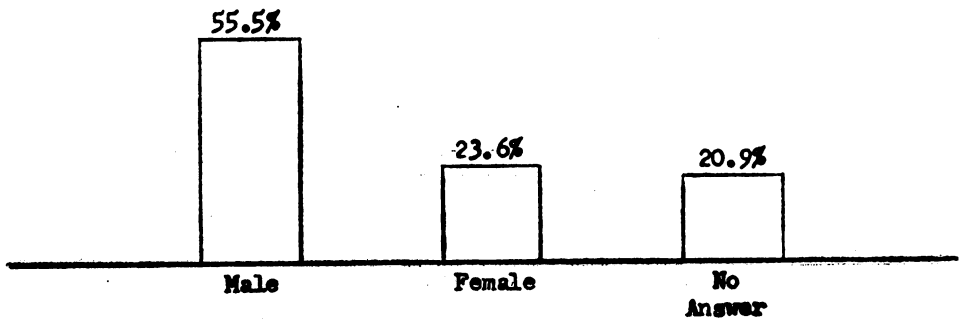


Figure 23.--Analysis of Replies to Question 20

What is your age?

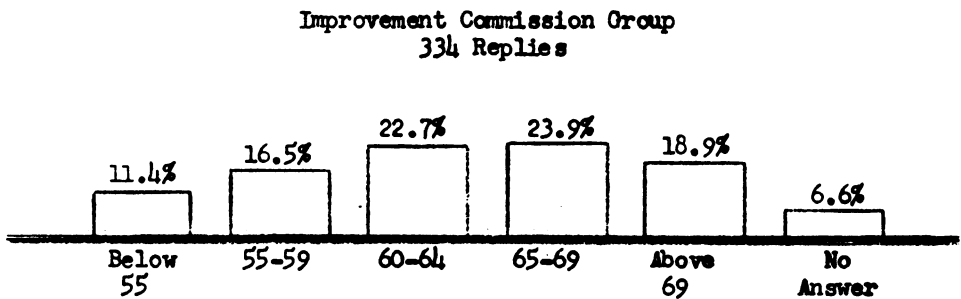
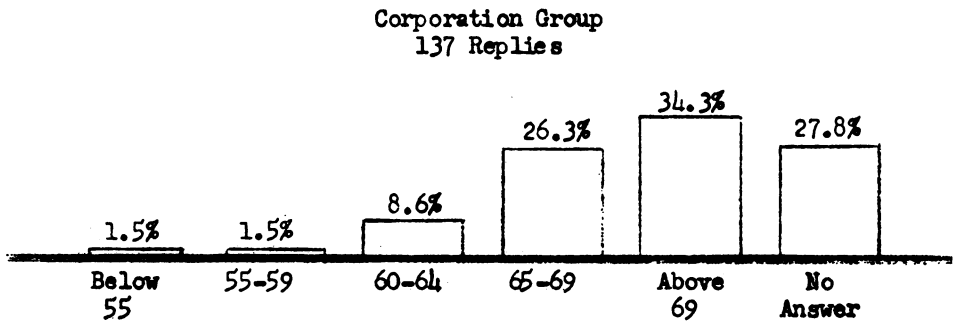
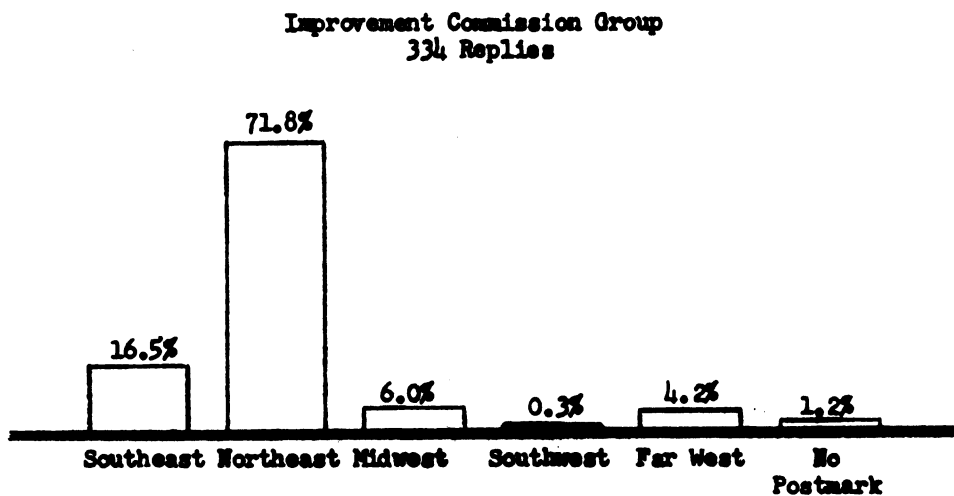
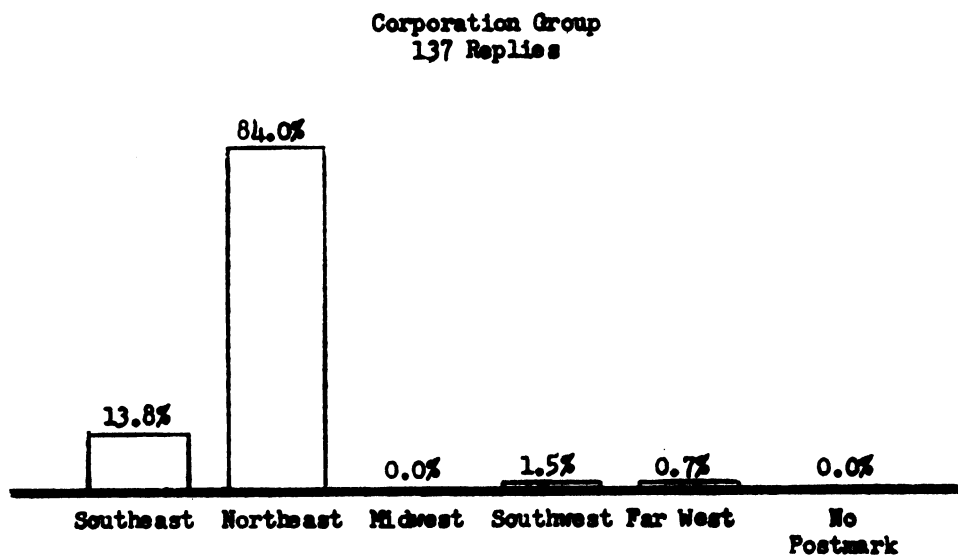


Figure 24.—Geographical Distribution of Replies



CHAPTER VI

CONCLUSIONS FROM THE SURVEY

The results of this survey provide a sound basis for further planning for retirement villages. If a village were constructed on the basis of these findings, it would be located in the suburbs of a Florida city of population 50,000 or more. One-eighth to one-fifth of the inhabitants of the village would live in an apartment house, while the rest would live in separate one-story dwelling units. About half of these dwellings would have two bedrooms, while the remainder would have one bedroom. More than half would have a carport or garage. Three-fourths of the village families would own automobiles. More than two-thirds of the village citizens would take part in a planned program of recreation.

Since villages will be constructed on many different sites; and since different groups may prefer to have special features in their villages, an engineering study of this problem should not be directed toward the design of a specific village plan, but rather should have as its object sound reference data for the use of those who would plan specific villages. These villages then would be designed after a study of the needs and wishes of its prospective inhabitants had been conducted.

Considering the trends seen in census data and the results of this survey, it is evident that some action is needed to help older persons who wish to retire comfortably in Florida. There is also very good reason to believe that the retirement village idea will receive wide acceptance among those persons who do come to Florida to retire. This is shown by the fact that 84, or 61.3 per cent, of the corporation annuitants answering and 208, or 62.3 per cent, of the persons replying from the Improvement Commission mailing list gave a definite affirmative answer to the first four questions asked. By answering "yes" to these four questions these people indicated the following:

1. That they felt they would enjoy living in a retirement village as described.
2. That they would consider moving into such a village if they came to Florida to live.
3. That they would like to live in a village made up largely of retired people.
4. That they would like to live in Florida.

As was indicated earlier, critics of the retirement village idea have voiced the opinion that older people would not like to live in neighborhoods made up largely of retired persons, and that older persons would not want to move to new surroundings, but would prefer to remain in their former communities after retirement. The results of this survey do not bear out these critics in their arguments. Contrary to the critics first point 100, or 73.0 per cent, of the corporation pensioners responding and 243, or 72.7 per cent, of persons answering from the Improvement Commission mailing list indicated definitely that they would prefer living in a neighborhood made up largely of retired people. In answer to the second point 108, or 78.8 per cent, of those replying from the corporation group, and 302, or 90.4 per cent, of those responding from the Improvement Commission list felt that they would like to live in Florida. In view of these answers there is good reason to believe

that money and time invested in an engineering study of retirement village planning would bring a good return both to the citizens of Florida and to persons who wish to spend their retirement years in this state.

The results of this survey also indicate many items to be considered in the planning of these villages. Most persons answering prefer to live in the suburbs of a city of 50,000 or more population. Planners should be mindful of this when considering potential sites for retirement villages.

In planning the village as a whole, consideration should be given to providing an apartment building since about one-fifth of the corporation annuitants and about one-eighth of those persons on the Improvement Commission list who expressed a desire to live in Florida retirement village also expressed the desire to live in an apartment. Most of the rest of the persons who want to live in one of these villages wish to live in a separate dwelling. Village planners should also expect a large portion of retired persons to own automobiles. Recreation facilities would find favor with most of the village inhabitants.

In designing the dwellings, plans should be made for both one-bedroom and two-bedroom units. Plans should also be made for units with garage or carport since more than half of both groups expressed a need for some type of shelter for their automobiles. One-story dwellings would find favor with more than 85 per cent of all persons who expressed a desire to live in a retirement village. Very few would object to a combination living-room and dining-room.

Consider now the estimates given by persons answering question number sixteen pertaining to monthly rental for the dwelling units. In both groups the median rental indicated is in the bracket \$40 to \$49. In the case of the corporation group, 96.4 per cent of those answering would be willing to pay monthly rent of \$30 or more; 62.8 per cent would be willing to pay \$40 or more; while 49.2 per cent indicated a willingness to pay \$50 or more. Of those replying from the Improvement Commission group, 88.6 per cent would be willing to pay \$30 or more rent monthly; 56.4 per cent would pay \$40 or more; while 31.6 per cent would pay monthly rent of \$50 or more.

The median estimated total monthly expenditures based on estimates given by those replying to questions sixteen and seventeen is in the range of \$140 to \$159 for the Improvement Commission group, and is in the class less than \$140 for the corporation group. Thus members of the corporation group in general have smaller incomes than members of the Improvement Commission group, but are willing to pay higher rents.

CHAPTER VII

RECOMMENDATIONS FOR AN ENGINEERING STUDY OF RETIREMENT VILLAGE PLANNING FOR FLORIDA

Census trends have shown us that many older persons are migrating into Florida to retire and many more may be expected to do so in the future. Organized groups will come to establish their own retirement communities here. Recently, the Upholsterers International Union has announced its plan to build just such a community. If these new citizens find homes which meet their needs at prices they can afford to pay, they will be happy and will present no problem to the state's younger citizens. However, if these people cannot find such homes they will be unhappy and a burden to the economy of Florida. If an engineering study will provide information which will enable organizations to set up communities of adequate, low-cost homes for these people, then the money and time spent in such a study will be an excellent investment.

Since retirement villages will be developed by various groups such as labor unions, lodges and investors; and the size of village and number of residents will vary; and villages will be located in many parts of the state; it is recommended that the engineering study of this problem have as its aim the development of reference material for the use of those who will actually plan specific villages. Thus an organization contemplating establishment of such a village would be provided with information based on sound principles. It is with this purpose in mind that the following program for an engineering study of the problem is presented.

Program for an Engineering Study of the Problem

Community Planning

Location of the villages.—This will depend upon desires of the particular groups who establish them. The following results of the survey will be of help. Approximately two-thirds of persons replying to the questionnaire survey who also indicated a desire to live in a retirement village preferred that the village be located in the suburbs of a city of 50,000 or more population. Many also noted that they would like to locate near water. Specific choice of locations for villages should be avoided in this study, but information on as many potential locations as possible should be gathered and made available for the use of those planning to establish a village.

Research into the need for community services.—Develop an estimated budget for retired persons showing how much they would be expected to spend on food, laundry, haircuts, cosmetics, etc. Then use these figures to establish the number of persons necessary to support the various services which are considered for inclusion. Investigate the possibility of locating the village so that the community services would be patronized by persons living outside of the retirement community. In this way needed services could be provided even though the village residents alone could not support them.

Ascertain the desirable features to plan for in a village layout.—Consider such features as solar orientation of dwelling units, automobile traffic flow around community, pedestrian traffic flow inside community not crossing streets, and the possibility of including a community garden. The survey

has indicated that a large portion of retired persons expect to have automobiles. Plans should be made for adequate parking facilities.

Planning of Dwelling Units

Recommendation of types of equipment, materials and methods of construction, and general plans for construction.—These are factors which are subject to the least variation due to change in site. This area of planning should consider first the health and safety of the village inhabitants. Older persons are much more subject to falls than younger persons, so changes in level inside the dwellings would be undesirable. Floors must be made of non-slip material and must be well insulated to prevent coldness and dampness. The possibility of using ramps in place of steps should be considered. Ventilation without drafts should be planned for. Dwellings should be designed so that persons in wheelchairs could get about easily. Sliding doors and doors wide enough to permit passage of wheelchair might well be considered. Bathtubs with safety features should be included. The entire dwelling should be planned for ease of cleaning and upkeep.

Study of kitchen design.—Consider first the size of the average older woman, her reach, comfortable working area, etc. Then determine desirable work table heights, shelf heights, and stove heights. Study the space needs for refrigeration, cooking, and storage based on estimates for a retired couple. Include construction of actual mock-ups of kitchens if necessary to obtain desired results. Then after needs are determined, investigate to ascertain whether standard equipment will meet these needs economically. If cases arise in which standard equipment fails to meet the needs, then design special equipment and build working models. The large numbers of units being considered in the planning of these villages will justify the manufacture of special equipment where the need exists. Plan the kitchen for motion economy throughout. Propose specific basic kitchen plans and layouts for consideration of persons developing retirement villages. The survey has shown that the functions of dining-room and living-room could be combined without meeting objections from many retired persons. More than 86 per cent of all persons answering the questionnaire indicated they would not object to such an arrangement. Many even noted that they would prefer this plan, while some indicated a preference for a combined kitchen and dining area.

Study of methods and materials of construction.—In villages of the size being contemplated by some groups (500 or more units), great economies could be effected by proper methods of construction. Use of the techniques such as prefabrication, multiple use of forms and tilt-up construction should be studied. This area offers many potential savings in construction of villages.

Economic and financial analysis.—Determine estimated first cost based on the methods and materials recommended. Find the optimum number of dwelling units from the standpoint of gaining construction economy. Ascertain depreciation rates applicable to these dwellings. Based on these figures study the profitability of a village from the standpoint of an investor. Include an analysis of the desirability of incorporating retirement villages as communities. Present an analysis of various methods of payment such as monthly or yearly rental, life estate and outright purchase. The actuarial analysis of the life estate plan might well be included. Present a

recommended plan for maintenance of the grounds and structures of the villages and a method of charging for these services.

It is believed that the engineering study of this problem will be of great value both to older persons retiring in Florida, and to the other citizens of the state, by providing sound ideas which may be incorporated into these villages by organizations establishing them.

APPENDIX

UNIVERSITY OF FLORIDA
COLLEGE OF ENGINEERING
GAINESVILLE

ENGINEERING AND INDUSTRIAL EXPERIMENT STATION
DEPARTMENT OF INDUSTRIAL ENGINEERING

May 21, 1952

Dear Friend:

Some time ago you wrote to the Florida State Improvement Commission requesting information about retirement in Florida. Since the Engineering and Industrial Experiment Station at the University of Florida is now studying the problem of housing for retired persons, we would like some help from you.

You can be a great help to us by filling in the enclosed questionnaire and returning it to us in the return envelope provided.

Yours truly,

/s/ R. S. SAHLIE
R. S. Sahlie
Project Leader

UNIVERSITY OF FLORIDA
COLLEGE OF ENGINEERING
GAINESVILLE

ENGINEERING AND INDUSTRIAL EXPERIMENT STATION
DEPARTMENT OF INDUSTRIAL ENGINEERING

April 7, 1952

The Florida State Improvement Commission and the Florida Engineering and Industrial Experiment Station are studying ways to provide, without government subsidy, housing for people who wish to retire in Florida. We are studying the design of houses to suit the special needs of retired people at rents which they can afford.

To find out just how these houses should be designed and how much a builder could spend on them, we need your help.

We have no desire to use your name—or sell you anything—so you need not sign the questionnaire.

Will you please fill out this questionnaire and mail it to "Retirement Village Project," Engineering and Industrial Experiment Station, University of Florida, Gainesville?

Thank you very much for your cooperation.

SURVEY OF RETIRED PERSONS

We are studying the need for and the acceptability of establishing privately owned and developed retirement villages in Florida. These villages would be less than thirty minutes from the center of a town or city of 50,000 population or more. Traffic would be routed around the outside limits of the community. The central area of the community would contain many essential facilities such as a community hall for recreation and visiting, a food store, drug store, a hobby shop, a recreation area, etc., all within walking distance of the living quarters.

Houses would be designed for safety and convenience to provide maximum comfort and livability to make housekeeping easier. Living units would be rented or sold for a very moderate figure.

1. Do you think you would enjoy living in a village such as this?

Yes.....

No.....

Undecided.....

2. Would you consider moving into this type of retirement village if you went to Florida to live?

Yes.....

No.....

Undecided.....

3. Would you like to live in a neighborhood made up largely of retired people?

Yes.....

No.....

Undecided.....

4. Would you like to live in Florida?

Yes.....

No.....

Undecided.....

If your answer to question 4 is "yes" or "undecided," we would like to have your answers to the following questions. (If your answer is "No" please turn to page 3 and answer questions 18, 19, and 20.)

5. Would you rather live:

Near the center of a city of 50,000 or more

In the suburbs of such a city

Other (specify)

6. Would you rather live:
- In an apartment
 - In a two family dwelling
 - In a separate dwelling
 - Other (specify)
7. Would you rather:
- Buy your dwelling
 - Rent by the month
 - Rent for a year at a time
 - Other
8. Would you plan to live in Florida all year round?
(except for occasional trips)
- Yes.....
 - No.....
 - Undecided.....
9. How many bedrooms would you need?
10. Would you rather live in:
- A one story dwelling
 - A two story dwelling
11. How many people would live in your house permanently?
12. Would you object to a house having a combination living and dining room?
- Yes.....
 - No.....
 - Undecided.....
13. Would you have an automobile?
- Yes.....
 - No.....
 - Undecided.....
14. Would you need a garage?
- Yes.....
 - No.....
 - Undecided.....

15. Would you like a planned program of recreation such as shuffleboard, horseshoes, checkers, chess, bridge, canasta, etc.?

Yes.....

No.....

Undecided.....

It would help us especially in making this study if you could give us your best estimates for the following two questions:

16. About how much rent PER MONTH would you be willing to pay?

.....

17. About how much per month would you plan to spend in addition to rent? (Food, utilities, clothing, recreation, etc.)

.....

The answers to the following questions are to be used for statistical purposes only. YOU DO NOT NEED TO SIGN YOUR NAME.

18. Are you: Married.....

Single.....

19. Are you: Male.....

Female.....

20. What is your age?

"X" COMPANY

June 4, 1952

To Retired "X" People:

The Engineering and Industrial Experiment Station of the University of Florida is gathering information for the purpose of finding out if there is a need for special housing for retired people and have asked us if you might be willing to answer some questions about housing to aid them in their planning.

A questionnaire has been prepared for this purpose which we agreed to send you. Please understand, however, that your answering it is wholly optional with you, although the University of Florida will greatly appreciate any help you can give.

If you are willing to do so, please answer as many of the questions as you can, and mail in the enclosed postage free envelope. You do not need to sign the questionnaire as it is desired to be anonymous.

Yours very truly,

Director of Industrial Relations

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