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# UA3/3/1 Analysis of the Demand for Married Student Housing at WKU, 1966-1967

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**Authors**

R. E. Kramer, William Calvert, James Darden, Robert Hancock, Carol Lehman, Gary Lloyd, Robert Matthews, Melven Morris, Ronald Roby, Daniel Saur, Wayne Wilcox, Aubrey Wilson, and WKU President's Office

ANALYSIS OF THE DEMAND FOR MARRIED  
STUDENT HOUSING AT  
WESTERN KENTUCKY UNIVERSITY  
1966-1967

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## INTRODUCTION

The purpose of this study is to bring forth relevant information needed to determine the feasibility of an investment project for a married student housing complex on the campus of Western Kentucky University. Only the demand side of the market is analyzed; a potential investor will have the construction and land costs for such an enterprise at his disposal. With the information presented in this study it is hoped that a decision to construct a housing complex will be forthcoming. The study group attempted to present information that will allow a potential investor to make an intelligent decision as to the profitability of the investment. It is hoped that the critical questions concerning the investment have been answered by this study.

The time period in which the study was carried out was January, 1967, to June, 1967, i. e., the second semester of the 1966-67 school year. The information presented was obtained from a single sample of the married population. Seventy married family units (8.4 percent of the population) were stratified according to class standing (Freshman, Sophomore, Junior, Senior, and Graduate) and then picked randomly within the class stratifications. A more desirable method would have been a sequential sampling method, but the time and expense of the method did not allow its use.

Future studies can be carried out in order to substantiate the data presented at this time. The estimated size of the

investment would seem to warrant at least one more comprehensive examination of the market in order that a more exact market character can be determined.

The study group contacted state institutions that have married housing units in order to see if any useful information could be obtained from their experience in the determination of market character and size of their married students. None of the schools contacted had conducted a market study prior to the construction of such a housing unit. Discovering this factor did not disturb the study group. It was assumed that the market character at the various educational institutions would be significantly different with reference to income, rent, family size, etc., that no useful comparison could be made. The reason for this assumption rests on the fact that the educational institutions differ in such things as type and size of the graduate program and community size and industrial development. These factors have a direct influence on the family unit's income, numbers, and the rate of growth of the married student body. The purpose of contacting the various institutions was to examine the methodology used in the study of the market for married student housing.

The persons involved in the study are listed below. The director of the study group is indeed grateful for the cooperation and dedication of the individuals listed. The director would also like to thank Mr. R. L. Brite and Mr. Harvey Zimmerman of the



Economics Department at Western Kentucky University for their helpful suggestions during the course of the study. It should be noted that the director of this study assumes all responsibility for the statements made in the report.

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## PRESENTATION AND INTERPRETATION OF FINDINGS

### POPULATION

The market for married student housing has a finite population. Information needed to determine the market size was obtained from the Registrar's Office of Western Kentucky University. The information was not available in raw form; therefore it was necessary for the study group to define and find the market from the general enrollment lists.

The market is defined as the family units that have at least one member of the family enrolled at the University for nine (9) credit hours. If more than one member of the family was found to be carrying nine hours, the wife was excluded so as to avoid double counting of family units.

The reason for the use of nine credit hours instead of twelve, as does the University, was to enable the study group to consider the existing Graduate students. The existing Graduate program is limited in size and if Graduate students only carrying twelve hours and above were included in the market, the population of the Graduate class would have been so small that the measurements would have been insignificant for the study.

The use of nine hours also has long-run validity for the market. The development of the Graduate School will yield a larger number of students that will be considered to be carrying a full course load when they are enrolled for nine hours. This will be the case for

those students that are on research assistantships and teaching associateships.

The population is segmented as follows: Freshman 99 family units, Sophomores 163, Juniors 194, Seniors 309, and Graduate 62 family units. These segments yield a total population of 827 family units at Western Kentucky University.\* To emphasize the meaning of the 827 figure, it is the full-time student family units on the University's campus.

The nine hour criterion increased the population by only 48 family units. The largest percentage of students carrying nine hours are found in two classes, the Freshman and Graduate classes. The percentage of family units in the Freshman class in which a member is carrying nine hours is 9.9 percent; one possible reason for the relatively high percentage is that many wives are attending the University but are not working toward a terminal degree. This student would be maintaining a home and sometimes working, but the fact that the course load is significant would allow the student to be considered full-time. The Graduate family units that are carrying nine hours constitute 28 percent of the 62 family units in the class. As can be seen, even if the 48 family units that are carrying nine hours were discarded from the population, there would still be a population of 779 family units in the market.

---

\*The population figure was determined from the fall enrollment, September, 1966.

As stated in the Introduction, the population was stratified according to class standing. This was done because the study group thought there could be a significant difference between income, rent, etc. in the different classes and we wanted to be sure that the sample represented each class in proportion to its percent of the population. It was discovered that the classes did differ to a significant degree insofar as income and type of existing housing is concerned. The Freshman and Graduate classes are the classes that deviate to the greatest extent from what the study group considers to be the "normal" married student on the campus.

Some of the reasons for considering the Freshman and Graduate classes to be "special" or "unique" when compared to the remaining classes (Sophomores, Juniors, and Seniors) are that the Graduate student is, in many instances, a secondary or elementary teacher that is completing his course work during the evenings or on Saturdays. Since this student holds down a full-time job and is older and more settled than other students, he has a unique income, rent, and housing situation when he is compared to the remaining students. The "special" Freshman student is under approximately the same set of circumstances insofar as income and rent are concerned.

A significant factor that was discovered when determining the size of the population was the number of observations that lived out of the city limits. The number of family units that live outside of

Bowling Green by classes are, Freshmen 23, Sophomores 37, Juniors 39, Seniors 43, and Graduates 23. While administering the questionnaire to the sample, many married couples commented that the reason they were living out of town was because of the lack of satisfactory housing facilities in Bowling Green that would fall into their income bracket. The remaining members living out of town lived in communities where they or another member of the family held a full-time working position.

#### PROJECTION OF POPULATION

The projection of the population as it has been defined was determined in the following way. The total student body is projected and the family units are considered to be a fixed percentage of that student body. At the present time the family units constitute 11 percent of the student body. The Registrar stated that he thought the married students usually represented 10 percent of the student body. Using the conservative percentage of 10 percent, the family units are assumed to increase at the same rate as the student body and represent 10 percent of that student body.

The enrollment figures for the years 1961 through 1965 have been used for the projection of the student body. The reason for using this time period is that the rate of growth that has taken place during this time period coincides with the University's administration plans for the future growth. That is, the future growth rate is assumed to be represented by the 1961-1965 time span. The

method used to calculate the projection is the method of ordinary least squares. The estimating equation takes the form of,

$$Y_t = \alpha + \beta Y_{t-1}$$

$$Y_t = 897 + .99Y_{t-1}$$

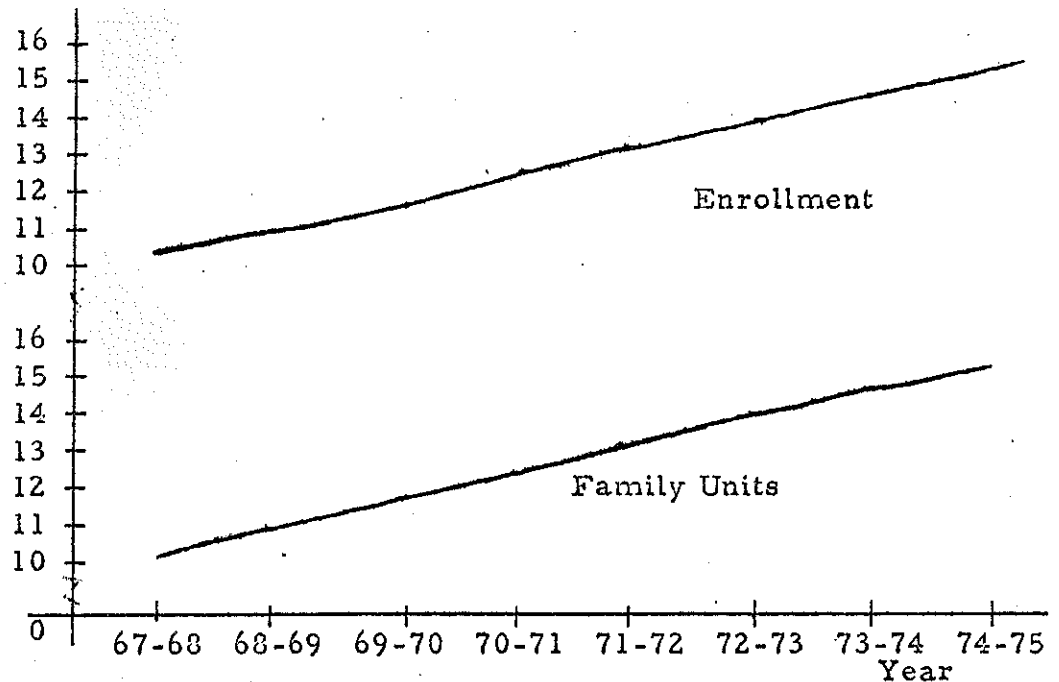
The projection of the enrollment and family units are presented in Table I and Figure I below.

TABLE I  
ENROLLMENT AND FAMILY UNIT PROJECTION: 1968-1975

YEAR	ENROLLMENT	FAMILY UNITS
1967-68	10,245	1,024
1968-69	11,048	1,104
1969-70	11,834	1,183
1970-71	12,612	1,261
1971-72	13,382	1,338
1972-73	14,145	1,414
1973-74	14,900	1,490
1974-75	15,648	1,564

FIGURE I  
ENROLLMENT AND FAMILY UNIT PROJECTION: 1968-1975

Enrollment (Thous.)  
Family Units (Hund.)



It should be noted that the enrollment figure for 1974-75 is well within the limits set by the administration in the ten year plan. The administration has set a maximum of 16,350 students for the year 1975. According to the administration, any larger enrollment would overcrowd the physical facilities that will exist at that time. The projection of 15,684 for 1975 is below the maximum; therefore the study group anticipates that the actual enrollment in 1975 will not be significantly different than the projection.\*

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\*There is a possibility that dormitories constructed by private entrepreneurs will take place in the future. If this activity occurs, there would have to be a readjustment of the maximum student enrollment in the upward direction for 1975.

## STATEMENT OF INCOME

The measurements of income follow the lines of the sample stratification, that is, the study group measured the mean and confidence intervals for the following segments of the market: Freshman, Sophomore, Junior, Senior, and Graduate classes separately. Then the study group combined the market segments into the two aggregate strata of the entire sample and the Sophomore-Junior-Senior classes and measured the mean, standard deviation, and confidence intervals for these strata. It will be seen that the Freshman and Graduate classes depart from the general findings of the remaining portion of the sample. The reasons for the discrepancy were stated in the section on population. The statements of income will follow the order of the above stratification.

Freshman:

The range of income for the observations in this strata was \$1,800 to \$8,500 per year. The mean income of the class sample was \$4,596 per year. The .05 degree of confidence interval is  $\$4,596 \pm \$601$ ; the range being \$3,995 to \$5,197. This simply states that we are 95 percent sure that the true freshman population mean lies in this range. The range for the .02 confidence interval is  $\$4,596 \pm \$755$ , yielding an income range of \$3,841 to \$5,351, i. e., we are 98 percent sure that the true population mean lies within these limits. Given the wide range of income found in the observation, the confidence intervals give a significant meaning to the sample



mean income.

#### Sophomore:

The Sophomore class observations had a range of \$1,920 to \$4,500 per year. The mean income is \$3,230 per year. The confidence intervals of the sample mean compared to the true population mean are, .05 confidence interval,  $\$3,230 \pm \$486$ , and the .02 confidence interval is  $\$3,230 \pm \$597$ .

#### Juniors

Observations of income in the Junior class have a range from \$1,200 per year to \$5,800 per year. The mean income is \$3,915 per year. The .05 confidence interval is the mean income plus and minus \$389, and the .02 confidence interval is the mean income plus and minus \$493.

#### Seniors:

The range of income for the Senior class observations is \$1,700 to \$7,000 per year. The mean income is \$3,802 per year. The .05 confidence interval is  $\$3,802 \pm \$205$ , and the .02 confidence interval is  $\$3,802 \pm \$249$ .

#### Graduate:

The Graduate class has the largest range thus far; it extends from \$2,500 to \$12,000 per year. The average (mean) income for this class is \$6,762 per year. The wide dispersion of income can be attributed to the factors previously mentioned that differentiate this

class from the rest of the population. The .05 and .02 confidence intervals are  $\$6,762 \pm \$2,472$  and  $\$6,762 \pm \$3,134$  respectively.

Sample:

When examining the entire sample and the character of income, the study group found the mean income to be \$4,206 per year. The range of income in the sample is \$1,200 to \$12,000 per year. The distribution of the income is not what is called a normal distribution; this can be seen in Table III and Figure II. The distribution is skewed negatively, i. e., it is skewed toward the lower income brackets.

The standard deviation for the entire sample is \$2,155, which if the distribution was normal, would represent 68 percent of the observations within a range of  $\$4,206 \pm \$2,155$  (a range of \$2,051 to \$6,361). The actual number of observations of the sample that lie within this range is 45 out of 60 which represents 75 percent of the sample. This would indicate that at least 68 percent of the population would have an income within the first standard deviation.

The few observations that have a very high income are basically found in the Freshman and Graduate classes. The Freshman class sample has three observations with incomes above \$7,000 per year; they are \$7,065, \$8,000, and \$8,500. The Graduate class sample has three observations with an annual income above \$9,000 per year; they are \$9,600, \$10,000, and \$12,000 per year. These extremes result in the skewed nature of the distribution of the sample.

The .05 and .02 confidence intervals are \$4,206 (the mean income)  $\pm$  \$506 and the mean income plus and minus \$602. That is, we are 95 percent sure that the true mean income of the population is between \$3,700 and \$4,712 per year and we are 98 percent sure that the true population mean lies in the \$3,604 to \$4,808 range.

Sophomore, Junior, Senior Stratification:

Examining this particular strata, which is considered to be the most representative of the market, the study group found the mean income to be \$3,665 per year, which is \$541 below the mean of the entire sample. The reason for the significant difference is the extremely high incomes that were found in the Freshman and Graduate classes. After taking these extremes into consideration, it is easy to see why the two averages differ.

The standard deviation for this segment is \$1,202, which if the distribution is normal, would mean that 68 percent of the population would have an income that would lie between \$2,463 and \$4,867. The sample had 25 out of 43 observations that was in this range. The 25 observations constitute slightly over 58 percent of the sample. This would seem to indicate that the population would have approximately 60 percent of its members with an income within the first standard deviation.

The .05 and .02 confidence intervals are: .05 equals \$3,665  $\pm$  \$347 (\$3,318 to \$4,012); the .02 confidence interval is \$3,665  $\pm$  \$413 (\$3,252 to \$4,078). The narrow limits we find for the high degree of

confidence tells us that the mean income of the sample can be used with a great deal of legitimacy when we attempt to determine the possible rent payment that the population can make.

The summary of the information is presented in Table II. The acceptance of the mean income of the Sophomore, Junior, Senior stratification gives a solid foundation on which to begin the analysis of the effective demand for married student housing at Western Kentucky University.

TABLE II  
INCOME MEASUREMENTS OF SAMPLE STRATIFICATIONS:  
MEAN, STANDARD DEVIATION, CONFIDENCE INTERVAL

STRATA	MEAN	STANDARD DEVIATION	CONF. .05	INT. .02
Freshman	\$4,596	\$	†\$ 601	\$ 755
Sophomore	3,230		486	595
Junior	3,915		389	493
Senior	3,802		205	249
Graduate	6,762		2,472	3,134
Entire Sample	4,206	± 2,115	506	602
Soph. -Jr. -Sr.	3,665	± 1,202	347	413

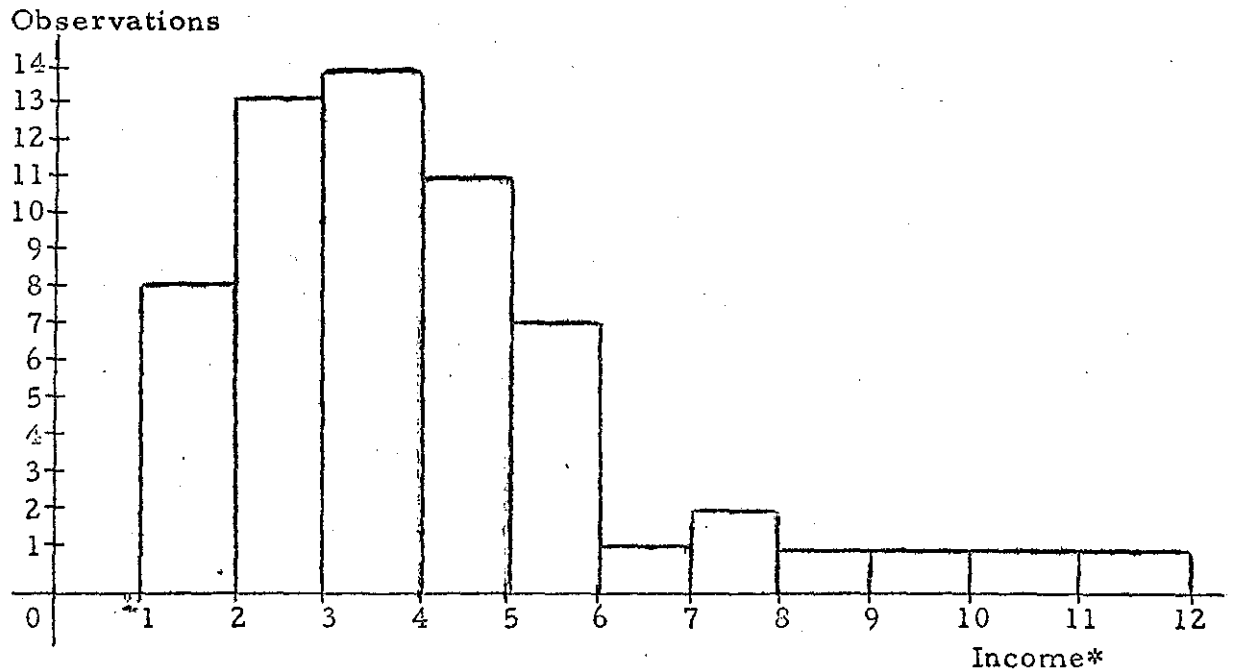
The income distribution for the entire sample and the Sophomore, Junior, Senior stratification is presented in Tables III and IV and Figures II and III.

TABLE III  
INCOMES OF MARRIED STUDENTS:  
DISTRIBUTION OF ENTIRE SAMPLE

Class Limits	No. of Observations	% in Limits
\$00,000 - \$ 1,000	0	.000
1,001 - 2,000	8	.134
2,001 - 3,000	13	.216
3,001 - 4,000	14	.234
4,001 - 5,000	11	.183
5,001 - 6,000	7	.116
6,001 - 7,000	1	.017
7,001 - 8,000	2	.034
8,001 - 9,000	1	.017
9,001 - 10,000	1	.017
10,001 - 11,000	1	.017
11,001 - 12,000	1	.017
	<u>60</u>	

\* The percentages are rounded to the nearest hundredth.

FIGURE II  
DISTRIBUTION OF INCOME OF MARRIED STUDENTS:  
ENTIRE SAMPLE



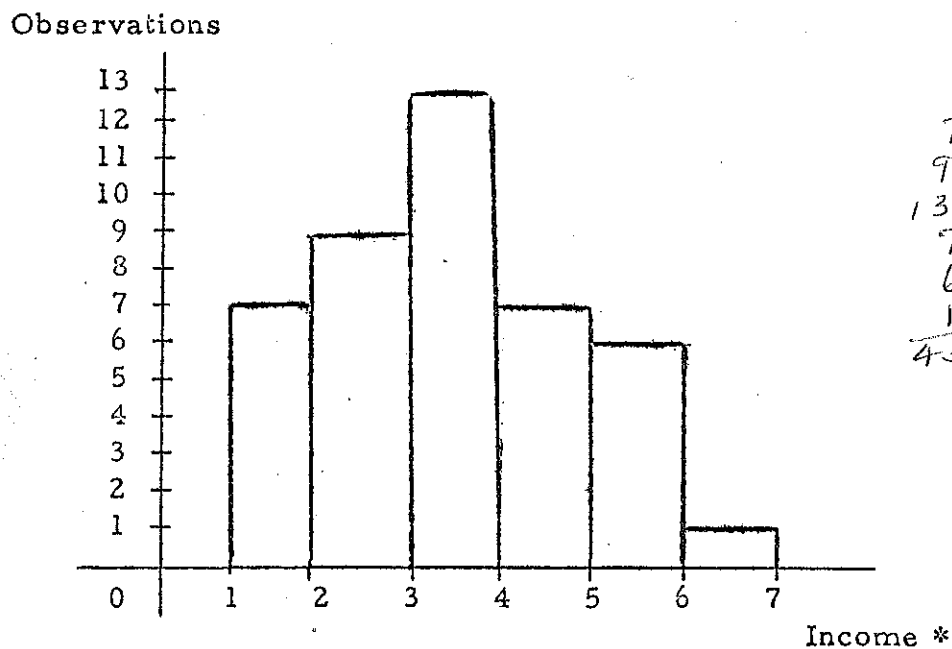
\*The boundaries in Figure II are measured in thousands of dollars and each boundary stops half way between the limits, i. e., the 0 to 1 boundary represents zero income to \$1,000.50; the 1 to 2 boundary represents \$1,000.50 to \$2,000.50, etc.

TABLE IV  
 INCOMES OF MARRIED STUDENTS:  
 DISTRIBUTION OF SOPH., JR., SR.

Class Limits	No. of Observations	*% in Limits
\$0,001 - \$1,000	0	.000
1,001 - 2,000	7	.163
2,001 - 3,000	9	.209
3,001 - 4,000	13	.302
4,001 - 5,000	7	.163
5,001 - 6,000	6	.140
6,001 - 7,000	1	.023
	43	

\* The percentages are rounded to nearest hundredth.

FIGURE III  
 DISTRIBUTION OF INCOME OF MARRIED STUDENTS:  
 SOPH., JR., SR.



\* The boundaries in Figure III are to be interpreted as the boundaries in Figure II.

## PROJECTION OF DISPOSABLE PERSONAL INCOME

The projection of Disposable Personal Income (DPI) is not to be considered as reliable a projection as that of the population. The income projection is determined by the method of least squares just as the population projection; the estimating equation takes the form of,

$$Y_t = \alpha + \beta Y_{t-1}$$

$$Y_t = -108 + 1.07Y_{t-1}$$

The income measurements for the years 1962 through 1965 were obtained from Sales Management Survey of Buying Power Index. The measurement of Household "effective buying income" was used and assume to represent the DPI of the households of the community. The student family unit income as obtained from the sample is Personal Income (gross income). The study group estimated an .08% decrease from the "gross" income figure would result in a reasonable estimate of the DPI of the student family unit income. That is, the .08% adjustment will result in a tax free income figure. The difference between the income figure Sales Management gives for household income, for Bowling Green as a whole, and the income figure for married students is assumed to be 40 percent, i. e., the projection of income for married students will be .40% of the projection of the household income of Bowling Green, minus the .08% for the tax adjustment.

A 40 percent lower income for the married family units, in comparison with the households of Bowling Green, seems high, but

we feel that this will lend a conservative bias (downward) to the projection of future average income of the married students. We feel that a lower estimate would be less harmful for a prospective investor.

The projection of DPI for the Households in Bowling Green and the married student family units is presented in Table V and Figure IV.

TABLE V

PROJECTION OF INCOME FOR HOUSEHOLDS AND MARRIED STUDENT FAMILY UNITS

YEAR	HOUSEHOLD INCOME*	STUDENT INCOME*
1965-66	\$ 7,230	\$2,892
1966-67	7,628	3,051
1967-68	8,053	3,221
1968-69	8,508	3,403
1969-70	8,995	3,598
1970-71	9,516	3,806
1971-72	10,074	4,030
1972-73	10,671	4,268
1973-74	11,309	4,524
1974-75	11,992	4,797

\* All income measurements are averages.

As can be seen, the DPI for married students in 1966-67 is \$3,051 according to the projection. The mean income of the Sophomore, Junior, Senior stratification, which we are using to base our decisions upon is \$3,665 for the 1966-67 school year. If .08% of the income is subtracted (.08% represents the tax adjustment), the income

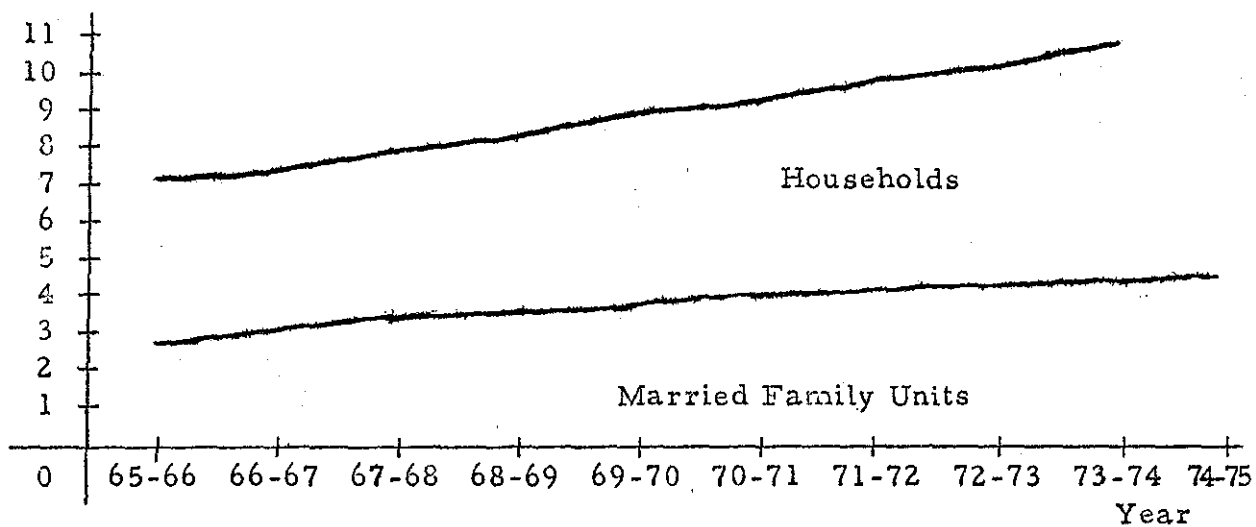
measurement would be \$3,388. The projection for 1966-67 is below

*relying on experience or observation*  
the empirical measurement by \$337. As stated, we desired the

projection be a conservative measurement.



FIGURE IV

PROJECTION OF INCOME FOR HOUSEHOLDS AND MARRIED STUDENT  
FAMILY UNITSDPI for Households &  
Married Family Units  
(Thous. \$)

## STATEMENT OF RENT

The analysis of rent was broken down into the two aggregate stratifications, i. e., the entire sample and the Sophomore-Junior-Senior classes. The standard deviation, mean, and .05 and .02 confidence intervals were determined for these stratifications.

The rent payments recorded do not distinguish between payments that include all or part of the utilities, and payments that do not include utilities. The reason the distinction was not made is that the rent structure in the community does not state an allotted amount for the various utilities (gas, water, and electricity). Attempting to measure the utility portion of existing rent payments through the questionnaire would have made the process of administering the questionnaire too complicated and confusing for the interviewee. As can be observed in the section describing the existing multi-dwelling facilities, some of the units include all of the utilities while others include part or none of the utilities. The single or private homes that rent apartments do not follow any predetermined pattern as to the utility payments. The information presented in the descriptive section of existing multi-dwelling units is provided so that the reader may develop a view as to the character of the rent-utility aspect of the rent structure.

The rents also include payments for trailer lot rentals, home mortgage payments, and trailer rental and mortgage payments. The rents are considered to be conservative in the sense that the trailer

mortgages are understated in some cases. The study group is convinced that the general picture obtained by examining the rent structure recorded gives the investment potential of a married housing unit a positive bias, i. e., the rent payments are probably lower in the survey than in reality.

Sample:

Examining the entire sample, the study group found the mean rent to be \$68.12 per month. The standard deviation is \$26.80, giving a range of \$41.32 to \$94.92 in which, assuming a normal distribution, 68 percent of the individual members of the population can be found. The percent of family units in the sample that pay a rent within the stated range is slightly over 73 percent, i. e., there are 46 out of 63 sample observations that pay a rent payment between \$41.32 and \$94.92. This indicates that the population is approximately normal and that at least 68 percent of the population rent payments fall within one standard deviation of the mean.

The total range of rent payments which was found in the sample was \$000.00 to \$130.00 per month. The observations that do not pay rent, of which there are two, live with parents. The \$130.00 rent payment was measured for one observation, which lives in one of the new "luxurious" housing units in the city.

The .05 confidence interval results in a range of \$61.76 to \$74.48; that is, we are 95 percent sure that the true mean rent payment for the population falls within this range. The .02 confidence interval

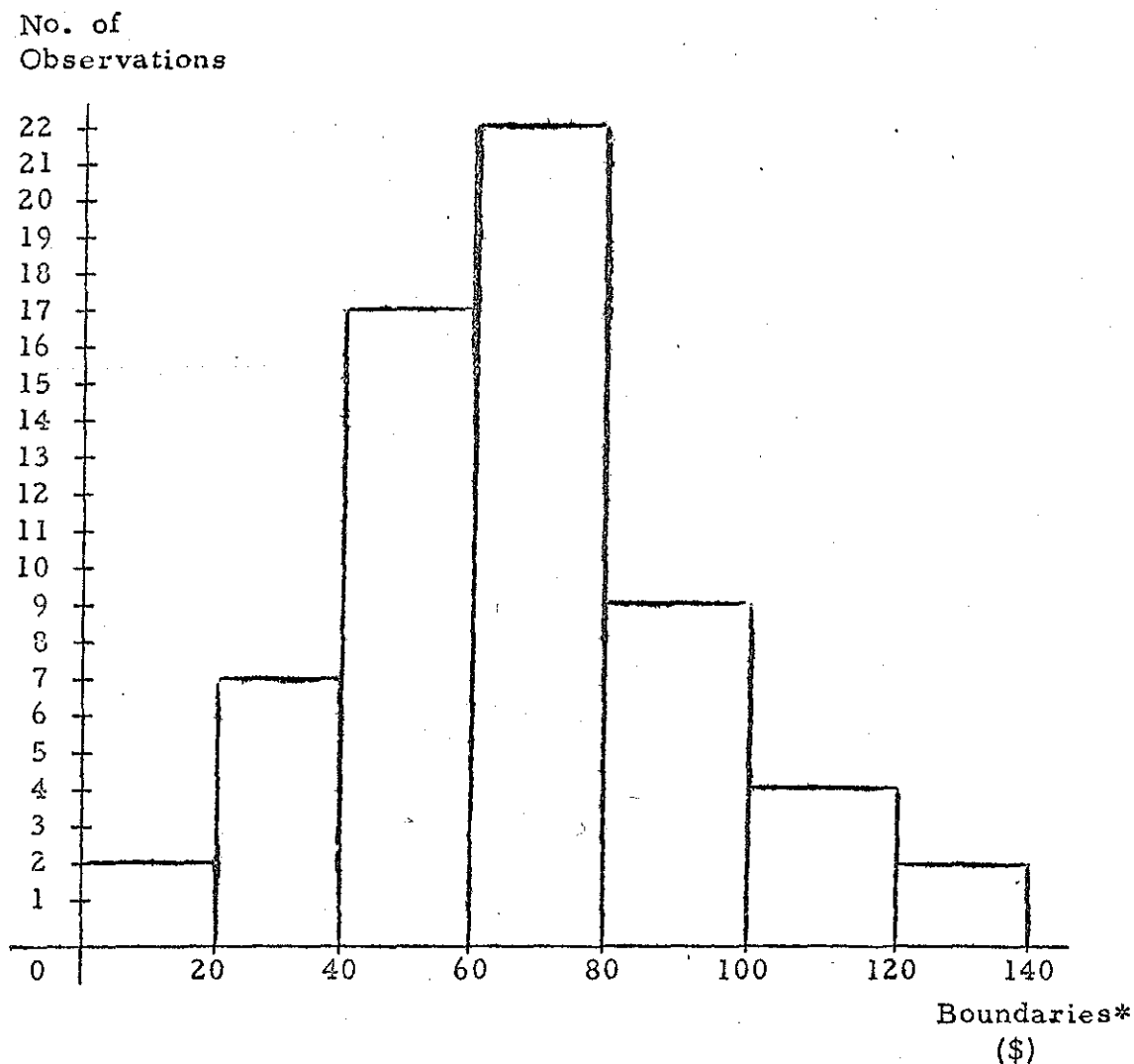
results in a range of \$60.56 to \$75.68 per month, i. e., we are 98 percent sure that the true population mean rent payment falls within the stated range. The narrow range for the high degree of confidence is not surprising when the distribution of rent payments is examined. The relatively normal distribution of rent payments for the entire sample is presented in Table VI and Figure V.

TABLE VI

## DISTRIBUTION OF RENT FOR SAMPLE

LIMITS	NO. OF OBSERVATIONS	PERCENT
\$000 - \$ 20	2	.032
21 - 40	7	.111
41 - 60	17	.270
61 - 80	22	.349
81 - 100	9	.143
101 - 120	4	.063
121 - 140	2	.032

FIGURE V  
DISTRIBUTION OF RENT FOR SAMPLE



\* The boundaries in Figure V stop half way between the limits, i. e., the 0 to \$20 boundary represents zero rent payments to \$20.50; the \$20 to \$40 boundary represents \$21 to \$40.50 rent payments, etc.

Percent of Income Allocated for Rent:

It was found that the percent of income allocated for rent payments by the individuals sampled ranged from 53 percent to 9 percent. As the income of the observations increased, the percent of income spent on rent decreased. The percent of income spent on rent for the income range of \$1,000-\$3,000 is 31 percent, for \$3,001-\$5,000 range, 20

percent, and for a \$5,001-\$12,000 income range, 13 percent.\* The average percent of income allocated for rent by the entire sample is 23 percent, which is low, considering the national average is approximately 28 percent. If the recorded rent payments are understated, as the study group has assumed for the reasons stated on page 16, the actual percentage of income allocated for rent by the sample would be closer to the 28 percent national average.

A Possible 25 and 28 Percent of Income Allocation:

If it is assumed that 25 percent of income was allocated for rent, the rent payment would be \$87.63 per month. Using the mean income of \$4,206 we find that \$1,051.50 would be the yearly rent bill. (The \$1,051.50 represents 25 percent of the mean income.) The yearly rent bill when divided by 12 months yields the \$87.63 per month rent payment, which is \$19.51 above the mean rent payment (\$68.12) of the sample. If 28 percent of income is allocated for rent, the payment would be \$94.46 which is \$23.34 above the sample mean rent.

Sophomore-Junior-Senior:

Examining the strata of the Sophomore-Junior-Senior classes, which is considered to be the most representative of the population since the extreme values of income are excluded, the study group found the character of the rent structure to be only slightly different.

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\* The number of observations in the \$5,001 to \$12,000 income range were too few to warrant a narrower income range breakdown.

The mean rent payment is \$67.78 with a standard deviation of \$24.77. Assuming a normal distribution of the population, 68 percent of the individual rent payments would fall in the range of \$43.01 to \$92.55 per month. The number of observations which are in this range is 32 out of 45 observations, or 71 percent. The assumption can be made that since 71 percent of the sample lies within one standard deviation of the mean, that the population is approximately normal and that at least 68 percent of the individuals of the population make a rent payment within the first standard deviation.

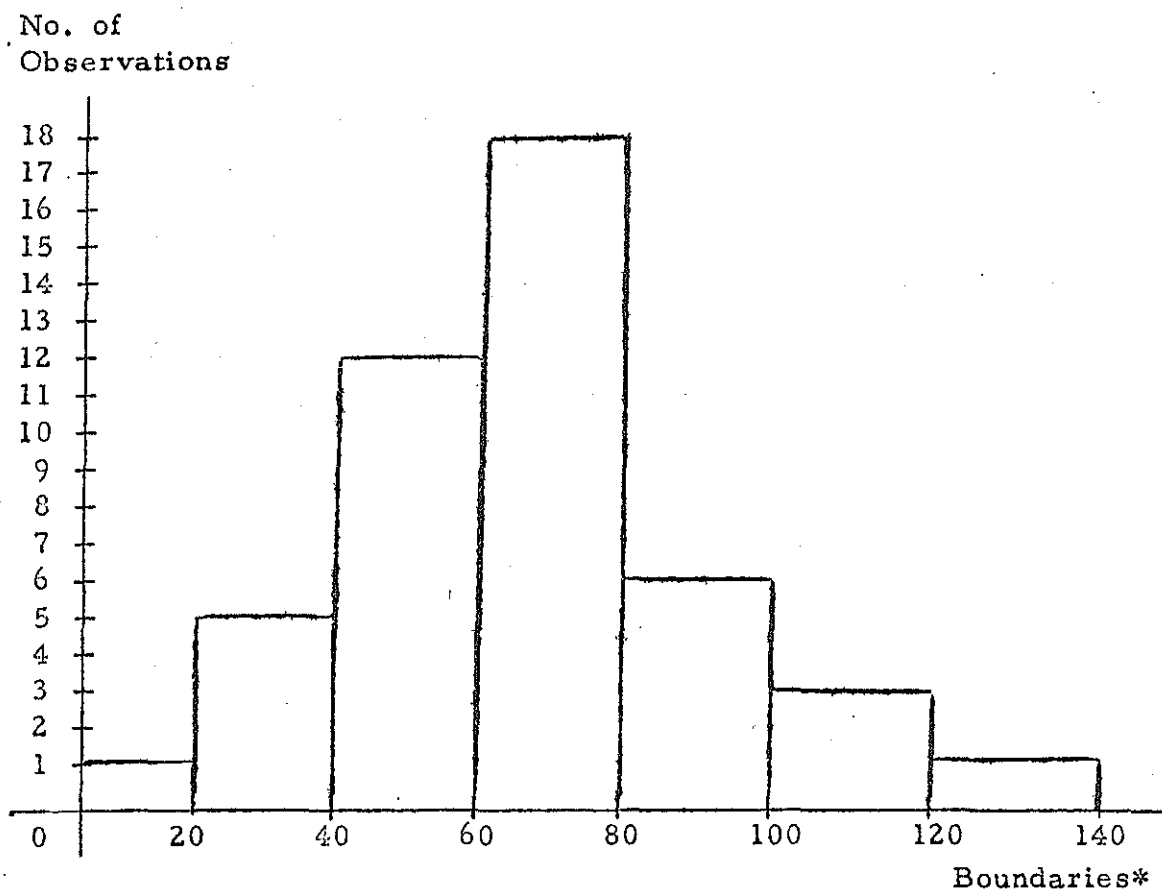
The .05 and .02 confidence intervals have ranges of \$60.87 to \$74.69 and \$59.66 to \$75.80 respectively. Table VII and Figure VI presents the distribution of the rent payments for this segment of the sample.

TABLE VII

## DISTRIBUTION OF RENT FOR SOPH. -JR. -SR.

LIMITS	NO. OF OBSERVATIONS	PERCENT
\$000 - \$ 20	1	.022
21 - 40	5	.109
41 - 60	12	.262
61 - 80	18	.392
81 - 100	6	.130
101 - 120	3	.065
121 - 140	1	.022

FIGURE VI  
DISTRIBUTION OF RENT FOR SOPH. -JR. -SR.



\* The boundaries in Figure VI stop half way between the limits, i. e., the 0 to \$20 boundary represents zero to \$20.50; the \$20 to \$40 boundary represents \$21.00 to \$40.50, etc.

#### Allocation of Income For Rent:

When considering the allocation of income for rent payments, the study group found the 25 percent income allocation to yield a rent payment of \$76.35 per month. The mean income was \$3,665 per year and 25 percent of this income equals \$916.25. \$916.25 divided by 12 results in a \$76.35 rent payment, which is \$8.57 above the mean rent of \$67.78. The 28 percent allocation yields a monthly rent payment



of \$78.17 which is \$10.39 above the mean. The actual percentage of income allocated to rent payments is 22 percent of income (22 percent is the average.)

The result of the analysis is that the market could make a rent payment between the high sixty dollar and high seventy dollar range without a significant decrease in the standard of living or a change in the existing allocation of expenditures. This is very important; if the rent could be maintained so as not to disturb the existing expenditure pattern to a significant degree, the transfer to a new housing unit would be quite easy and cause little concern for a family decision. It should be noted that many members of the market implied that a slight increase in rent payments would be willingly absorbed in order to obtain a more livable apartment. The rent payment suggested in the conclusion differs from the \$60.00 to \$70.00 range because of several additional factors that are taken into consideration at that time.

## CHARACTERISTICS OF SAMPLE

Existing Housing of Sample:

Three general categories were used in order to describe the character of existing housing facilities of the sample; they are apartment, house, and trailer. The proportion of the sample that live in the types of dwelling units are as follows: apartment, 43.3 percent, houses, 26.9 percent, trailers, 29.8 percent. It would seem surprising that this sample would only have 43 percent of its members living in apartments, while 57 percent live in houses and trailers. The proportions can be explained by the fact that the availability of apartments in the relevant rent range of the population are in very short supply. The existing multi-dwelling apartment facilities have rents that are well above what most of the population can afford. The relatively high percentage of the sample found to be living in houses can be accounted for in that there are some low cost homes that are rented at a nominal fee; and that many of the graduate and freshman married students that are older prefer to live in homes rather than high rent apartments, i. e., since both types of dwellings are in the same cost range, some of the older married students prefer home ownership. Approximately 30 percent of the sample live in trailers. A possible explanation for this is that the mortgage and/or rent payments for trailers usually fall into the relevant rent range of the married students.

A very interesting measurement is the size of the housing units occupied by the sample and the proportion of the sample that live in various sized dwellings. The percentage of the sample that live in two room dwellings is 4.5 percent, three room dwellings 25.4 percent, four room dwellings 35.8 percent, and over four rooms 34.3 percent. The larger dwellings are accounted for by the number of family units that live in homes and trailers. This indicates that an apartment complex that has one and two bedroom apartments would satisfy the two, three, and four room dwellers which account for 65.7 percent of the sample.

Family Size:

The family size is of critical importance when determining the spatial requirements of the housing complex and the proportion of various sized apartments in the complex. The family size is broken into families with no children, one child, two children, three children, and over three children. The proportions measured in the sample are: no children 47.1 percent, one child 38.6 percent, two children 7.1 percent, three children 1.5 percent, and over three children 5.7 percent; as can be seen the graduate class once again has a significant influence on the findings. The family units with three and more children represent the older student that would not be representative of the major body of the market for married student housing.

An apartment complex with one and two bedroom apartments would accommodate families with no children and families with one or two children; the proportion of the sample with a family size within these

limits is 92.8 percent. This indicates that for the present time a complex with a maximum of two bedrooms would accommodate virtually all of the existing effective market.

Tastes As To Furnished Vs. Unfurnished Apartments:

The sample indicated that the family units would prefer furnished apartments over unfurnished apartments. The exact preference is three out of every five families desire a furnished apartment. The suggested ratios for furnished to unfurnished apartments would be two furnished for every five apartments or the exact ratio of the sample, three to five. The study group anticipates the demand would be of sufficient strength that an unfurnished apartment would not deter a family unit from moving into the apartment complex.

Attitudes Toward Existing Facilities and The New Housing Complex:

The information concerning attitudes is of a subjective nature and the study group took it upon itself to restate the answers in a more concise manner than the interviewees presented their statements. Table VIII summarizes the results from the sample; as the Table indicates, four questions were asked the interviewee concerning his attitude toward his existing housing and a new married housing complex. In order to determine the significance of the answers, the entire Table must be examined. The case in point is that fifty-eight of the responses to the question, "Are you satisfied with your existing housing?", were affirmative and twelve of the answers were negative.

TABLE VIII  
SUMMARY OF ATTITUDES

ARE YOU SATISFIED WITH EXISTING HOUSING	WHY?	WOULD YOU CONSIDER LIVING IN COMPLEX	ATTITUDE TOWARD COMPLEX	
1.	No	Bad conditions, rent too high	Yes	Favorable
2.	No	Bad condition	Yes	Favorable
3.	Yes	NR	Yes	NR
4.	No	Bad condition	Yes	NR
5.	Yes	Good condition	Yes	NR
6.	Yes	Bad condition	Yes	Favorable
7.	Yes	NR	Yes	NR
8.	Yes	NR	Yes	NR
9.	Yes	Rent is good	Yes	NR
10.	Yes	NR	Yes	NR
11.	Yes	NR	No*	Favorable
12.	Yes	NR	No	NR
13.	Yes	Like trailer	No	NR
14.	Yes	Good condition, free rent	Yes	Favorable
15.	Yes	NR	No	NR
16.	Yes	NR	No*	Favorable
17.	Yes	NR	Yes	NR
18.	No	Bad condition, rent too high	Yes	Favorable
19.	Yes	NR	No	Favorable
20.	Yes	NR	No	Favorable
21.	Yes	Good condition	Yes	Favorable
22.	Yes	Rent is good	Yes	Favorable
23.	Yes	Good condition	No*	Favorable
24.	Yes	Good condition	Yes	Favorable
25.	Yes	NR	No	NR
26.	Yes	NR	No	Favorable
27.	Yes	NR	No	NR
28.	Yes	Good condition	No*	Favorable
29.	Yes	Good condition	Yes	Favorable

30.	Yes	NR	No	Favorable
31.	Yes	Live in trailer	No	Favorable
32.	Yes	NR	Yes	Favorable
33.	No	Bad condition, rent is good	Yes	Favorable
34.	Yes	Good location	Yes	Favorable
35.	Yes	Good condition	No	Favorable
36.	Yes	Live in trailer	No*	Favorable
37.	Yes	Rent is good	Yes	Favorable
38.	Yes	Live in trailer, good condition	No*	Favorable
39.	Yes	Good location, rent too high	Yes	Favorable
40.	No	Don't like trailer, bad condition	Yes	Favorable
41.	Yes	Good condition, rent too high	Yes	Favorable
42.	Yes	Do not like location	Yes	Favorable
43.	No	Do not like location	Yes	Favorable
44.	Yes	Do not like location	No	NR
45.	No	Bad location	Yes	NR
46.	Yes	NR	Yes	Favorable
47.	Yes	Good location	Yes	Favorable
48.	Yes	Good location	Yes	NR
49.	No	NR	Yes	Favorable
50.	Yes	Good location	No	Favorable
51.	Yes	Bad condition	No*	Favorable
52.	No	Bad condition	Yes	Favorable
53.	Yes	Good condition	Yes	Favorable
54.	Yes	Good rent payment	Yes	NR
55.	Yes	Good location and rent	Yes	Favorable
56.	No	Rent too high	Yes	Favorable
57.	Yes	Like trailer	No*	Favorable
58.	Yes	Like trailer	No*	Favorable
59.	Yes	Good condition, like location	Yes	Favorable
60.	Yes	Like trailer	No*	Favorable

61.	Yes	Good location	No	NR
62.	No	Bad condition	Yes	Favorable
63.	Yes	Bad condition	Yes	NR
64.	Yes	Good condition	Yes	NR
65.	Yes	Good rent payment	Yes	Favorable
66.	Yes	Good location	Yes	Favorable
67.	Yes	Good location	Yes	Favorable
68.	Yes	Good condition, location, rent	No	NR
69.	Yes	Good rent payment	Yes	Favorable
70.	Yes	Good location	Yes	Favorable

\* Asterisk indicates a trailer owner who stated that he would not have purchased the trailer if such a housing unit would have been available at the time of the purchase.

This would imply that the population would not consider living in a new complex; but, when the question, "Would you consider living in a new complex?" was asked, there were forty-five affirmative and only twenty-five negative answers. Of the twenty-five "No" answers, ten said they would consider living in the complex if they did not own a trailer; and they would not have purchased a trailer if such a housing complex had existed at the time of the purchase. This indicates that there are only fifteen actual negative answers to the question referring to the possibility of living in the complex.

The answers to the questions referring to the attitudes toward existing housing had to be categorized so as to facilitate understanding. The "Why", i. e., the reasons for liking or disliking the existing housing unit, gave the interviewee an opportunity to state as many positive or negative aspects as he pleased. Eighteen of the interviewees did not answer the "Why" to the first question. Of the sample that did respond, thirteen said the conditions were good considering their alternatives, and eleven were dissatisfied with the conditions of the dwelling units. Nine were satisfied with the rent payment while five were dissatisfied with the rent. Positive answers concerning the location of dwelling unit amounted to twelve and the negative answers amounted to four; seven said that living in a trailer was the best they could do considering the character of existing facilities in a comparable rent range elsewhere.

The attitudes toward a new married housing complex was



categorized as favorable or unfavorable. Forth-nine of the interviewees gave a "favorable" response in reference to a new housing complex. The remaining twenty-one members of the sample did not answer this question. There was not a single interviewee that gave an unfavorable answer; even the family units that would not consider living in such a complex showed a favorable attitude toward the complex. The type of response to this question ranged from, "It would be nice", to "Wonderful, when can we move in."

It is essential to examine each set of answers in its entirety when attempting to develop a general view as to the attitudes of the sample. The interpretation made by the study group followed this approach when determining the conclusions to the report. The general attitude seems to be favorable toward a married housing complex but the proportion of the sample that would consider living in the complex is not unanimous. From those who responded in the sample, 7 percent would not consider living in the complex under any conditions while 93 percent would consider living in such a complex if it were available.

#### Working Character of Sample:

There were only five observations out of seventy observations in which neither the husband or wife worked. In every other case one or the other adult member of the family held an income earning position. The five observations which had neither husband nor wife working represents 7.1 percent of the sample and family units that

had both husband and wife working constituted 37.1 percent of the sample. The number of husbands that work full time is twenty-four (49 percent of the working husbands) and the number of wives working full time is twenty-six (62 percent of the working wives); the remainder of the working adults work part time.

The large proportion of families that have a member working (92.9 percent) is quite significant; the ability to meet financial obligations is very important. Realizing that 92.9 percent of the families have a steady income gives a high degree of stabilization to the married population on the Western campus. As will be seen in the section on Strengthening Factors, the job opportunities and industrial development in the Bowling Green area is very good now and appears favorable in the future. The prospect of industrial development provides additional opportunities for the student to maintain financial stability.

## STRENGTHENING FACTORS

### Development of the Graduate Program:

An interview with Dr. John Minton, Dean of the University Graduate School, disclosed the fact that the University plans a rapid development of the Graduate Program in the next ten years. The Dean stated that the enrollment in the Graduate School will double by the end of 1968. With the increase in the number of students, there will be an increase in the financial assistance available for the Graduate students. The doubling of the student body in the Graduate School will be accompanied by a doubling of the financial assistantships. Although there were no quantitative measurements given, the administration presented a picture of expansion and growth in the Graduate program. This should definitely add to the numbers of older and more mature students and increase the number of married students on the campus.

### Summer School Program:

There is a decrease in the student body during the summer months. Western Kentucky University is fifth in the state when comparing full-time summer enrollment. The summer program should expand as rapidly as the Graduate Program expands. If this is the case, the number of students remaining for summer course work would surpass the existing summer student body of 2,381. Of course, the married student who is working would not have the same inclination to leave the Bowling Green area during the summer months.

as would the single student. It can be assumed that if a family unit had priority for housing in a married student housing complex, it would hesitate to relinquish that priority for the summer months.

Selective Service:

Extensive study of proposals by the executive branch of government and congressional committees yield only speculation as to the future of the draft and its effects on the college enrollments. Studies are being carried on by the House Education Committee to evaluate the impact of the draft on higher education, but as to the present date, the Committee has not disclosed any of its findings. If the new guidelines which were set forth by the President on March 6, 1967 are followed, the result will be the drafting of 19 year olds first. This would give an incentive for the older student who is more inclined to be married, to make and fulfill college plans. If the new draft follows the President's suggestion, there will be sufficient numbers of 19 year olds for service so as to release the older men for other duties. The study group believes that the implementation of the law would raise the overall age level of the student body and give the college campuses more mature students and a student body which will have more married members.

Another factor which compliments the above is the increase in financial subsidies that is taking place. The G. I. Bill has had an influence on the student body at Western. A canvass of the students receiving the Bill revealed that 38% of the men are attending as a

direct result of this financial assistance. The passage of the National Defense Education Act of 1958 has made long term loans at low interest rates available to all qualified students. As the number of men who complete their military obligation increases, the college campuses will experience an increase in the number of students who are veterans and attend college as a direct result of the financial aid given by the government.

The overall picture obtained from the above remarks indicate that there are factors in motion that will result in a strengthening of the demand for married student housing on all University campuses. Western's development of the Graduate Program should compliment the normal increase experienced by other schools. All in all, the broad forecast looks very good for a strong market for married student housing on the Western campus.

#### Industrial Development:

The present level of economic activity in the Bowling Green area is strong and the future activity looks very good. In the three years preceding 1967, employment opportunities in new and expanding industry has increased 40% in Southern Kentucky. This is approximately double the rate of growth for the entire state. Miss Katherine Peden, Commissioner of Kentucky Department of Commerce, attributes the growth rate to four basic factors. They are, availability of water through rural water districts, the modern highway system, educational assets in the area, and development of local organizations

interested in industrial expansion.

The Bowling Green Chamber of Commerce first made plans for an industrial park in 1961. The original park has since been completed and filled, and a second industrial park has been started. The plants located in the industrial park have expanded since their initial construction. Cutler Hammer has expanded its plant since its construction in 1965. Master Consolidated has expanded 34,000 sq. ft., and Union Underwear has expanded 50,000 sq. ft.

New plants entering the Bowling Green area are Firestone Tire and Rubber Company, Wellington Electronics, and Chain-Belt Corporation. Firestone will construct a 25 million dollar plant (400,000 sq. ft.) seven miles north of Bowling Green. The plant is expected to employ 425 initially, but the employment could eventually be considerably larger. Construction is to begin in June, 1967, and limited production is scheduled for January, 1968.

A secondary factor which accompanies industrial expansion is expansion of retail and service outlets. Three new shopping centers have entered the Bowling Green area and a fourth is well into the planning stage. The Chamber of Commerce estimates that the new shopping centers and Firestone will account for an increase of 3,000 persons in direct employment.

Using the newest shopping center as an example, an insight can be obtained as to the employment opportunities in the retail and service sectors. There are three large outlets that will account for

a significant amount of employment. Woolco Department Store has 90,000 sq. ft., Castner Knott Department Store has 58,000 sq. ft., and an A & P Food Store has 14,000 sq. ft. These outlets should demand a large number of full and part time employees and therefore they will constitute a meaningful increase in job opportunities for the student wife and/or husband.

There is another factor that should be considered although it does not represent as strong an influence as the previous developments. The University now employs approximately 175 married students in full and part time positions. This measurement was given by Mr. Dee Gibson, Coordinator of Western's Work-Study Program. As the school expands towards its goal of 16,350 students, it is expected that the number of jobs made available by the school will expand proportionally. This does constitute additional employment opportunity for the married student, but the incomes usually earned when working as student help do not constitute a meaningful portion of a family's income. Usually the hours worked per week are limited to 15. This results in a small increment of income.

## DESCRIPTION OF EXISTING MULTI-DWELLING FACILITIES

A survey of twenty-three multi-dwelling apartments disclosed that there were only seven apartments that rented exclusively to married couples. The seven units made this their major policy but would rent to single people if they experienced a continued vacancy. When renting to unmarried individuals the units stipulated a much higher deposit; one of the deposits went as high as \$300.00.

Data has been accumulated for seven units which include all the new "luxurious" units in the community. They are "luxurious" in the sense that they are modern and well furnished when furnishings are included. The rent structure, number of bedrooms, and furnishings are presented on Table IX. A description of the complexes will follow the list on Table IX.

### Mall Apartments:

This complex includes gas and electricity in the rent payment. They charge a \$300.00 deposit for all student occupants of the unit. According to the enrollment in September, 1966, there were seven married students living in the complex.

### Knox Manor Apartments:

The water utility is the only utility paid by the apartment complex. There is a \$100.00 deposit for all tenants. The number of married students living in this complex is six.



TABLE IX  
EXISTING MULTIPLE DWELLING FACILITIES:  
Rents and Number of Bedrooms

APARTMENTS	BEDROOMS			EFFICIENCY
	ONE	TWO	THREE	
Mall Apartments 2702 Industrial Drive Rents: Furnished Unfurnished	\$113.00	\$128.00	\$160.00	
Knox Manor 550 Winfield Dr. Rents: Furnished Unfurnished	\$130.00 \$120.00	\$150.00 \$130.00		
Colonial Court Normal Drive Rents: Furnished Unfurnished	\$ 89.00			
Reef Apartments 11th & Stubbins Rents: Furnished Unfurnished	\$110.00			
Village Green Apartments 1132 Fairview Ave. Rents: Furnished Unfurnished	\$116.00	\$141.00		\$115.00
Blue Grass 1555 Chestnut Rents: Furnished Unfurnished	\$110.00 97.50			
Carriage Hill 12th & College St. Rents: Furnished Unfurnished	\$115.00	\$125- 135.00		

Colonial Court Apartments:

The utility included in the rent payment for this unit is water.

There are six married students living in this unit.

Reef Apartments:

All utilities are included in the rent payment for this complex.

There are only two married students living in this complex.

Village Green Apartments:

All utilities are included in the rent payment for this housing unit. There are approximately seven married family units (students) living in this unit.

Blue Grass Apartments:

All the utilities are included in the rent and there are thirteen student family units living in the complex.

Carriage Hill Apartments:

Water is the only utility included in the rent structure of this complex. Since the complex has just started to rent its units, the study group was unable to determine the number of married students living in the complex. \*

It should be noted that all of the above units have complete kitchen facilities. The Mall Apartments include a dishwasher in the kitchen whereas the others do not.

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\* The number of students living in these housing units was obtained from the University records.

TABLE X  
 APPRAISAL VALUE, REPRODUCTION COST, AND  
 ASSESSED VALUE OF EXISTING MULTIPLE DWELLING  
 FACILITIES

APARTMENT	Appraisal Value		Reproduction Cost	Assessed Cost
	Building	Land		
<u>Bowling Green Mall Apts.</u> Construction of block and solid masonry; Two stories with 48 units Building area of 7216 sq. ft.	\$322,638	\$21,400	\$93,030	\$344,000
<u>Knox Manor</u> Construction of Concrete block with brick veneer exterior; Units = 36 2.8 acreage of land	\$222,819	\$24,750	\$214,970	\$247,560
<u>Colonial Court</u> Construction of steel grider with brick veneer on block; one year old; units =	\$71,864	\$3,200	\$90,071	\$82,570
<u>Reef Apartments</u> Construction of concrete block with 21 units; one year old	\$83,943	\$4,750	\$85,222	\$88,693
<u>Village Green Apartments</u> Construction of concrete block foundation with brick veneer exterior; Two stories with 104 units	\$323,214	\$72,000	(1965) \$331,127	(1965) \$395,200 (1966) \$651,400
<u>Blue Grass Apartments</u> Reinforced construction with brick veneer on block; units = 27	\$124,309	\$6,680	\$153,905	\$144,090
<u>Carriage Hill</u>	No information			

Table X presents a short description of the construction of the units discussed and the Appraisal Value, (building and land), Reproduction Costs, and Assessed Cost.

**Trailers:**

There are approximately fifteen trailer courts in the area surrounding the University and near the city of Bowling Green. A representative of Young's Trailers stated that there are two new courts in the construction phase and they will be completed by the spring of 1968. Each court is expected to hold 250 trailers, which will account for 500 new trailer lots coming into existence in early 1968. The average lot rental is between \$25.00 and \$30.00 per month. This rental includes the water and utility.

The price of new trailers starts at \$2,995. This includes models with one and two bedrooms. The major portion of sales constitutes the sale of a more expensive model than the above price indicates. The payments start at \$58.00 per month for seven years. Once again, this represents the minimum figure.

Future Expectations:

The future expansion of housing facilities is not completely known. Housing of the type under consideration has not been advertised as being in the planning stage. There is a fifteen acre tract under option for \$600,000.00 located very near the University. The announced plans for this tract is a housing complex with a rent range of \$135.00 to \$150.00 per month. It is considered to be a

"high rent" complex and it should not create a significant degree of competition with a housing complex specifically for the married student body. The complex that will be constructed on the fifteen acre tract is planned to have 2,000 units located on it in the longrun. It should be noted that the re-zoning for the complex has not been completed, and there seems to be a segment of the community located in the fifteen acre tract that is against the construction of the complex. If this segment is successful in its effort, the complex could be stopped before it really begins.

There is the possibility that one or two housing units could be constructed for the married student segment of the housing market. There has not been an announcement of any such structure being close to the construction phase but if they are, the estimates presented in the conclusion would have to be reassessed.

## CONCLUSION

The concluding remarks of this report will revolve around the size of the market, the number of dwelling units that could be constructed, the rent range that could be charged, the one and two bedroom ratio, the furnished vs. unfurnished ratio, the location aspect of the complex, and the type of housing that has been proven to be successful in the long run.

The statements that follow were made by the study group on the basis of the information gained from the study and the innate knowledge of the market. The conclusions are not to be considered as the only alternatives for the investor. The information presented will have to be evaluated by the investor and the conclusions that he will reach need not necessarily be the same as those reached by the study group.

### Number of Units That Could Be Constructed: 1966-67 and 1971-72.

The study group anticipates that 35.7 percent of the existing family units would not live in the complex. A 30 and 40 percent proportion of the population that would not live in the complex has been used to estimate the number of units that could be constructed. The 40 percent proportion is thought to be the relevant percentage for the decision in 1966-67 and the 30 percent proportion is thought to be the relevant percentage for the decision in 1971-72. Both proportions are presented for each time period for purposes of comparison.

It is obvious that the number of units constructed will be smaller

than the anticipated number of units that could be filled. A 1:5 and 1:4 ratio has been used to predict the number of units that could be constructed. That is, one unit for every five family units and one unit for every four family units that are considered to be in the effective market.

At the present time the population is 827 family units. Using the 30 percent non-occupancy estimate the effective number of family units is 579. When the 1:5 ratio is used, 116 units could be constructed. When the 1:4 ratio is used, 145 units could be constructed. Using the 40 percent non-occupancy estimate the effective number of family units is 496. The 1:5 ratio yields a 99 unit figure for construction and the 1:4 ratio yields a 124 unit figure.

The projected population for 1971-72 is 1,338 family units. The 30 percent non-occupancy proportion yields a family unit figure of 937. The 1:5 ratio gives the number of units that would be occupied as 187. The 1:4 ratio yields a figure of 234 units. The 40 percent non-occupancy proportion results in an effective demand of 803 family units. The 1:5 ratio equals 160 units and the 1:4 ratio 200 units.

It should be noted again that the projection of the population is considered to be biased in the downward direction. The 10 percent proportion of the student body that is assumed to constitute the married family units might be shown to be too low in future studies and thus would demand that the above estimates be adjusted upward.

It should also be noted that the construction of the housing complex would effect the existing trailer market of rentals and purchases. If the housing complex was constructed, the proportion of married students living in the trailer units would decrease from the existing 35.7 percent and thus would result in a smaller percentage of the population having to be considered as non-occupants.

Suggested Rent Range:

The conclusion as to the possible rent range is of critical importance. The size of the rent payment that the market can pay and the amount that will pay can be two different measurements.

As noted in the preceding section, the average rent payment now payed by the sample (Sophomores, Juniors, and Seniors) is \$67.78. It was assumed that the rent figures were understated because of the trailer mortgage and utility factors. If this is a correct assumption, the rent payment derived from the 25 and 28 percent allocation of income would seem to indicate that a \$76.00 to \$78.00 rent payment is not unreasonable. The rent range that is suggested by the study group is from \$75.00 to \$90.00 per month.

The suggested rent range was arrived at in the following way. There was a general indication on the part of the sample that a slightly higher rent would be willingly payed if the dwelling unit was of a higher quality than that available to the majority of the married students. It must also be remembered that 44.4 percent of the Soph. -Jr. -Sr. sample made a rent payment between \$67.78 (the mean)



and \$92.55 (the upper limit of the first standard deviation.). The \$75.00 to \$90.00 rent payment represents an average allocation of income for rent payment of 23.7 percent to 29.4 percent. This is 2 percent to 7 percent higher than the Soph. -Jr. -Sr. average allocation of income for rent payments.

If it is assumed that the new apartment complex could be constructed and charge a rent within the range given, the dwelling units with which it would compete would be the home apartment. That is, the private dwelling with apartments, or the home that has been converted into two or more apartments. As is well known, many of these dwellings are not kept in the best repair and the general character of the dwelling would not be as appealing as a housing complex strictly for University married students. To emphasize this fact it should be remembered that over 15 percent of the sample was dissatisfied with the existing dwelling unit because of the physical condition of the dwelling.

#### One and Two Bedroom Ratio:

The study group concludes that the one and two bedroom ratio could be one to one or two to one at the initial stage of development of such a complex. The ratio would obviously change as the Graduate School develops, and later additions to the complex could follow the future trend as to the ratio, dependent upon the distribution of the family size.

### Furnished Vs. Unfurnished Ratio:

The study group concludes that the ratio of furnished apartments to unfurnished apartments could be two furnished for every five apartments constructed at the initial stage of development. The market would not deteriorate in size because of this aspect of the project. It is well known that young marrieds can obtain furnishings for apartments from various sources (parents and other relatives) with a minimum cash outlay.

### Location of Complex:

The location of the complex is a topic about which the study group can only speculate. The married student body, it is assumed, has at least one automobile per family. With this form of transportation available to the family unit, the student should be able to travel a reasonable distance without significantly disturbing the existing pattern of the family. There is also the fact that ways could be found to overcome any disruption to the family pattern; an example would be a car pool on the part of the students.

The closer to the campus the housing unit, the more desirable the housing unit would be to the market, but the study group feels that the complex could be constructed within a three mile radius of the campus and it would not have a serious effect on the market.

Of course, the significant question is whether the location of a new housing complex would deter a significant percentage of the market from living in the complex. The location is assumed to play a

secondary role in the decision of the family to live in such a complex. This assumption is not valid for those students that have a full-time job out of town; it would be impossible for any housing unit to draw these students to Bowling Green. The study group is making this assumption only for that segment of the market which has a job and/or lives in Bowling Green.

Final Remarks:

A final statement needs to be made as to the type of housing unit that would be successful in the long run. In the past many Universities and private firms have developed housing for married students. Not all of these ventures have been successful. One reason for the lack of success of some of these developments was the fact that the developers failed to realize that the married college student is not significantly different than any other individual in the housing market. The married student will not willingly live in a sub-standard housing unit with a high rent payment. Many students do so, but this is a result of the exploitation of the market by monopolistic suppliers. The point is that a student family unit will not move into a new complex if it is not better than the existing dwelling unit that they occupy. If there is a higher rent payment to be made in the new complex, the difference in the quality of the units should not be less than the difference in the rent, i. e., the higher rent demands that there is a higher quality in the living unit. It has been said that married students do not have a choice when it comes to housing. This is not a correct

statement; they can make a choice. They have the choice of staying where they are or moving into a new complex. Their decision, which is dependent on the investor's decision as to what type of unit will be constructed, determines the success or failure of a married student housing complex.

The type of housing unit that has been successful has the characteristics of being modern, clean, well maintained, and large enough to allow the family to live comfortably. The study group has at its disposal plans for housing units that have proven themselves successful at several educational institutions. The director of the study group would be willing to discuss these plans and any other aspect of the study with any interested party.