728.1 ;308 F22 Madion, WIS. 1966



Analysis of the

MADISON, WISCONSIN HOUSING MARKET

as of September 1, 1966

A Report by the
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL HOUSING ADMINISTRATION
WASHINGTON, D. C. 20411

August 1967

ANALYSIS OF THE MADISON, WISCONSIN, HOUSING MARKET AS OF SEPTEMBER 1, 1966

Field Market Analysis Service Federal Housing Administration Department of Housing and Urban Development

Foreword

As a public service to assist local housing activities through clearer understanding of local housing market conditions, FHA initiated publication of its comprehensive housing market analyses early in 1965. While each report is designed specifically for FHA use in administering its mortgage insurance operations, it is expected that the factual information and the findings and conclusions of these reports will be generally useful also to builders, mortgagees, and others concerned with local housing problems and to others having an interest in local economic conditions and trends.

Since market analysis is not an exact science, the judgmental factor is important in the development of findings and conclusions. There will be differences of opinion, of course, in the interpretation of available factual information in determining the absorptive capacity of the market and the requirements for maintenance of a reasonable balance in demand-supply relationships.

The factual framework for each analysis is developed as thoroughly as possible on the basis of information available from both local and national sources. Unless specifically identified by source reference, all estimates and judgments in the analysis are those of the authoring analyst and the FHA Market Analysis and Research Section.

Table of Contents

	Page
Summary and Conclusions	i
Housing Market Area	1
Map of Area	2
Economy of the Area	3
Character and History Employment Principal Employment Sources Unemployment Future Employment Income	3 3 5 6 6 7
Demographic Factors	9
Population Households	9 12
Housing Market Factors	15
Housing Supply Residential Building Activity Tenure of Occupancy Vacancy Sales Market Rental Market Urban Renewal Public Housing Student Housing	15 17 19 19 21 22 23 24 24
Quantitative Demand Qualitative Demand	25 25

MADISON, WISCONSIN, HOUSING MARKET AS OF SEPTEMBER 1, 1966

Summary and Conclusions

1. State government currently accounts for an estimated one-quarter of all nonagricultural employment in the Madison SMSA, including 11,800 employees at the University of Wisconsin. The government segment has been the principal factor in the recent employment growth in the area; nonagricultural wage and salary employment averaged 98,300 in the first six months of 1966, a gain of over seven percent above the comparable 1965 period. It is estimated that nonagricultural wage and salary employment will increase by about 4,400 to 4,500 jobs annually in the next two years, led primarily by employment gains in the government sector.

Unemployment in the Madison SMSA has been low in the past six years, reaching a high of only 3.0 percent of the work force in 1961. In 1965, 2.3 percent of the work force was unemployed.

The current median annual income of all families in the Madison SMSA is \$8,175, after deduction of federal income tax, and the median income of renter households of two persons or more is \$6,125 annually.

2. The nonfarm population of the Madison SMSA as of September 1966 totals approximately 264,000, including 170,000 persons in the city of Madison. The number of students in the Madison area has risen sharply since 1960 and currently totals over 31,300.

Nonfarm population in the Madison area will increase by about 9,000 persons annually over the next two years, to a September 1968 total of 282,000. Enrollment at the University of Wisconsin should reach 34,000 by the fall semester of 1968.

3. At the present time, nonfarm households in the Madison SMSA number about 75,700, an increase of 2,650 annually since April 1960. There are 49,700 households in the city of Madison. Included in the total households are 6,300 student households and 69,400 nonstudent households.

By September 1968, there should be approximately 81,500 nonfarm households in the Madison SMSA, a gain of 2,900 or 3.8 percent, annually.

4. There are 80,700 nonfarm housing units in the Madison SMSA currently, representing a net addition of about 2,850 housing units annually since April 1960. The total addition of 18,250 resulted from the

construction of 17,850 new units, the demolition of about 1,600 units, and the net addition of 2,000 housing units by conversion.

There have been 18,050 privately-financed housing units authorized for construction in Dane County since 1960, including 8,400 single-family units and 9,650 units in multifamily structures. In addition, 440 public housing units have been built in the Madison SMSA since 1960. Building activity reached a peak in 1964 when 4,300 units were authorized, including 2,800 multifamily units.

Currently, about 900 housing units are under construction in the Madison SMSA, consisting of 350 single-family units and 550 units of multifamily housing.

- 5. At present, there are about 2,900 vacant available housing units in the Madison SMSA. Of the total, 900 are available for sale only, representing a homeowner vacancy ratio of 2.0 percent, and 2,000 are vacant available rental units, representing a rental vacancy ratio of 5.8 percent. These present vacancy levels are above 1960 levels, but represent a decline from the high vacancy rates evident in the area in 1965 and early 1966.
- 6. Demand for additional housing during the September 1, 1966 to September 1, 1968 period is expected to total 2,600 units annually, consisting of 1,500 single-family units and 1,100 multifamily units. In addition, about 300 units could be marketed effectively if provided at rents achievable with the aid of below-market-interestrate financing or assistance in land acquisition and cost. This demand estimate does not include public low-rent housing or rent-supplement accommodations. Annual demand for new single-family housing by price class is expected to approximate the pattern indicated on page 26. Annual demand for multifamily units by gross monthly rent and unit size is expected to be distributed as shown on page 27.

ANALYSIS OF THE MADISON, WISCONSIN, HOUSING MARKET AS OF SEPTEMBER 1, 1966

Housing Market Area

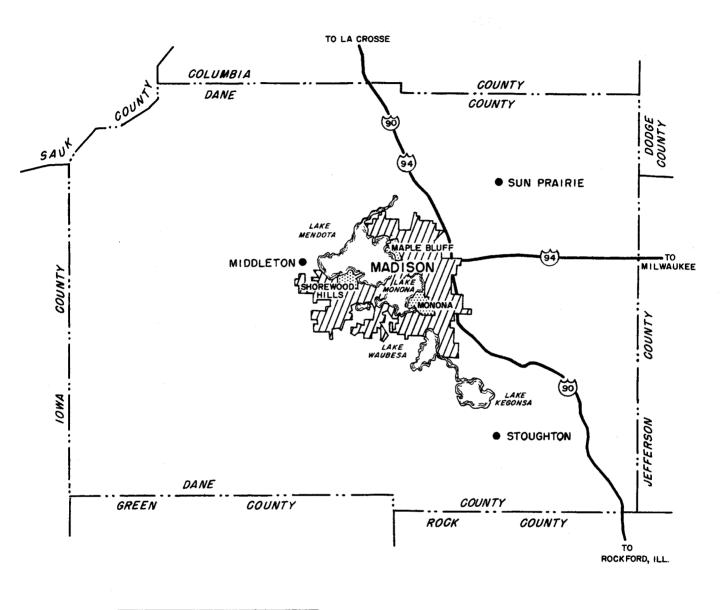
The Madison, Wisconsin, Housing Market Area (HMA) is defined as Dane County, Wisconsin, conforming to the delineation of the Madison Standard Metropolitan Statistical Area (SMSA) and the Madison Labor Market Area. Madison is located in south central Wisconsin about 145 miles northwest of Chicago, 77 miles west of Milwaukee, and 269 miles southeast of Minneapolis-St. Paul.

The nonfarm population of Dane County was 202,200 in 1960. Since rural farm population constituted 9.1 percent of the population of the Madison SMSA, all data exclude the rural farm component, except where specifically noted. Madison is the only major city in Dane County and, in April 1960, accounted for almost 63 percent of the population of the SMSA. The only urbanized area in Dane County is composed of the city of Madison, Middleton village (just to the west of Madison), and three independent cities which are completely within the city limits of Madison: Shorewood Hills, Monona, and Maple Bluff.

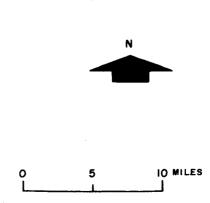
As seen on the map on page two, Lakes Mendota and Monona, which come within a mile of each other in mid-Madison, have directed the growth of the city to the northeast and southwest directions. The State Capitol Building, located in the small isthmus between the two lakes, is the dividing line between East Madison and West Madison.

Transportation facilities in the area are good. Madison is served by an excellent network of federal and state roads, including Interstate Routes 90 and 94, U.S. Routes 12, 14, 18, 51, and 151, and three major state routes. The Chicago and Northwestern Railroad, the Illinois Central, and the Chicago, Milwaukee, St. Paul, and Pacific Railroad offer rail service to all parts of the country. Daily air transportation is provided at the Madison Municipal Airport by North Central, Northwest, and Ozark Airlines. In addition, 25 truck lines and four bus lines serve the city of Madison.

MADISON, WISCONSIN, HOUSING MARKET AREA







Economy of the Area

Character and History

The economy of the city of Madison has gone through a series of stages of development. During the early 1800's, the city served the wheat and dairy farming economy of the area. The two key events during this period which have had a sustained impact on the city were the moving of the state capital to Madison in 1837 and the establishment of the University of Wisconsin in Madison in 1848. As manufacturing industries and major transportation lines were established in the early 1900's, Madison changed from a rural-to an urban-oriented economy.

The educational and governmental sectors added stability to the economy during the 1930's and provided rapid growth after World War II. As other sectors of the economy have grown, so has trade and service employment in the area. In addition, Madison recently has grown as a finance, insurance, and medical center, all of which are linked to the proximity of the university and the state capitol.

Employment

Current Estimate. Nonagricultural employment in the Madison SMSA averaged 107,700 in the first six months of 1966, including 98,300 wage and salary workers and 9,400 employees in other types of non-agricultural jobs, according to the Wisconsin State Employment Service. In addition, about 7,500 workers were employed in agricultural jobs. Table I shows annual average civilian work force components since 1960, including unemployment, and agricultural and nonagricultural employment.

Past Trend. Although the Madison area has been experiencing steady growth in employment since 1960, the greatest increases have occurred in the last eighteen months, principally because of growth in the government sector. Wage and salary employment increased by 1.7 percent between 1960 and 1961 and from 4.0 to 5.2 percent a year between 1961 and 1964. In 1965, however, wage and salary employment averaged 94,100, or 6.6 percent (5,800 jobs) above the 1964 total. In the first six months of 1966, employment was 6,500 above the comparable period of 1965. As indicated in the following table, almost 93 percent of the employment increase since 1960 has occurred in nonmanufacturing industries.

Trend of Nonagricultural Wage and Salary Employment

Madison, Wisconsin, SMSA, 1960-1966

(Annual Averages)

	Manu-	Nonmanu-		Annual	change
Year	facturing	facturing	<u>Total</u>	Number	Percent
1960	13,200	62,500	75,700	· -	· -
1961	13,000	64,000	77,000	1,300	1.7
1962	13,200	66,900	80,100	3,100	4.0
1963	13,300	71,000	84,300	4,200	5.2
1964	13,800	74,500	88,300	4,000	4.7
1965	14,500	79,600	94,100	5,800	6.6
First six months:					
1965	14,200	77,600	91,800	-	-
1966	14,800	83,500	98,300	6,500	7.1

Source: Wisconsin State Employment Service.

Employment by Industry. Manufacturing employment accounts for only about 15 percent of wage and salary employment in the Madison SMSA, and it has been only in the last few years that it has increased substantially. Employment in manufacturing averaged about 13,200 between 1960 and 1963, but then increased by 1,200 during the 1963-1965 period. This growth has continued into 1966 with 14,800 workers in manufacturing industries in the first half of 1966, 600 jobs above the comparable 1965 period. As seen in table II, the largest and most stable manufacturing employment sector is food and kindred products, with about 5,600 workers, over half of whom work for Oscar Mayer and Company, a local meat packer.

Nonmanufacturing employment has increased by 21,000 workers since 1960, to an average of 83,500 in the first half of 1966. Over 83 percent of the nonmanufacturing gain was in the three major employment sources in the Madison area: government, trade, and service.

Government employment, by far the most significant segment of the Madison economy, has increased substantially each year since 1960; annual employment gains averaged 1,100 during the 1960-1963 period, 1,200 from 1963 to 1964, and 1,800 between 1964 and 1965. Government employment in the first six months of 1966 is 2,500 above the total for the first half of 1965 (see table II). Of the 33,300 government employees in the Madison area in 1966, about 3,300 are federal employees

and the remaining 30,000 are employed by the state and local governments. Employment at the University of Wisconsin constitutes the largest single government employment source and has provided much of the growth within that category.

The role of government in the economy of Madison is important not only directly, but also because of its impact on the expansion of many other aspects of the economy, principally trade and services. Wholesale and retail trade employment averaged 20,300 in the first half of 1966, an addition of 840 jobs annually since 1960, including average annual gains of 1,050 during the 1963-1965 period and 1,400 between the first six months of 1966 and the comparable 1965 period. Employment in services has increased from 9,800 in 1960 to 14,200 in the first half of 1966. The largest annual gain in service employment occurred between 1964 and 1965 when employment rose by 1,100 workers. It is significant to note that trade and service employment has increased most rapidly in the last eighteen months, a direct reflection of the corresponding large gains in government employment during the same period.

Employment Participation Rate. The ratio of employment to total population is termed the employment participation rate. Census data indicate that this ratio for the Madison SMSA was about 40 percent in 1960. The rate in the Madison area is high because of the large number of female and part-time employees in the SMSA. Since 1960, rapidly rising university enrollment has caused population to increase more rapidly than employment, resulting in a current participation rate that is below the 1960 ratio, probably between 38 and 39 percent. A decrease in the rate of enrollment growth at the University of Wisconsin coupled with an employment increase above the 1960-1966 average gain, however, should halt the downward trend in the participation rate during the forecast period and result in a ratio of just above 39 percent in the Madison SMSA in 1968.

Principal Employment Sources

State government currently accounts for an estimated one-quarter of all nonagricultural employment in the Madison SMSA. According to the Personnel Office of the State of Wisconsin and estimates by the University of Wisconsin, between 23,500 and 23,800 workers in the Madison area are employed by the state, including 5,925 faculty employees and 5,875 full-time civil service employees at the university. Employment at the University has risen from 4,000 in 1951, to 9,100 in 1960, to the current level of 11,800. Growth in state employment, other than at the university, has been steady since 1960 and substantial in the last two years (reaching gains of about 1,500-1,800 new employees annually).

Oscar Mayer and Company, the largest manufacturing firm in the Madison SMSA, is one of the nation's leading meat producers. According to the Madison Chamber of Commerce, the company employs 3,700 persons; with the improved refrigeration and transportation facilities the company has recently developed, employment should expand slightly during the next few years.

Truax Air Force Base is located seven miles northwest of Madison. The base was established in 1942 as an Army Air Corps Technical Training base and currently serves as the Headquarters for the 30th Air Division, the Headquarters of the Chicago Air Defense Sector, and the home base of the 327th fighter interceptor squadron. An Air National Guard intercepter squadron also is located at Truax.

Assigned military strength at Truax AFB averaged about 2,600 between 1960 and 1965. In addition, about 360 civil service personnel worked at the base. The Defense Department has announced plans for the phase-out of regular Air Force activities at Truax Field by the end of Fiscal Year 1968.

Unemployment

As seen in table I, unemployment in the Madison SMSA has been low in the past six years, reaching a high of only 3.0 percent of the work force in 1961. The lowest annual rate of unemployment in the area since 1960 occurred in 1965 when 2,600 persons, or 2.3 percent of the work force, were unemployed. A comparison of the first half of 1965 and 1966 reveals that unemployment may have dropped even lower than the 1965 level; 2.3 percent of the work force was unemployed in the first half of 1966 compared with 2.7 percent in the first six months of 1965. Since this level of unemployment is considered to be minimal, a substantial decline from the current rate is not expected during the forecast period.

Future Employment

On the basis of the over-all 1960-1966 trend of employment growth and in consideration of the recent surge in employment, it is estimated that nonagricultural wage and salary employment will increase by about 4,400 to 4,500 jobs annually in the next two years. This gain is predicated on the fact that it is unlikely that the 1964-1966 growth rate can be sustained during the forecast period primarily because of a reduced rate of employment growth in the government sector.

The major contributor to employment increases in the Madison area, the government sector, will continue to supply a large part of the new jobs, over 1,500 a year. This increase is below that of the 1964-1966 rate, but is about equal to the growth pattern of the last six years (1,550 new jobs annually). The University of Wisconsin is currently expanding its extension centers by encouraging more freshmen to attend these "satellite" schools. For this reason, enrollment increases at the university in the next two years will be below those of the 1960-1966 period, resulting in a reduction of the 1964-1966 rate of university employment growth. However, the increasing importance of graduate studies should lead to a continued growth in research employees at the university. It is estimated that there will be about 400 new employees at the university annually in the next two years. In addition, civil service employment at Truax AFB will be eliminated, adding to the slight decrease in government employment gains expected in the forecast period.

Despite the reductions at Truax AFB and a modest slowing of university employment growth, the government sector will receive continued impetus from state and local government employment sources. The growing employment at the various state administrative offices and county and municipal gains will be the primary factors in the governmental employment increases.

Trade and service will continue to grow, but at a rate below that of the past eighteen months, probably adding fewer than 1,900 new jobs yearly. The reduced enrollment growth expected during the forecast period should dampen employment increases in trade and services. In addition, the current money market and slowing of construction at the university will cause contract construction employment gains to be all but curtailed.

Income

The current median annual income of all families in the Madison SMSA, after deducting federal income tax, is approximately \$8,175. The median after-tax family income is expected to rise to \$8,600 in 1968. At present, about 12 percent of all families receive after-tax incomes below \$4,000 annually, while an estimated 32 percent of all families have annual after-tax incomes of over \$10,000.

The median after-tax income of renter households of two persons or more is about \$6,125 annually and is expected to increase to \$6,450 in 1968. Currently, 25 percent of these households have after-tax incomes below \$4,000 annually and 13 percent receive after-tax incomes above \$10,000. Distributions of area families by tenure and by income class are presented in table III.

It is probable that the income distributions and the median incomes, particularly of renter households, reflect to an unknown degree the inclusion of married student families who, presumably, are concentrated in the lower ranges of income.

Demographic Factors

Population

 $\underline{\text{HMA Total}}$. The nonfarm population of the Madison SMSA totals approximately 264,000 as of September 1966, an increase of 9,625 persons (4.1 percent) $\underline{\mathcal{V}}$ annually since April 1960 when the population was 202,200. During the previous decade, the nonfarm population of Dane County grew at a rate of 5,725, or 3.4 percent, annually (see table V). The 1960-1966 population growth rate is above that of the 1950's because of the large enrollment increases at the University of Wisconsin in the last six years.

Because of the change in definition of "farm" between the 1950 and 1960 Censuses, many persons living in rural areas who were classified as living on farms in 1950 were considered to be rural nonfarm residents in 1960. The resultant decline in farm population and, consequently, the increase in nonfarm population between the two census dates was, to some extent, the result of the change in definition. Total population, including rural farm, in the Madison SMSA rose from 169,400 in April 1950 to 222,100 in April 1960, indicating a gain of 52,700 persons. Comparing this increase with the nonfarm population decennial gain of 57,300 suggests that about 4,600 persons were affected in 1960 by the definitional change or no longer were actual farm residents.

City of Madison. There are about 170,000 persons residing in the city of Madison currently, a gain of 43,300 over the April 1960 total of 126,700 (see table V). The population of the city of Madison equals about 64 percent of the nonfarm population of Dane County. About 6,400 persons lived in areas annexed to the city since 1960 and an undetermined number of people were subsequently added to the city's population as the annexed areas became urbanized. Most of the recent annexations to Madison have been areas which were undeveloped at the time of annexation.

^{1/} All average percentage changes, as used in the demographic section of this analysis, are derived through the use of a formula designed to calculate the rate of change on a compound basis.

Student and Nonstudent Population Trends. The following table shows student and nonstudent population trends since April 1950.

Student and Nonstudent Population Trends Madison, Wisconsin, SMSA, 1950-1966

				Ave	rage
				annual	change
	April	April	September	1950-	1960-
Components	1950	1960	1966	1960	1966
Total nonfarm population	144,900	202,200	264,000	<u>5,730</u>	9,625
Student enrollment	14,200	16,550	31,300	<u>235</u>	2,300
In households	3,700	6,450	14,000	$\frac{1}{275}$	1,175
Nonhousehold	10,500	10,100	17,300	- 40	1,125
Nonstudent population	130,700	185,600	232,700	5,490	7,325
In households	126,700	182,600	230,000	5,590	7,375
Nonhousehold	4,000	3,050	2,700	-95	- 50

Note: Subtotals may not add to totals because of rounding.

Sources: 1950 and 1960 Censuses of Population. Total population for

1966 and component data for all years estimated by Housing Market Analyst based on University of Wisconsin enrollment

reports.

The number of students at the University of Wisconsin, which increased slowly during the 1950's, has risen sharply since 1960 and currently totals over 31,300. The 1960-1966 annual average net addition to student enrollment of 2,300 includes increases of 3,000 between 1964 and 1965 and 2,000 between September 1965 and September 1966 (see table IV).

The nonstudent segment of the population has been growing at a rate of 3.5 percent annually since April 1950. The change in definition of farm overstated the 1950-1960 increase, however, indicating that the nonstudent segment has grown more rapidly recently than it did during the 1950 decade.

Population in Households. The population in households in the Madison area has increased by about 8,550 annually since 1960, a rate of 4.0 percent per year. Between 1960 and 1966, the number of student households increased at an average rate of 12.0 percent a year compared with a rate of 3.6 percent for nonstudent households. Since 1960, there has been an increasing proportion of upperclass and graduate students at the university, groups that are much more likely to form households than younger students, resulting in an increase in the number of students in households from 6,450 in 1960 to 14,000 currently. Table IV shows total enrollment at the university since 1950, by type of residence.

Nonhousehold Population. Persons living in residence halls, fraternity or sorority houses, and hospitals account for almost all of the population in group quarters (nonhousehold population) in the Madison SMSA. At present, there are about 20,000 persons living in these quarters, including 17,300 students and 2,700 nonstudents.

Both university and privately-owned dormitories have increased their capacities since 1960. Between 1960 and 1965, about 3,500 university dormitory spaces and 2,775 privately-owned dormitory spaces were added to the Madison inventory. During the 1950-1960 decade, the nonhouse-hold student population declined from 10,500 to 10,100, principally as a result of the small enrollment increase and some demolition of substandard student quarters (see table IV).

The nonstudent population in group quarters has declined slightly since 1960 as a result of the demolition of a number of rooming and boarding houses not occupied by students located in downtown Madison. During the 1950's, the nonstudent nonhousehold population declined from 4,000 to 3,050. A major portion of this "decline", however, was the result of a definitional change in census concept from "dwelling units" in 1950 to "housing units" in 1960. This conceptual change had the effect of shifting a number of persons from the nonhousehold category into the household classification.

Future Population. Over-all population growth in the Madison area in the next two years probably will be below that of the 1960-1966 period. The population is expected to increase by about 9,000 persons annually, or 3.6 percent, to a September 1968 total of 282,000. The anticipated decrease in the population growth rate reflects a decline in growth in the student segment of the population. Nonstudent population should grow at about 3.3 percent annually, but student population growth will drop from 2,300 a year between 1960 and 1966 to 1,350 annually during the next two years. Nonstudent population will equal 248,000 by 1968, a gain of about 7,650 annually. Virtually all of this growth is expected to be in the household population segment.

According to university officials, enrollment in September 1968 will be about 34,000, a gain of only 2,700 over the current total. The primary cause of this decrease in enrollment growth at the university is the growing number of freshmen who attend the eleven extension centers; the number of freshmen at the Madison campus will drop from 6,000 currently to about 5,000 by September 1968. For this reason, no new state-owned dormitories are to be built in the next two years.

The number of graduate students at the university will continue to increase, however, rising from 8,200 currently to 9,900 by the fall semester of 1968. Because graduate students tend to form households, all of the net student population growth in the next two years (1,350 annually) is expected to be in the student household segment.

<u>Natural Increase and Migration</u>. Because data are not available separately for **farm** and nonfarm births and deaths, it is necessary to use total population, including rural farm, in order to determine the components of population change.

Components of Population Change Madison, Wisconsin, SMSA, 1950-1966

	Average annual change				
	April 1950-	April 1960-			
Components	April 1960	September 1966			
Total population change	5,274	9,475			
Net natural increase	3,851	4,275			
Net in-migration	1,423	5,200			
Percent of increase due					
to migration	27.0%	54.9%			

Sources: 1950 and 1960 Censuses of Population, Wisconsin State Department of Health, and estimates by Housing Market Analyst.

As seen above, the increased population growth in the last six years is the result of both rising net natural increase and increased in-migration. The average net natural increase of 4,275 a year in the 1960-1966 period compared to 3,850 a year in the 1950's obscures the fact that the net natural increase has been declining in the last five years, from 4,560 in 1961 to only 3,700 in 1965, reflecting a declining birth rate in the Madison SMSA.

A comparison of total in-migration with increases in student enrollment reveals that a large number of the in-migrants were actually nonstudents. Student enrollment at the university increased by an annual average of 235 between 1950 and 1960 and 2,300 annually during the 1960-1966 period, compared with annual average net in-migration totals of 1,425 and 5,200, respectively. Although some of the nonstudent in-migration is actually linked to the university (employees of the school, service and trade establishment employment, etc.), it is also clear that increasing employment opportunities in other sectors of the economy are continuing to draw people to the Madison area.

<u>Households</u>

HMA Total. There are 75,700 nonfarm households in the Madison SMSA as of September 1, 1966, an addition of 2,650 households (4.0 percent) annually since April 1960. In the 1950-1960 decade, the number of

nonfarm households in the area grew by about 3.8 percent annually, from 40,100 in 1950 to 58,700 in April 1960 (see table V). Part of this increase, however, is attributable to census definitional changes which tended to inflate the 1960 nonfarm household figure. The conceptual change from "dwelling unit" in 1950 to "housing unit" in 1960, coupled with the change in the definition of "farm", resulted in definitional increments in the number of nonfarm households reported in 1960.

City of Madison. As of September 1, 1966, there are 49,700 households in the city of Madison. The current total represents an addition of about 1,850 new households annually since April 1960, well above the average annual gain during the 1950 decade. Between 1950 and 1960, the number of households in the city of Madison increased by about 1,175, or 3.7 percent annually (see table V). An increase in the number of student households is a primary cause of the rising household growth rate in Madison since 1960.

<u>Student and Nonstudent Households</u>. The following table shows student and nonstudent nonfarm household trends in the Madison SMSA since April 1950.

Student and Nonstudent Household Trends Madison, Wisconsin, SMSA, 1950-1966

•	April	April	September	Average an	nual change
Nonfarm households	1950	1960	1966	1950-1960	1960-1966
_		_			
Student	2,250	3,650	6,300	140	400
Nonstudent	37 , 850	55,050	69,400	1,720	2,250
Total nonfarm	40,100	58,700	75,700	1,860	2,650

Sources: 1950 and 1960 Censuses of Housing, University of Wisconsin Housing Bureau, and estimates by Housing Market Analyst.

As the proportion of upperclass and graduate students to total enrollment increases at the University of Wisconsin, there is a corresponding increase in the number of student households in the Madison area. Currently, there are 6,300 student households in the SMSA, a gain of about 400 annually over the 1960 spring semester total of 3,650. This gain can also be seen in the large increases in the last few years in the number of students living in apartments, as shown in table IV. Between 1950 and 1960, student households increased by only about 140 a year.

The number of nonstudent households in the Madison SMSA has increased at about 3.6 percent annually over the past 16 years, to a total of 69,400 in September 1966. Part of the increase during the 1950's, however, is probably attributable to census definitional changes, as discussed previously.

Estimated Future Households. Although the population gains expected during the forecast period are slightly below those of the 1960-1966 period, the rise in student household population will keep household growth at a high level, approximately 2,900 or 3.8 percent, annually over the next two years. By September 1968, there should be 81,500 nonfarm households in the Madison SMSA, including 7,500 student households in the Madison SMSA, including 7,500 student households and 74,000 nonstudent households.

The number of student households will increase at a rate of 600 a year during the 1966-1968 period, as compared with 400 annually between 1960 and 1966. The number of nonstudent households should increase by about 2,300 annually in the next two years, continuing the rate of growth of over 3.3 percent evident in this segment since 1950.

Household Size Trends. Currently, the average size of all nonfarm households in the Madison SMSA is estimated at 3.22 persons. After a very slight 1950-1960 decrease in the number of persons per household from 3.25 to 3.22, household size has remained relatively unchanged in Dane County (see table V). Reflecting differences in tenure and age, the average household size in the city of Madison, 3.04 currently, is lower than in the county as a whole. In areas of Dane County outside Madison, the average size of nonfarm households is 3.54 persons currently, unchanged from the April 1960 average size.

Housing Market Factors

Housing Supply

Current Estimate and Past Trend. There are 80,700 nonfarm housing units in the Madison SMSA at present (see table VI). This total represents a net addition to the housing stock of about 18,250 units (29.2 percent), or about 2,850 annually since April 1, 1960. The net addition of 18,250 nonfarm housing units resulted from the construction of 17,850 new units, the demolition of about 1,600 units, and the net addition of approximately 2,000 housing units by conversion. There are about 52,100 housing units in the city of Madison currently, about 65 percent of the Dane County nonfarm total.

During the 1950-1960 decade, the number of nonfarm housing units in the Madison SMSA increased from 41,900 to 62,450, a gain of some 20,550 (49 percent). Part of this increase, however, may have resulted from a census definitional change from "dwelling unit" in the 1950 Census to "housing unit" in the 1960 Census, and from the change in definition of "farm" and "nonfarm" between 1950 and 1960. The number of total housing units, including farm units, rose from 48,000 in 1950 to 67,200 in April 1960, an increase of 19,200 during the decade, suggesting that about 1,350 units were reclassified from farm to nonfarm.

Type of Structure. As seen in the following table, there have been two significant changes in the structural composition of the Madison SMSA nonfarm housing inventory by size of structure since 1960; the number of housing units in structures with five or more units has more than doubled since 1960, increasing from 12 percent of the housing inventory to 19 percent; and the proportion of single-family units has dropped from over 66 percent to less than 61 percent in the last six years.

Nonfarm Housing Inventory by Units in Structure Madison, Wisconsin, SMSA, 1960 and 1966

	April 1	, 1960	September 1, 1966		
<u>Units in Structure</u>	Number	Percent	Number	Percent	
1 unit	41,288	66.1	49,100	60.8	
2 units	7,191	11.5	8,300	10.3	
3 and 4 units	6,490	10.4	7,950	9.9	
5 or more units	7,468	12.0	15,350	<u>19.0</u>	
Total	62,437 <u>a</u> /	100.0	80,700	100.0	

<u>a</u>/ Differs slightly from the count of all units because units in structure were enumerated on a sample basis.

Sources: 1960 Census of Housing.

1966 estimated by Housing Market Analyst.

Age of Structure. Over 47 percent of the current nonfarm housing inventory has been built since 1950, indicating the rapid growth of the Madison area in the last 16 years. The following table presents a detailed description of the nonfarm housing inventory of the Madison SMSA by age of structure.

Nonfarm Housing Inventory by Age of Structure Madison, Wisconsin, SMSA, September 1966

Agea/	Number of units	Percentage distribution
6 and one-half years old or less	17,850	22.1
7 to 16 years old	20,150	25.0
17 to 26 " "	7,900	9.8
27 to 36 " "	6,850	8.5
37 or more years old	27,950	34.6
Total	80,700	100.0

The basic data in the 1960 Census of Housing from which the above estimates were developed reflect an unknown degree of error in "age of structure" occasioned by the accuracy of response to enumerators' questions as well as errors caused by sampling.

Sources: 1960 Census of Housing, C-40 Construction reports, and estimates by Housing Market Analyst.

Condition of the Inventory. Of the 80,700 nonfarm housing units in the Madison SMSA as of September 1, 1966, about 5,700 units (seven percent of the housing stock) are considered to be either dilapidated or lacking one or more plumbing facilities. This indicates an improvement in the Dane County nonfarm housing stock since 1960 when 6,775 units, eleven percent of the inventory, were classified as substandard in condition. The improving condition of the Madison housing inventory is a result of the demolition of some substandard units and the fact that over 47 percent of the housing supply has been built since 1950.

<u>Value and Rent</u>. As reported by the Census of Housing, the median value of all owner-occupied units in the Madison SMSA was \$15,300 in 1960. A general increase in price levels since 1960 and the recent construction of many homes priced above \$20,000 have raised the median value of owner-occupied units to well above \$16,000 currently.

The median monthly gross rent (contract rent plus utilities and services) in the Madison area was \$91 in 1960. The construction of over 9,000 multifamily units in the last six years has been the principal factor in raising the current median contract rent to between \$100 and \$105 monthly.

Residential Building Activity

Annual Volume. Between January 1, 1960 and July 31, 1966, 18,050 privately-financed housing units were authorized in the Madison SMSA, including 8,400 single-family units and 9,650 units in multifamily structures. Building permits cover virtually all new nonfarm residential construction in the Madison HMA. The annual volume of units authorized for construction in Dane County since 1950 by locality is shown in table VII.

The number of privately-financed housing units authorized by building permits in the Madison SMSA dropped slightly from over 2,025 in 1960 to 1,925 in 1961, but then rose each year during the 1961-1964 period. After a 16-year peak construction rate of almost 4,300 units in 1964, vacancy problems in the rental market caused construction levels to drop to 3,200 units in 1965. This downward trend has continued into 1966; 1,350 units have been authorized in the first seven months of 1966 compared to almost 1,675 in the comparable 1965 period. The 1966 authorization level has been adversely affected by the tight money market.

As seen in table VIII, the trends in housing construction in the city of Madison have parallelled those in Dane County as a whole. Between January 1960 and July 1966, more than 10,550 privately-financed housing units were authorized in the city of Madison, 59 percent of the SMSA total. The Madison construction rate reached a 16-year peak in 1964 when over 2,600 units were authorized.

In addition to the 18,050 privately-financed units authorized in the Madison SMSA since 1960, 440 public housing units have been added to the nonfarm housing stock. In 1961, 280 single-family units were built for married students of the university and, in 1963, 160 publicly-financed multifamily units were authorized for construction in the city of Madison.

Type of Structure. The following table shows private building permit authorizations by type of structure in the Madison SMSA since 1960.

Privately-Financed Dwelling Units Authorized by Building Permits Madison, Wisconsin, SMSA, 1960-1966

Type of structure							
			3 to 4	5 units			
Year	l unit	2 units	units	or more	<u>Total</u>		
1960	1,297	76	296	365	2,034		
1961	1,083	122	138	573	1,916		
1962	1,089	118	109	830	2,146		
1963	1,262	146	297	1,406	3,111		
1964	The state of the s	204	180	2,414	4,297		
1965	•	142	40	1,496	3,211		
First seve	en months:						
1965	756	66	18	827	1,667		
1966	647	47	35	615	1,344		

Sources: C-40 Construction Reports and local building inspectors.

Over 8,400 privately-financed single-family units have been authorized for construction in the Madison SMSA, including 4,550 units (54 percent of the SMSA total) in the city of Madison and 3,850 in other areas of Dane County. After dropping slightly between 1960 and 1961, the number of single-family units authorized increased annually to a peak of over 1,525 in 1965. The 1966 rate is below the peak year of 1965, however, as fewer than 650 units have been authorized in the first seven months of 1966.

Since 1963, multifamily construction has accounted for more than half of all private construction in the SMSA. Between 1960 and 1964, the number of units in multifamily structures authorized rose sharply to an unprecedented high of 2,800 units in 1964. Rental vacancy problems and a tight money market, however, have dampened multifamily construction, and only 2,375 multifamily units were authorized between January 1965 and July 1966. Although multifamily building in the city of Madison has accounted for over 62 percent of the total multifamily construction in the SMSA since 1960, the high vacancy rate of 1965 apparently affected construction in the city more than in other parts of Dane County, and the proportion of multifamily construction in Madison to total multifamily construction in the HMA dropped to just over 41 percent in 1965.

Units Under Construction. As of September 1, 1966, about 900 housing units are under construction in the Madison SMSA, including 350 single-family units and 550 units of multifamily housing. It should be noted that there

is a seasonal construction cycle in the Madison SMSA; area builders usually plan to have new multifamily units completed by September in order to coincide with the beginning of the fall semester at the university. Therefore, although the current multifamily construction level appears to be low, it does not represent a secular decline in units under construction.

<u>Demolitions and Conversions</u>. Approximately 1,600 housing units have been demolished since 1960 in the Madison SMSA, or about 250 annually. The large number of college students seeking off-campus housing induces conversion of many single- and two-family structures into three- or more-unit structures. Since April 1960, it is estimated that a total of about 2,000 housing units have been added by conversion to the Madison housing stock, or about 300 a year.

Although the average annual number of units lost through demolition (250) is expected to remain unchanged during the 1966-1968 forecast period, the reduction in student enrollment growth probably will curtail conversion activity in the near future. In addition, almost all of the units in the university area of Madison that were single- or two-family structures in 1960 were converted during the period of rapid enrollment growth between 1960 and 1965, leaving very few units available for future conversion.

Tenure of Occupancy

Increasing enrollment at the university has been the principal factor leading to the shift toward renter occupancy evident in the Madison SMSA since 1960. In April 1960, 39 percent (23,150 units) of the occupied nonfarm housing stock was renter occupied; since that time, the proportion of renter-occupied units has increased to over 43 percent. Currently, there are about 75,700 nonfarm occupied dwelling units in the SMSA, including 43,100 owner-occupied units and 32,600 units that are renter-occupied. Between 1950 and 1960, the proportion of renter-occupied units declined slightly, from 42.6 percent in 1950 to 39.4 percent in 1960.

As seen in table VI, renter occupancy increased in the city of Madison from 46 percent of the occupied units in 1960 to over 49 percent currently. In the remaining parts of Dane County, principally suburban or predominantly rural areas, a smaller proportion of occupied units are renter-occupied, only 28 percent in 1960 and 31 percent currently.

Vacancy

1960 Census. According to the 1960 Census, there were 1,900 vacant units in Dane County available for rent or for sale in April 1960. Of the total, 675 units were available for sale (a homeowner vacancy ratio of 1.8 percent) and 1,225 were available for rent (a 5.1 percent renter vacancy ratio). However, 25 of the available sales units and over 300 available rental units were lacking some or all plumbing facilities.

Vacancy rates in the city of Madison in 1960 were higher than those in the SMSA as a whole in the sales market (2.2 percent) and lower in the rental market (4.7 percent). In April 1960, as seen in table VI, there were 470 available sales units and 850 available rental units in the city of Madison.

<u>Postal Vacancy Survey.</u> A postal vacancy survey was conducted in the area in August 1966 covering almost 66,150 total possible deliveries, or 82 percent of the current nonfarm housing inventory. A total of about 900 vacant residences (2.0 percent vacancies) and over 1,675 vacant apartments (7.8 percent) were reported. Over 1,200 housing units were reported to be in various stages of construction, including over 300 residences and 900 apartments. Results of the survey are summarized in table IX, including totals for each of the six participating post offices.

Since the postal survey was conducted during August when many apartments primarily intended for student-occupancy are vacant or in the final stages of construction, a comparison of the vacancy situation in August and September is not completely valid. The 7.8 percent apartment vacancy rate reported in the August postal survey is well above the current rental vacancy rate of 5.8 percent; also, the number of apartments under construction in August (900) is higher than the 550 units under construction currently. Many of the vacant apartments and units under construction reported in the August postal survey are currently occupied and/or have been completed in time for the beginning of the school year.

It is important to note that the postal vacancy survey data are not entirely comparable with the data published by the Bureau of the Census because of differences in definition, area delineation, and methods of enumeration. The census reports units and vacancies by tenure, whereas the postal vacancy survey reports units and vacancies by type of structure. The Post Office Department defines a "residence" as a unit representing one stop for one delivery of mail (one mailbox). These are principally single-family homes, but include duplexes and structures with additional units created by conversion. An "apartment" is a unit on a stop where more than one delivery of mail is possible. Postal surveys omit vacancies in limited areas served by post office boxes and tend to omit units in subdivisions under construction. Although the postal vacancy survey has obvious limitations, when used in conjunction with other vacancy indicators, the survey serves a valuable function in the derivation of estimates of local market conditions.

Current Estimate. Based on the results of the postal vacancy survey and information received from local builders and realtors, the current number of available vacant units is judged to be above the 1960 level; the September 1966 over-all vacancy rate is 3.7 percent compared to 3.1 percent in April 1960. At present, there are about 2,900 vacant available housing units in the Madison SMSA, including 900 sales units (a 2.0 percent homeowner vacancy rate) and 2,000 rental units (a 5.8 percent renter vacancy rate). The current number of vacant housing units and those reported by the 1960 Census are presented in table VI for the city of Madison and the SMSA.

Between 1960 and 1964, sales and rental vacancy rates probably stayed near the 1960 levels of 1.8 percent and 5.1 percent, respectively. In late 1965 and early 1966, however, vacancies in the rental market rose to a peak, probably well over seven percent of the available inventory. This increase was caused primarily by the large number of multifamily units completed in the Madison area in the 1964-1965 period. Some curtailment in construction, coupled with an increasing number of students entering the off-campus rental market, has reduced the rental vacancy rate recently, however, below the 1965 level. Although the number of rental vacancies continue to decline, it is judged that there is still a slight excess of rental units available currently. The sales vacancy rate probably did not increase materially in 1965, and the current rate is only slightly above the 1960 level of 1.8 percent.

Sales Market

General Market Conditions. The sales market in the Madison SMSA appears to have weakened slightly in the last eighteen months. Sales vacancies have increased to the point that there is considered to be a moderate oversupply, and the amount of speculative construction has decreased in the last three years. The modest oversupply has not affected the absorption of new units or single-family construction levels seriously, however.

Major Subdivision Activity and Price Trends. Some individual locations within the Madison area currently have exceptionally strong sales markets. In West Madison, for example, both new and existing homes are selling well and there appear to be no vacancy problems. Most of the homes in this area are priced between \$20,000 and \$25,000. The homes in the Odana Hills area of West Madison, about 10-15 years old, are priced around \$20,000 and those that are placed on the market are usually sold immediately. Newer homes in the West Madison area are generally priced around \$25,000.

Most of the homes built in the last few years to sell for under \$20,000 have been constructed in East Madison. While marketing experience has been acceptable in this area, there appears to have been some overbuilding recently in the lower price range. Above \$18,000, however, marketability has been good. In this area a substantial volume of homes priced between \$18,500 and \$25,000 have been sold in the last two years.

Unsold Inventory of New Homes. The annual surveys of unsold new sales houses which were conducted by the Milwaukee FHA Insuring Office in January of 1964, 1965, and 1966 covered subdivisions in which five or more houses were completed in the Madison HMA in the twelve months preceding the survey dates (see table X). A comparison of the three surveys reveals that the proportion of speculative to total construction has been dropping since 1963. In the January 1964 survey, 73 percent of total completions were reported built speculatively. This ratio dropped to 62 percent for new units built in 1964, and less than half of the 400 units completed in 1965 and covered by the 1966 survey had been built speculatively.

The most recent survey, conducted in January 1966, covered 12 subdivisions in which 400 houses were completed during 1965. Almost 210 (51 percent) of the completed units were reported to have been sold prior to the start of construction and about 190 units were built speculatively. Of the speculatively-built houses, 30 (15.5 percent) were unsold. Almost 46 percent of the houses completed in 1965 were over \$20,000 in price, compared to about 17 percent of the 1963 completions in the over-\$20,000 price range.

Rental Market

General Market Conditions. The large number of multifamily units constructed in 1963 and 1964 (4,650 units) apparently exceeded rental demand, resulting in a soft rental market during 1965 and early 1966. Recently, however, the volume of new multifamily construction has declined and vacancy rates have trended downward.

Since student households account for about 20 percent of all renteroccupied housing units, many of the new multifamily units are in locations
and price ranges which point toward student occupancy, typically one- and
two-bedroom garden-type apartments in large projects near the university
or in West Madison. Gross rents in new apartments designed primarily for
students generally average about \$120 to \$160 monthly for two-bedroom
units, and usually include swimming pool privileges, other recreational
facilities, and other amenities. Projects of this type represent the
strongest segment of the Madison rental market. Recently, the market for
high-rise apartments in the Madison area has improved considerably. Gross
monthly rents typically range from \$105 for an efficiency to \$155 for twobedroom units.

The weakest segments of the Madison rental market appear to be in the cities surrounding Madison and in units in four- to eight-unit structures on scattered individual lots in or near Madison. Although rents in the small projects are generally only \$10 to \$20 a month less than rents in the larger multifamily developments, there is usually considerable difference in the amenities offered. Also, small-scale projects located in predominantly single-family or mixed residential-commercial areas do not appeal to students and others connected with the university who prefer renting in areas with concentrations of students.

FHA Multifamily Absorption Survey. As the table below indicates, the rental market deteriorated substantially during 1965. It is important to note, however, that in the units between three months and one year old, vacancies dropped from 14 percent to four percent during 1965, while in units over one year old, vacancy rates more than doubled. This seems to indicate that the location and amenities of units completed during 1965 were better adopted to market demand than were the 1964 completions—for many of which, vacancies remained significant in January 1966. Throughout 1966 new units have been marketing well, typically renting from \$140 to \$150 for two-bedroom units.

Rental Vacancy Survey Madison, Wisconsin, SMSA, 1963-1966

Units Surveyed by Age Group	March 1963	January 1965	January 1966
Units over one year old	1,607	3,177	4,224
Percent vacant	2.8%	4.0%	8.1%
Three months to one year old	391	1,049	1,332
Percent vacant	0.5%	14.0%	4.0%
Three months old or less	156	190	134
Under construction	873	1,914	1,306

Source: FHA Milwaukee Insuring Office.

Urban Renewal Activity

Currently, there are five urban renewal projects in the HMA, all of which are located in Madison. Two of the projects are in execution and one is scheduled for completion in September 1966.

Brittingham Urban Renewal Project (R-1) is located in an established residential and commercial neighborhood of downtown Madison. About 45 units have been demolished and 31 families have been relocated. Present use of the land is primarily residential and includes a 150-unit high-rise project. No other dwelling units have been constructed in the project area.

Triangle Urban Renewal Project (R-2) began execution in January 1962. The project is located adjacent to the Brittingham project and is bounded generally by Regent Street on the north, West Washington Avenue on the south, and Park and Mills Streets on the west. The land use before execution was primarily residential; re-use of project land will be principally residential and commercial. About 465 dwelling units in the area have been demolished and 300 families have been relocated. A 60-unit public housing project for the elderly has been built in the Triangle area and plans schedule two more multifamily developments to be built in the area in 1967: a 170-unit moderate rent project and a 150-unit high-rise apartment building.

South Madison Urban Renewal Project (R-7) is a residential area about three miles south of the university campus, bounded by Park Street on the west, Wingra Creek on the north, the Northwestern Railroad on the east, and Buick Street on the south. Demolition of about 65 dwelling units will begin in 1967, and about 75 single-family houses will be constructed in the project.

University Avenue Urban Renewal Project (R-26) is adjacent to the university campus. The project is bounded by University Avenue on the north, Frances Street on the east, Johnson Street on the south, and Brooks Street on the west. Execution of the project will begin in 1967 with the demolition of about 100 dwelling units, principally rooming houses and converted units. On completion, land use of the project will be institutional and commercial, including about 300 rooming-house units for students.

<u>University General Neighborhood Renewal Project</u> (R-21) is a large area just south of the university campus. The area now contains a large number of commercial structures and rooming houses for students, which will eventually be demolished. Execution should begin in 1968 and new dormitories with 3,000-4,000 spaces will constitute the primary re-use of the project area.

Public Housing

There are 280 units of public housing in the city of Madison, including 160 units in a federally-aided project and 120 units in a state-aided project. Included in the 160-unit project are 60 units of housing designed specifically for the elderly. A 130-unit federally-aided public housing project for the elderly is planned for construction during the 1966-1968 forecast period.

Student Housing

At present, there are 7,350 university-owned dormitory spaces in the Madison SMSA, including 3,950 spaces for men and 3,400 for women. In addition, there are 870 on-campus apartments for married students. As seen in table IV, almost 3,500 dormitory spaces have been built between 1960 and 1965. In addition, about 280 units of married-student housing were built in 1961. No dormitory spaces are to be constructed by the university between 1966 and 1968, but construction of 250 married-student housing units will begin in 1966 to open by the 1967 school year.

In addition to the university-owned dormitories on the Madison campus, there are almost 7,550 spaces available in privately-owned dormitories near the campus. Although the university does not control the financial arrangements of these dormitories, they are subject to rules governing housing of students (curfew hours, maintenance, recreation rules, etc.). As seen in table IV, the number of privately-owned dormitory spaces increased from 4,450 in September 1960 to almost 7,225 in September 1965.

Demand for Housing

Quantitative Demand

The demand for housing in the Madison SMSA is based on the projected growth of 2,900 households annually during each of the next two years, with adjustment for the expected volume of residential demolitions and the excess of available vacant units currently in the Madison housing market. Tenure of housing demand is adjusted for the continuation of a shift toward renter occupancy and the realization that some part of the demand for rental units will continue to be supplied by single-family housing. Based on these considerations, annual demand for new housing is estimated at 2,600 units, of which 1,500 units represent demand for single-family units and 1,100 units represent demand for multifamily housing. The multifamily demand estimate excludes 300 middle-income units that may be marketed only at the rents achievable with the aid of below-market-interest-rate financing or assistance in land acquisition and cost. These estimates do not include public low-rent housing or rent-supplement accommodations.

The forecast average annual demand for 1,500 single-family houses approximates the 1964 and 1965 rates of single-family construction. The projected multifamily demand of 1,100 units annually represents a continuation of a downward trend in multifamily activity evident since 1964.

Qualitative Demand

<u>Sales Housing</u>. Based on current family incomes, on typical ratios of income to purchase price, and on recent market experience, the annual demand for 1,500 single-family units is expected to be distributed as shown in the following table. Based on current land prices and development costs in the Madison area, it is judged that single-family houses that meet minimum standards cannot be produced to sell for less than about \$14,500.

Estimated Annual Demand for New Single-family Housing Madison, Wisconsin, SMSA, September 1, 1966 to September 1, 1968

Sales price	Number of units	Percentage distribution
Under \$16,00	75	5
\$16,000 - 17,99	9 225	. 15
18,000 - 19,99	9 235	16
20,000 - 24,99	9 395	26
25,000 - 29,99	9 345	23
30,000 - 34,99	9 135	9
35,000 and over	· <u> </u>	6
Total	1,500	100

The foregoing distribution differs from that in table X, which reflects only selected subdivision experience during the years 1963, 1964, and 1965. It must be noted that these data do not include new construction in subdivisions with less than five completions during the year, nor do they reflect individual or contract construction on scattered lots. It is likely that the more expensive housing construction, and some of the lower-value homes, are concentrated in the smaller building operations which are quite numerous. The preceding demand estimates reflect all home building and indicate a greater concentration in some price ranges than a subdivision survey would reveal.

Multifamily Housing

The monthly rental at which privately-owned net additions to the aggregate multifamily housing inventory might best be absorbed by the market are indicated for various size units in the following table. These net additions may be accomplished by either new construction or rehabilitation at the specified rentals with or without public benefits or assistance through subsidy, tax abatement, or aid in financing or land acquisition. The production of new units in higher rental ranges than indicated below may be justified if a competitive filtering of existing accommodations to lower ranges of rent can be anticipated as a result.

In the Madison SMSA, it is judged that the minimum gross rents achievable with market interest rate financing are \$80 for efficiency units, \$100 for one-bedroom units, \$120 for two-bedroom units, and \$140 for three-bedroom units. **J Below these rent levels, 300 units of middle-income rental units may be marketed.

^{1/} Calculated on the basis of a long-term mortgage (40 years) at 5½ percent interest and 1½ percent initial annual curtail; changes in these assumptions will affect minimum rents accordingly. An effective rate of six percent or more would raise these minimums by \$10 to \$15 a unit.

Estimated Annual Demand for New Multifamily Housing Madison, Wisconsin, SMSA, September 1, 1966 to September 1, 1968

•		Size	of unit	
Gross	•	One	Two	Three or more
monthly rent a	<u>Efficiency</u>	<u>bedroom</u>	bedroom	bedroom
			•	
80 and over	60	-	-	-
85 " "	55	-	-	-
90 '' ''	45	-	-	-
95 " "	35	-	_	-
100 " "	20	475	-	-
110 " "	10	405	-	_
120 " "	-	315	470	-
130 " "	-	240	455	,
140 " "	-	170	425	95
150 " "	-	110	345	80
160 " "	- ,	60	255	55
170 " "	-	40	155	40
180 " "	-	20	55	30
190 " "	-	-	30	20
200 " "	-	-	15	10

a/ Gross rent is shelter rent, plus the cost of utilities.

Note: The above figures are cumulative and cannot be added vertically. For example, demand for one-bedroom units at rents from \$100 to \$120 monthly is 160 units (475 minus 315).

The annual demand for 300 additional multifamily units that may be marketed only at the lower rents achievable through the utilization of below-market-interest-rate financing or assistance in land acquisition or cost includes 15 efficiencies at rents of \$65 or more, 130 one-bedroom units at rents of \$80 and above, 80 two-bedroom units at \$95 or more, and 75 three-bedroom units at \$110 and above.

The preceding distribution of average annual demand for new apartments is based on projected tenant-family income, the size distribution of tenant households, and rent-paying propensities found to be typical in the area; consideration is also given to the recent absorption experience of new rental housing. Thus, it represents a pattern for guidance in the production of rental housing predicated on foreseeable quantitative and qualitative considerations. Specific market demand opportunities or replacement needs permit effective marketing of a single project differing from this demand distribution. Even though a deviation may experience market success, it should not be regarded as establishing a change in the projected pattern of demand for continuing guidance unless thorough analysis of all factors involved clearly confirms the change. In any case, particular projects must be evaluated in the light of actual market performance in specific rent ranges and neighborhoods or submarkets.

The location factor is of especial importance in the provision of new units at the lower rent levels. Families in this user group are not as mobile as those in other economic segments; they are less able or willing to break with established social, church, and neighborhood relationships, and proximity to place of work frequently is a governing consideration in the place of residence preferred by families in this group. Thus, the utilization of lower-priced land for new rental housing in outlying locations to achieve lower rents may be self-defeating unless the existence of a demand potential is clearly evident.

Table I

Civilian Work Force Components

Madison, Wisconsin, SMSA

Annual Averages, 1960-1965

(in thousands)

						Nonagr	icultural emp	loyment
Year	Civilian work force	<u>Unemp</u> Number	loyment Percent	Total employment	Agricultural employment	Total	Wage and salary	Other a/
1960	99.2	2.7	2.7	96.5	9.8	86.7	75.7	11.0
1961	99.8	3.0	3.0	96.8	8.8	88.0	76.9	11.1
1962	100.3	2.6	2.6	97.7	8.7	88.9	80.1	8.8
1963	104.9	2.9	2.8	101.8	8.5	93.3	84.3	9.0
1964	108.6	2.7	2.5	105.8	8.2	97.6	88.3	9.3
1965	113.8	2.6	2.3	111.2	7.9	103.3	94.1	9.2
First								
six months:								
1965	111.8	3.0	2.7	108.9	7.9	101.0	91.8	9.2
1966 <u>b</u> /	118.0	2.7	2.3	115.3	7.5	107.7	98.3	9.4

<u>a</u>/ Includes self-employed and unpaid family workers and domestic workers in private households.

Note: Totals may not add due to rounding.

Source: Wisconsin State Employment Service.

b/ June 1966 data is preliminary.

Table II

Nonagricultural Wage and Salary Employment by Industry Group Madison, Wisconsin, SMSA Annual Averages, 1960-1965 (in thousands)

						First six months		
Industry group	<u>1960</u>	<u>1961</u>	1962	<u> 1963</u>	<u>1964</u>	1965	1965	1966 ^{a7}
Nonagricultural wage and salary employment	75.7	<u>77.0</u>	<u>80.1</u>	84.3	88.3	94.1	91.8	99.4
Manufacturing	13.2	<u>13.0</u>	<u>13.2</u>	<u>13.3</u>	13.8	14.5	<u>14.2</u>	15.5
Durable goods Nonelectrical machinery Other durable goods	$\frac{5.2}{1.7}$	$\frac{5.0}{1.6}$	$\frac{5.3}{1.7}$	$\frac{5.5}{2.0}$	$\frac{5.9}{2.3}$ 3.6	$\frac{6.5}{2.6}$	$\frac{6.3}{2.6}$	$\frac{6.8}{2.8}$
Nondurable goods Food and kindred products Other nondurable goods	$\frac{8.0}{5.8}$	$\frac{8.0}{5.7}$	$\frac{7.9}{5.6}$	7.8 5.6 2.2	$\frac{7.9}{5.6}$	8.0 5.6 2.4	7.8 5.5 2.3	$\frac{8.1}{5.6}$
Nonmanufacturing	62.5	64.0	66.9	<u>71.0</u>	<u>74.5</u>	<u>79.6</u>	77.6	83.5
Contract construction Transportation and public utilities Wholesale and retail trade Finance, insurance, and real estate Service and miscellaneous Government	4.4 4.1 15.7 3.8 9.8 24.8	4.4 4.0 15.8 3.9 9.9 25.9	4.9 4.1 16.2 4.0 10.8 27.0	5.0 4.4 17.4 4.4 11.7 28.1	5.4 4.6 18.1 4.6 12.5 29.3	5.8 4.8 19.5 4.8 13.6 31.1	5.2 4.7 18.9 4.7 13.4 30.8	6.1 5.0 20.5 5.1 13.9 33.4

a/ June 1966 data are preliminary.

Note: Totals may not add due to rounding.

Source: Wisconsin State Employment Service.

Mil ole

Estimated Income Distribution of All Nonfarm Families and of Renter Households

After Deduction of Federal Income Tax

Madison, Wisconsin, SMSA, 1966 and 1968

Table III

	196	6	1968			
Family income	All families	Renter <u>households</u> <u>a</u> /	All families	Renter <u>households</u> <u>a</u> /		
Under \$ 2,000	3	9	2	8		
\$ 2,000 - 2,999	4	7	4	7		
3,000 - 3,999	5	9	5	8		
4,000 - 4,999	7	10	6	9		
5,000 - 5,999	8	13	8	12		
6,000 - 6,999	10	13	9	13		
7,000 - 7,999	11	11	10	11		
8,000 - 8,999	11	9	10	8		
9,000 - 9,999	9	6	9	8		
10,000 - 12,499	15	7	17	9		
12,500 - 14,999	10	2	11	2		
15,000 and over		4	9	5		
Total	100	100	100	100		
Median	\$8,175	\$6,125	\$8,600	\$6,450		

<u>a</u>/ Excludes one-person renter households.

Source: Estimated by Housing Market Analyst.

Table IV

Enrollment Trends and Housing Characteristics

University of Wisconsin at Madison
September 1950-September 1966

			Place of residence									
,		Total	University	Private	Apt., house,	Fraternity	With	· · · · · · · · · · · · · · · · · · ·				
<u>Date</u>		<u>enrollment</u>	dormitorya/	dormitory	trailer, etc.	or sorority	parents	<u>Other</u>				
September	1950	15,766	2,657	6,421	2,597	1,525	1,706	860				
11	1951	14,020	2,557	5,271	2,204	1,660	1,331	997				
11	1952	13,571	2,509	4,622	2,374	1,559	1,278	1,229				
11	1953	13,346	2,540	4,872	2,431	1,515	1,225	763				
11	1954	13,954	2,527	4,998	2,722	1,565	1,256	886				
11	1955	15,134	2,640	5,171	3,481	1,621	1,407	814				
11	1956	15,918	2,569	5,380	4,301	1,649	1,356	663				
11	1957	15,929	2,596	5,007	4,669	1,706	1,403	548				
11	1958	16,590	3,011	4,654	5,060	1,599	1,467	799				
11	1959	17,433	4,312	3,854	5,236	1,565	1,566	900				
11	1960	18,811	4,155	4,452	5,420	1,511	1,382	1,891				
11	1961	20,118	4,526	5,292	6,162	1,679	1,736	723				
11	1962	21,733	4,620	5,816	6,587	1,723	1,892	1,095				
11	1963	24,275	5,523	5,734	7,845	1,722	1,949	1,502				
11	1964	26,293	6,658	6,742	8,447	1,800	1,819	827				
11	1965	29,299	7,653	7,221	8,877	1,907	2,230	1,411				
11	1966 <u>b</u> /	31,300	NA	NA	NA	NA	NA	NA				

a/ Includes on-campus apartments for married students.

Source: University of Wisconsin Department of Institutional Studies and University Housing Bureau.

 $[\]underline{b}$ / University of Wisconsin estimates.

Table V

Population and Household Trends

Madison, Wisconsin, Housing Market Area

April 1, 1950-September 1, 1966

Nonfarm population	April 1, 	April 1, 1960	September 1,	A 1950- Number		nual change 1960- Number	
Madison Rest of Dane County County total	96,056 48,848 144,904	126,706 75,480 202,186	170,000 <u>94,000</u> 264,000	3,065 2,663 5,728	$\frac{2.8}{4.4}$	6,750 2,875 9,625	4.6 3.4 4.1
Nonfarm households							
Madison Rest of Dane County County total Household Size	26,027 14,096 40,123	37,856 20,830 58,686	49,700 26,000 75,700	1,183 673 1,856	3.7 3.9 3.8	1,850 800 2,650	4.2 3.5 4.0
Madison Rest of Dane County County total	3.22 3.31 3.25	3.05 3.54 3.22	3.04 3.54 3.22	- - -	- - -	- - -	- -

a/ Derived through the use of a formula designed to calculate the rate of change on a compound basis.

Sources: 1950 and 1960 Censuses of Population and Housing.

1966 estimated by Housing Market Analyst.

Table VI

Components of the Nonfarm Housing Inventory
Madison, Wisconsin, SMSA, 1960-1966

	Madison		Rest	of SMSA	SMSA total			
Occupancy and tenure	April	September	April	September	April	September		
	1960	1966	1960	1966	1960	1966		
Total nonfarm housing supply	39,551	52,100	22,891	28,600	62,442	80,700		
Occupied housing units Owner-occupied Percent of all occupied	37,856	49,700	20,830	26,000	58,686	75,700		
	20,513	25,200	15,036	17,900	35,549	43,100		
	54.2%	50.7%	72.2%	68.8%	60.6%	56.9%		
Renter-occupied Percent of all occupied	17,343	24,500	5,794	8,100	23,137	32,600		
	45.8%	49.3%	27.8%	31.2%	39.4%	43.1%		
Vacant housing units	1,695	2,400	2,061	2,600	3,756	5,000		
Available For sale Homeowner vacancy rate For rent Renter vacancy rate	1,318	1,900	588	1,000	1,906	2,900		
	470	600	200	300	670	900		
	2,2%	2.3%	1.3%	1.6%	1.8%	2.0%		
	848	1,300	388	700	1,236	2,000		
	4.7%	5.0%	6.3%	8.0%	5.1%	5.8%		
Other vacant <u>a</u> /	377	500	1,473	1,600	1,850	2,100		

<u>a</u>/ Includes vacant seasonal units, dilapidated units, units sold or rented awaiting occupancy, and units held off the market.

Sources: 1960 Census of Housing.

1966 estimated by Housing Market Analyst.

Table VII

Number of Housing Units Authorized by Building Permits

Dane County, Wisconsin, 1950-1966

	Private residential construction								
*					Total	public	Total		
<u>Year</u>	Madison	$\underline{\texttt{Middleton}}$	Monona	Sun Prairie	Dane County	private units	units	SMSA	
1950	1,168	-	155	-	424	1,747	-	1,747	
1951	541		111	-	327	979	-	979	
1952	650	-	127	-	524	1,301	-	1,301	
1953	632	-	159		494	1,285	5	1,290	
1954	903	52	197	33	643	1,828	-	1,828	
1955	1,141	54	172	50	758	2,175	-	2,175	
1956	889	42	131	49	501	1,612	-	1,612	
1957	770	31	113	49	487	1,450	100	1,550	
1958	1,558	38	116	57	591	2,360	288	2,648	
1959	1,109	19	97	126	633	1,984	-	1,984	
1960	1,298	28	130	90	488	2,034	-	2,034	
1961	1,270	60	139	106	341	1,916	280	2,196	
1962	1,348	. 33	157	85	523	2,146	-	2,146	
1963	1,781	74	295	107	854	3,111	160	3,271	
1964	2,612	297	78	283	1,027	4,297	•	4,297	
1965	1,446	102	130	125	1,408	3,211	•	3,211	
First seven									
mos.									
1965	818	54	75	60	660	1,667	-	1,667	
1966	817	49	54	56	368	1,344	-	1,344	

Sources: C-40 Construction Reports and Local Building Inspectors.

Privately-Financed Housing Units

Authorized by Building Permits by Type of Structure

Madison, Wisconsin, SMSA, 1960-1966

	Madison		_Rest of	SMSA	Tota	Total Madison SMSA				
	Single-	Multi-	Single-	Multi-	Single-	Multi-				
Year	<u>family</u>	<u>family</u>	<u>family</u>	<u>family</u>	<u>family</u>	<u>family</u>	<u>Total</u>			
1960	785	513	512	224	1,297	737	2,034			
1961	624	646	459	187	1,083	833	1,916			
1962	579	769	510	288	1,089	1,057	2,146			
1963	673	1,108	589	741	1,262	1,849	3,111			
1964	796	1,816	703	982	1,499	2,798	4,297			
1965	756	690	777	988	1,533	1,678	3,211			
First seve	n mos.									
1965	427	391	329	520	756	911	1,667			
1966	349	468	29 8	229	647	697	1,344			

Source: C-40 Construction Reports and Local Building Inspectors.

Table IX

Madison, Wisconsin, Area Postal Vacancy Survey

August 8, 1966

	То	tal residen	ces and	apartment					lesiden	es .				Apa	rtments				House t	railers	
	Total possible		Vacant	units		Under	Total possible	V	cant un	its		Under	Total possible		cant un			Under	Total possible		ant
Postal area	deliveries	All	%	Used	New	const.	deliveries	All		Used	New	const.	deliveries	All	<u>%</u>	Used	New	const.	deliveries	No.	
The Survey Area Total	66,126	2,577	3.9	1,939	638	1,214	44,565	<u>895</u>	2.0	<u>631</u>	<u>264</u>	313	<u>21,561</u>	1,682	<u>7.8</u>	1,308	<u>374</u>	<u>901</u>	<u>895</u>	<u>19</u>	2.1
Madison	55,248	2,142	3.9	1,590	<u>552</u>	1,097	34,598	<u>558</u>	1.6	<u>364</u>	194	226	20,650	1,584	<u>7.7</u>	1,226	<u>358</u>	871	<u>770</u>	<u>13</u>	1.7
Main Office	12,696	543	4.3	521	22	205	2,988	63	2.1	63	-	1	9,708	480	4.9	458	22	204	-	-	-
Stations: Brookwood Hilldale East Side	13,109 8,802 20,641	741 176 682	5.7 2.0 3.3	443 149 477	298 27 205	488 133 271	9,322 5,885 16,403	146 60 289	1.6 1.0 1.8	57	69 3 122	82 43 100	3,787 2,917 4,238	595 116 393	15.7 4.0 9.3	92	24	406 90 171	176 - 594	5 - 8	2.8
Other Cities and Towns	10,878	<u>435</u>	4.0	349	86	<u>117</u>	9,967	337	3.4	<u>267</u>	<u>70</u>	<u>87</u>	911	<u>98</u>	10.8	82	<u>16</u>	<u>30</u>	<u>125</u>	<u>6</u>	4.8
Middleton	2,235	94	4.2	46	48	51	1,846	- 55	3.0	23	32	23	389	39	10.0		16	28	23	-	0.0
Mount Horeb Oregon Stoughton	1,253 1,270 3,397	24 26 193	1.9 2.0 5.7	24 18 188	- 8 5	9 14 21	1,121 1,244 3,301	15 23 179	1.3 1.8 5.4	15 15 174	- 8 5	9 14 21	132 26 96	9 3 14	6.8 11.5 14.6	3	-	-	61 24	- 2 1	3.3 4.2
Sun Prairie	2,723	98	3.6	73	25	22	2,455	65	2.6	40	25	20	268		12.3		-	2	17	3	17.6
		_																			
· ·																					
		4.													•						
													Ì								
•							1														

The survey covers dwelling units in residences, apartments, and house trailers, including military, institutional, public housing units, and units used only seasonally. The survey does not cover stores, offices, commercial hotels and motels, or dormitories; nor does it cover boarded-up residences or apartments that are not intended for occupancy.

The definitions of "residence" and "apartment" are those of the Post Office Department, i.e.: a residence represents one possible stop with one possible delivery on a carrier's route; an apartment represents one possible stop with more than one possible delivery.

Source: FHA postal vacancy survey conducted by collaborating postmaster(s).

Table X

Status of New House Completions in Selected Subdivisions Addison, Wisconsin, Housing Market Area

As of January 1, of 1964, 1965, 1966

i e			Spec	ulative	construct	tion					
	Total		-			Percent					
Sales price	<u>completions</u>	Pre-sold	<u>Total</u>	Sold	Unsold	unsold					
		_									
	Houses	completed	in 1963								
Under \$15,000	8	2	6	6	_	-					
\$15,000 - 17,499	144	19	125	107	18	14.4					
17,500 - 19,999	173	70	103	97	6	5.8					
20,000 - 24,999	38	12	26	23	3	11.5					
25,000 - 29,999	29	1	28	18	10	35.7					
30,000 and over	1	1	_		_	-					
Total	393	105	288	251	37	12.8					
· · · · · · · · · · · · · · · · · · ·											
Houses completed in 1964											
Under \$15,000	<u> </u>	-	_	_	-	_					
\$15,000 - 17,499	126	59	67	58	9	13.4					
17,500 - 19,999	125	50	75	66	9	12.0					
20,000 - 24,999	116	41	75	68	7	9.3					
25,000 - 29,999	45	7	38	33	5	13.2					
30,000 and over	<u>5</u> 417	-	5	5	-	-					
Total	417	157	260	230	30	11.5					
Houses completed in 1965											
Under \$15,000		-	-	_	-	•					
\$15,000 - 17,499	90	32	58	53	5	8.6					
17,500 - 19,999	128	80	48	41	7	14.6					
20,000 - 24,999	155	75	80	64	16	20.0					
25,000 - 29,999	26	18	8	6	2	25.0					
30,000 and over	. 1	1	-	-	-	-					
Total	400	206	194	164	30	$\overline{15.5}$					
·											

 $[\]underline{\mathbf{a}}$ / Selected subdivisions are those with five or more completions during the year.

Source: Unsold Inventory Surveys completed by the Milwaukee, Wisconsin, FHA Insuring Office.



HUDNEWS U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT WASHINGTON D.C. 20410

HUD NO. 3715 (Phone: 382-4693)

FOR RELEASE: FRIDAY, AUGUST 11, 1967

HOUSING MARKET ANALYSIS - MADISON, WISCONSIN

The Federal Housing Administration today released its analysis of the Madison, Wisconsin, housing market as of September 1, 1966.

The housing market area includes all of Dane County.

Demand for new housing is estimated at 2,600 units a year for the two years beginning September 1, 1966. The total includes 1,500 single-family houses and 1,100 multifamily units. About 300 more multifamily units could be marketed "if provided at rents achievable with the aid of below-market-interest-rate financing or assistance in land acquisition and cost." The demand estimate does not include public low-rent housing or rent-supplement housing.

As of September 1, 1966, there were 2,900 vacant, available, housing units in the area. The 900 units available for sale represented a 2.0 percent vacancy rate and the 2,000 units available for rent, a 5.8 vacancy rate. These vacancy levels were higher than in 1960, "but represent a decline from the high vacancy levels evident in the area in 1965 and early 1966."

There have been 18,050 privately-financed housing units authorized in Dane County since 1960, including 8,400 single-family units and 9,650 units in multifamily structures. "Building activity reached a peak in 1964 when 4,300 units were authorized, including 2,800 multifamily units." On September 1, 1966, 900 units were under construction, including 350 single-family houses and 550 units of multifamily housing.

Library

Dept. of Housing and Urban Development

Room 103, Normandy Bidg.

(e.o.w)

Nonagricultural wage and salary employment in the area averaged 98,300 in the first half of 1966. State government accounts for about one-fourth of the total, including nearly 11,800 employed at the University of Wisconsin. Employment is expected to increase by about 4,400 to 4,500 jobs yearly for two years, led by gains in the government sector.

"Unemployment in the area has been low in the past six years. In 1965, 2.3 percent of the work force was unemployed."

The current median annual income of all families is \$8,175, after deduction of federal income tax, and that of renter households of two persons or more is \$6,125.

The nonfarm population of the area totals 264,000 including 31,300 students. The population is expected to increase by 9,000 yearly for the next two years, to a September 1968 total of 282,000.

There are 75,700 nonfarm households in the area, including 6,300 student households. By September 1968, there should be 81,500 households in the area, a gain of 2,900 a year.

Requests for copies of the complete analysis should be directed to Lawrence S. Katz, Director, Federal Housing Administration, 744 N. 4th Street, Milwaukee, Wisconsin 53203.