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DEPARTMENT OF HOUSING
WASHINGTON, D. C. 20410
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Analysis of the
PHOENIX, ARIZONA
HOUSING MARKET

as of September 1, 1966

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

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ANALYSIS OF THE
PHOENIX, ARIZONA, 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.

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ANALYSIS OF THE
PHOENIX, ARIZONA, HOUSING MARKET
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Summary and Conclusions

1. The number of unemployed persons in the HMA has declined rapidly in the last year or so. An average of 10,900 persons, or 3.5 percent of the civilian work force, were unemployed in the first eight months of 1966. Unemployment in the HMA this year has been at the lowest level since 1959, when an average of 9,500 persons (4.2 percent of the civilian work force) were unemployed.

Nonagricultural employment in the Phoenix Housing Market Area (HMA) increased by 62,200 (15,550 a year) between 1956 and 1960; however, annual gains averaged only 11,450 workers between 1960 and 1965. Nonagricultural employment in the first eight months of this year totaled 287,900, up 20,800 over the corresponding period in 1965, an increase that will be the largest annual increment since the late 1950's if the rate is maintained for the remainder of the year.

Additional moderate increases in manufacturing employment are expected in the next three years, and gains in nonmanufacturing employment may be the highest since the latter half of the 1950-1960 decade because of the growth in manufacturing employment and continued increases in the number of temporary winter residents and tourists. The gains are expected to result in an increase in non-agricultural employment of about 12,500 a year in the next three years.

2. The current median annual income of all families in the Phoenix HMA, after deduction of federal income tax, is \$7,150; the median annual after-tax income of renter households (excluding one-person renter households) is \$5,400. By 1969, these median figures are expected to rise to \$7,750 for all families and to \$5,850 for renter households.
3. The population of the Phoenix HMA, an estimated 916,200 persons at the present time, has increased by an average of 39,400 persons a year since 1960; however, the increases in population experienced in this decade are below the gains that occurred in the late 1950's. Based on anticipated gains in employment, the population of the HMA is expected to increase by an average of about 39,950 a year to a total of 1,036,000 by September 1969.
4. Currently, there are 266,700 households (occupied housing units) in the HMA, an increase of 75,600 (11,800 a year) since 1960. Increases in households averaged fewer than 9,475 a year during the 1950's, although increases were much higher in the last five years of the decade than in the earlier years. Households are expected to increase by an average of 12,000 a year to a total of about 302,700 by September 1969.

5. The number of housing units in the Phoenix HMA has increased by 88,350 since April 1960 to a current total of 300,200 units. The increase reflects the construction of 79,850 new housing units, the net addition of 11,300 mobile homes, and the loss of 2,800 units from the inventory through demolition, fire, conversion, and other changes. Authorizations for new housing units, which averaged 15,200 a year between 1960 and 1963, declined sharply to only 5,925 in 1965; authorizations during the first eight months of this year suggest a similar low level of about 6,000 units in 1966.
6. The high level of new construction in the early 1960's resulted in a large surplus of both sales and rental housing. On an over-all basis, the housing market in the HMA has improved a little in the last year because of increased employment and a relatively low level of new construction; however, the current levels of both sales and rental vacancies still are in excess of the number that would represent a balanced demand-supply relationship in the market. Currently, there are an estimated 21,000 housing units in the HMA available for sale or rent, including 5,000 units available for sale, a homeowner vacancy rate of 2.7 percent, and 16,000 units available for rent, a renter vacancy rate of 15.5 percent.
7. There is expected to be a demand for an average of 8,000 new privately-owned housing units a year in the Phoenix HMA during the next three years, consisting of 5,000 single-family sales units and 3,000 units in multifamily structures. Of the 3,000 multifamily units, 2,600 will represent demand for multifamily rental units and 400 will represent demand for cooperative and condominium sales units. The rental demand does not include public low-rent housing or rent-supplement accommodations.

In order to accelerate absorption of the existing surplus of housing, it is suggested that construction during the first year of the three-year forecast period not exceed about 4,000 single-family houses and 1,500 multifamily units. During the second year, construction probably can be raised to 5,000 single-family units and 3,000 multifamily units. If the surplus is being adequately worked off and absorption of new units is satisfactory, construction during the third year probably can be increased to 6,000 single-family units and 4,500 multifamily units.

The demand for single-family sales houses by sales price ranges is expected to approximate the distribution shown on page 25. Demand for multifamily units by size of unit and by monthly gross rent (or monthly charges for sales units) is expected to approximate the pattern shown on page 27. The demand for multifamily condominium and cooperative units is distributed by ranges of sales prices equivalent to monthly charges on page 28.

ANALYSIS OF THE
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Housing Market Area

The Phoenix, Arizona, Housing Market Area (HMA) is defined as Maricopa County, and is coextensive with the Phoenix Standard Metropolitan Statistical Area (SMSA) as defined by the U.S. Bureau of the Budget. Eighty percent of the population of the HMA live in a metropolitan complex of communities that includes the cities of Phoenix, Scottsdale, Mesa, Tempe, and Glendale. These cities are centered in the fertile, but arid, Salt River Valley in south central Arizona (see map on page 2). The HMA had a population of 663,500 persons in April 1960, over one-half of the population in the State of Arizona.

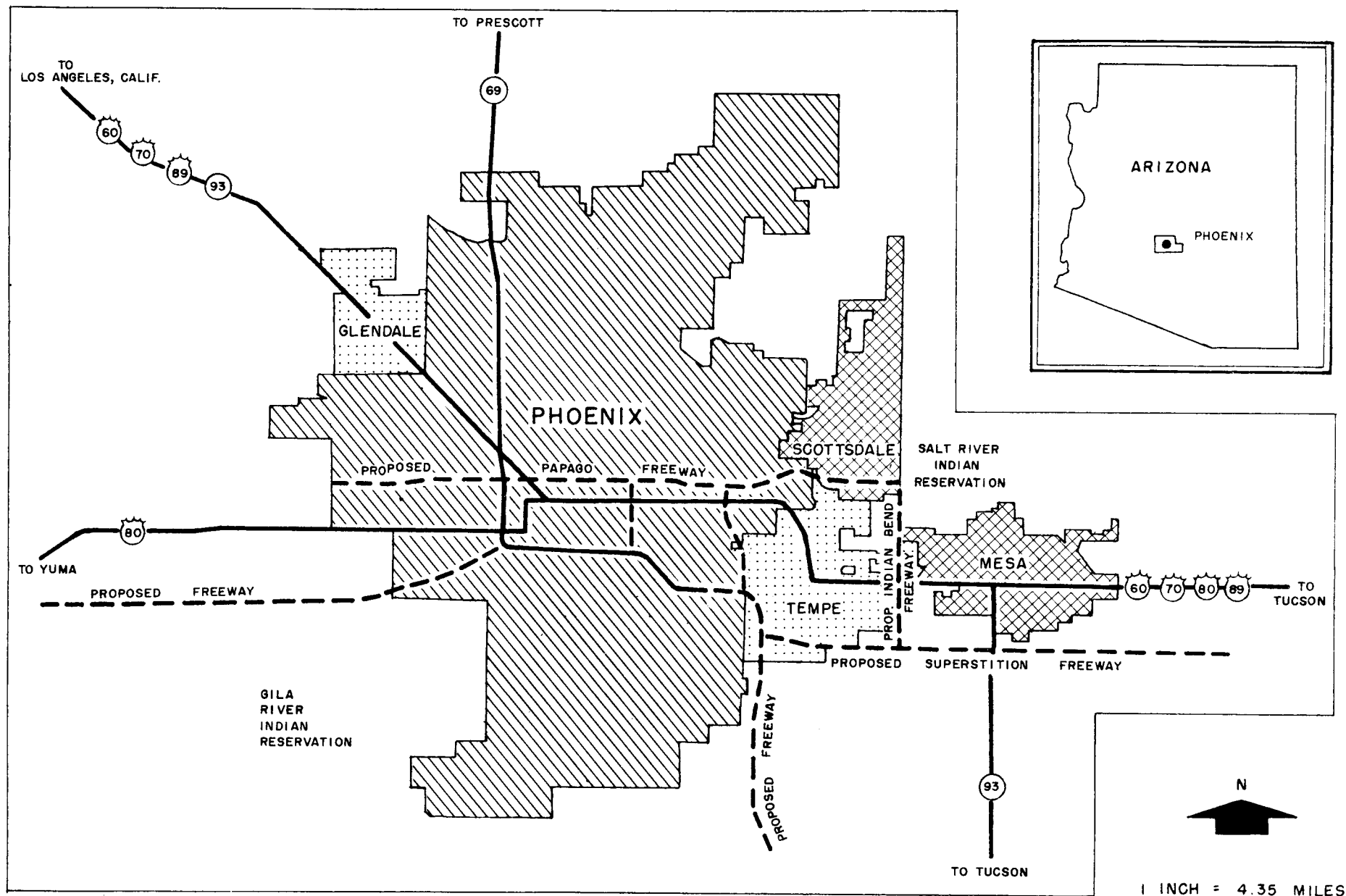
Transportation facilities in the Phoenix area are quite adequate. The Southern Pacific and Santa Fe Railroads, seven passenger and air freight airlines serve the area. Three interstate bus lines and over 30 interstate trucking concerns also provide transportation in the area. The county is transversed by U.S. Highways 60, 70, 80, and 89, and by State Highways 69 and 93.

Commutation between the HMA and nearby counties is not significant. The 1960 census reported that nearly two-thirds of the 1,750 out-commuters worked in Pima and Pinal Counties, which adjoin the HMA to the south. The 850 in-commuters from nearby areas provided only four-tenths percent of the employment in the HMA at that time.

Because Phoenix and the nearby cities of Scottsdale, Mesa, Tempe, and Glendale comprise the major portion of the active Phoenix housing market, wherever possible data on the five cities have been combined and referred to as the "Primary Market Area." The five cities are roughly comparable with the Phoenix Urbanized Area as defined by the Bureau of the Budget in 1960.

Inasmuch as the rural farm population of Maricopa County comprised only two percent of the total population in 1960, all demographic and housing data used in this report refer to the total of farm and nonfarm data.

PHOENIX PRIMARY HOUSING AREA MARICOPA COUNTY (PT.), ARIZONA



Economy of the Area

Character and History

The availability of water and a favorable climate are basic factors that led to the rapid post-World War II development of the Phoenix area. Systematic water storage and distribution systems, started over sixty years ago, have enabled the Phoenix area to develop into an important agricultural center. Although agricultural employment has been declining for many years because of technological developments in production, Maricopa County is the state's leading producer of cattle, cotton, dairy products, lettuce, grapefruit, and grapes. Nearly one-half of the 1.17 million acres in crops in the state are in the HMA. The warm, relatively dry climate also has made the Phoenix area popular as a winter resort. Several thousand persons establish residence in the HMA each winter to take advantage of the moderate temperatures.

The leading sources of employment are the service industries, trade, and government, which provided nearly 61 percent of the nonagricultural wage and salary employment in the HMA in 1965. The development of the Phoenix area as a tourist and resort center has had a favorable effect on the trade and service activities in the county. Government has become increasingly important in recent years because the city of Phoenix is the seat of government for both Maricopa County and the State of Arizona. The government category also includes substantial federal civil service employment at Luke and Williams Air Force Bases. Manufacturing employment, which increased from 17 percent of all nonagricultural wage and salary employment in 1958 to 21 percent in 1965, nearly doubled during the seven-year period. The machinery industry accounted for much of the gain through substantial increases in employment in a number of large firms.

Education is another important activity in the Phoenix area. Student enrollment at Arizona State University, Phoenix College, Mesa Community College, and the American Institute of Foreign Trade doubled between 1960 and 1965, from 18,000 to over 36,000. Although college students account for about four percent of the total population, their impact on the housing market is small because most of them lived in the HMA prior to entering college. Dormitory facilities at these schools are limited.

Employment

Current Estimate. The Employment Security Commission of Arizona reports that total nonagricultural employment in the Phoenix HMA averaged 287,900 in the first eight months of 1966. The nonagricultural total is comprised of 251,500 wage and salary workers and 36,300 persons employed at other nonagricultural jobs. Agricultural employment averaged 17,800 during the period, a ten-year low (see table I).

Past Trend. The economic growth of the Phoenix area was much greater during the latter half of the 1950-1960 decade than in the first five years of this decade. Between 1956 and 1960, nonagricultural employment in the HMA increased from 149,400 to 211,700, an increase of 62,300, or an average of 15,575 a year. Annual increases were quite large, ranging from a low of 10,200 between 1957 and 1958 to a high of 20,200 between 1958 and 1959. The relatively low rate of growth during 1957 and 1958 indicates that the Phoenix economy was affected somewhat by the national business recession that occurred during that period. Since 1960, year-to-year gains in employment have been smaller and somewhat less volatile. Nonagricultural employment in the Phoenix area increased by 56,500, an average of 11,300 a year, between 1960 and 1965. The annual increment was lowest between 1960 and 1961 (9,700 workers) and highest between 1963 and 1964 (13,000 workers). Employment data for the first eight months of 1966 show an increase of 24,100 over the corresponding period in 1965. Although it is possible that the data for the full year of 1966 may differ somewhat from the average of the first eight months, it is apparent that the increase in nonagricultural employment in the HMA between 1965 and 1966 will be the largest since the late 1950's.

Manufacturing employment in Maricopa County increased by 24,600 between 1958 and 1965 (see table II). Annual increases in manufacturing employment of at least 2,000 occurred each year between 1958 and 1964; the largest annual increase (4,600) occurred between 1958 and 1959. However, gains have been much higher in the last two years. The increase in manufacturing employment of 5,400 between 1964 and 1965 was the largest annual increase in the post-World War II period. The 1965-1966 increase will be even greater. An average of 58,300 manufacturing workers were employed in the HMA in the first eight months of 1966, an increase of 10,900 over the same period in 1965.

Nonmanufacturing employment in the Phoenix HMA increased by an average of 8,885 a year between 1958 and 1965. Annual increases were highest in the late 1950's; the 1964-1965 increase of 5,200 was the smallest reported during the seven-year period. However, gains in manufacturing employment and increased tourism have had a favorable effect on the non-manufacturing sector of the economy in the past year. Nonmanufacturing employment this year is 8,000 above the same eight-month period in 1965.

Employment Trend by Industry. Over one-fourth of the increase in nonagricultural wage and salary employment between 1958 and 1965 occurred in the manufacturing sector of the economy (see table II). Employment in the machinery industry, which increased from only 4,800 in 1958 to 21,100 in 1965, accounted for over two-thirds of the increase. Employment in this industry doubled between 1958 and 1961, then more than doubled again between 1961 and 1965. The rapid rate of increase reflects substantial gains in employment in a number of large firms. Some of these firms have announced plans for further expansion in 1966 and 1967. A portion of the increase in manufacturing employment in recent years is the result of defense contracts awarded to some of the larger electronic firms in the machinery industry. Over one-half of the employment in the machinery industry is female; among all wage and salary workers in the HMA, the female ratio is 38 percent, up from less than 35 percent reported in the 1960 Census. As a result of the increases, manufacturing employment accounted for 21 percent of all nonagricultural wage and salary employment in 1965, up from 17 percent in 1958.

Employment increases in trade (20,300), services (16,900), and government (17,600) accounted for the largest gains in the nonmanufacturing category between 1958 and 1965. The increases in trade and services were in response to the moderate growth in the manufacturing sector of the economy and to the continued development of the Phoenix area as a tourist and retirement center. Gains in government employment reflect the continued growth of the state and local governments and the hiring of teachers to meet the increasing student population at local high schools and colleges. More moderate employment increases were reported in finance, insurance, and real estate (7,000) and in transportation, communications, and utilities (1,900) during the seven-year period. Construction employment averaged 13,100 in 1965, down 4,500 from the 1960 high. The decrease reflects, in large part, the sharp decline in residential construction in the HMA since 1960.

The Employment Participation Rate is the ratio of nonagricultural employment to the total population. The rate in the Phoenix HMA was 29.39 in 1960, and it is estimated to have increased to 30.84 at the present time. The increase in the participation rate reflects the fact that many female residents of the HMA have entered the work force because of the increased job opportunities available in the electronics industry. As a result, employment in the Phoenix area has increased at a slightly faster rate than population in the last year or so.

Principal Employment Sources

The largest manufacturing employers in the area are concentrated in the machinery industry. Employment totaling 21,700 at two firms accounted for over one-third of all manufacturing employment in the HMA in August 1966. In addition to those two companies, there are five manufacturing concerns in the HMA employing over 1,000 workers. At the present time, there are two employers with 2,500 workers or more in the nonmanufacturing sector of the economy: the Phoenix City Government and a utility company.

Military Installations. There are three military installations in the HMA; Luke Air Force Base, located about 18 miles northwest of downtown Phoenix near Litchfield Park; Williams Air Force Base, located east of Chandler, Arizona, about 30 miles southwest of downtown Phoenix; and the Naval Air Facility at Litchfield Park, located eight miles south of Luke Air Force Base and 15 miles west of downtown Phoenix. Except for a de-activation period between 1946 and 1951, Luke Air Force Base has been in continuous operation since 1941. The base is under the Tactical Air Command and is an advance training base for fighter pilots. Williams Air Force Base has been in continuous operation since 1941. This installation, under the Air Training Command, conducts undergraduate pilot training. The Naval Air Facility, which began operations in 1943, overhauls and repairs Naval aircraft and associated equipment and is concerned with the storage, disposition, and scrapping of obsolete aircraft.

The combined assigned military strength of Luke and Williams Air Force Bases was about 6,700 on August 1, 1966, the same level as that reported in January 1964 (see table III). However, the assigned strength at the two bases has increased by 390 since the first of this year. There are 590 student pilots at Williams Air Force Base at present, including 110 foreign students. The number of students has increased by 100 since January 1966, but the over-all level of military strength at Williams has remained relatively unchanged in the past two years. Some of the pilots are transferred to Luke for advanced training upon completion of their program at Williams. A portion of the 300 increase in military strength at Luke Air Force Base since the first of the year includes transferees from Williams. Not much of an over-all increase in the number of student pilots at Williams is expected in the foreseeable future; the proportion of foreign students is expected to decline.

Assigned military strength at the Naval Air Facility is 280 at present, a decrease of 90 since October 1, 1965. The facility began to be de-activated in 1964, and is scheduled to be closed by July 1, 1967. The aircraft storage and disposition function of the installation has been transferred to Davis-Monthan Air Force Base in Tucson, Arizona. However, few military personnel from the Naval Air Facility are being re-assigned to Davis-Monthan as a result of the base closing.

Federal civil service employment at Luke and Williams Air Force Bases, also shown in table III, was reported to be about 2,050 on July 1, 1966, a level that has not changed significantly in several years. There are an estimated 1,100 civilians other than civil service employees at the two bases, including 900 civilian contractor employees at Luke Air Force Base. These workers are employed by the Lockheed Aircraft Corporation and are engaged in aircraft maintenance. Federal civil service employment at the Naval Air Facility, about 280 at present, has declined by one-half since September 1965. About 135 civilian employees of the Naval Air Facility have transferred to Davis-Monthan Air Force Base and another 60 are expected to transfer by the spring of 1967.

Unemployment

There was an average of 14,200 unemployed persons in the Phoenix HMA in 1965, an unemployment ratio of 4.7 percent (see table I). However, the rapid employment growth in the last twelve months has resulted in a significant decline in unemployment. Unemployment averaged 10,900 persons, or 3.4 percent of the civilian work force, in the first eight months of 1966. If the current level of unemployment is maintained through 1966, it would represent the lowest annual average level reported since 1959, when 9,500 persons were unemployed, 4.2 percent of the work force. A sharp increase in job opportunities in the HMA has been responsible for the decline in the jobless rate in recent months, and the increase in employment expected in the next year suggests that unemployment will remain at a relatively low level.

Future Employment Prospects

Nonagricultural employment in the Phoenix HMA increased by an average of 11,300 a year between 1960 and 1965, after having increased by 15,575 a year between 1956 and 1960. However, nonagricultural employment in the HMA in the first eight months of 1966 is 24,100 above the corresponding period in 1965, indicating that the increase in nonagricultural employment this year will be the highest since the late 1950's. Employment increases in the machinery industry have accounted for two-fifths of the nonagricultural gain in the last year, and indications are that there will be many new job openings in this industry in the next year or two. These job openings will depend to some extent on defense contracts, however. In addition to employment increases at the larger electronic firms in the area, a new electronics manufacturing plant has been opened this year which is expected to employ about 900 workers. Employment increases in the next few years in the nonmanufacturing sector of the economy may be the highest since the 1950's because of increases in trade and services in response to employment increases in manufacturing and because of expected increases in the number of tourists and temporary winter residents. Continued moderate employment increases of 2,500-3,000 a year are expected in the government category, which includes workers in federal, state, and

local government offices and in education. An increase in nonagricultural employment of 35,000 to 40,000 in the next three years, an average of about 12,500 a year, appears to be a reasonable expectation. Based on announced company expansions and on the rate of employment growth in the last twelve months, it is likely that employment will increase a little more in the next twelve months than in each of the following two years.

Incomes

Family Income. The current median annual income of all families in the Phoenix HMA, after deduction of federal income tax, is \$7,150, and the current median after-tax income of renter households^{1/} is \$5,400 a year (see table IV). Approximately 21 percent of all families and 34 percent of renter households currently have after-tax incomes below \$4,000, while 14 percent of all families and six percent of renter households receive after-tax incomes of \$12,500 or more a year. The median annual after-tax incomes of Phoenix area residents are expected to increase to \$7,750 for all families and to \$5,850 for renter households by 1969.

^{1/} Excludes one-person renter households.

Demographic Factors

Population

Housing Market Area. The population of the Phoenix HMA is estimated to be 916,200 as of September 1, 1966, an increase of 39,400 (5.0 percent^{1/}) a year since April 1960. This appears to reflect some decline in population growth from an even higher rate of growth in the latter half of the 1950-1960 decade, as indicated by records of increases in employment, the high level of both residential and commercial construction, and estimates of in-migration made by state and local government agencies. During the 1950-1960 decade as a whole, the population in the HMA more than doubled, increasing by an average of over 33,150 (6.9 percent) a year, but with the major part of the growth concentrated in the latter half of the decade.

The following table shows over-all population changes in the Phoenix HMA since April 1950, and a three-year projection to 1969. Population detail for the Primary Market Area and the remainder of Maricopa County are shown in table V.

Changes in Population Phoenix, Arizona, Housing Market Area April 1, 1950-September 1, 1969

<u>Date</u>	<u>Population</u>	<u>Average annual change from preceding date</u>
April 1, 1950	331,770	-
April 1, 1960	663,510	33,174
Sept. 1, 1966	916,200	39,400
Sept. 1, 1969	1,036,000	39,950

Sources: 1950 and 1960 Censuses of Population.
1966 and 1969 estimated by Housing Market Analyst.

Primary Market Area. A special census conducted by the Bureau of the Census counted nearly 687,400 persons in the Primary Market Area in October 1965. In addition to the population of almost 505,700 in Phoenix itself, four suburban communities had population counts exceeding 30,000: Scottsdale (54,500), Mesa (50,550), Tempe (45,900), and Glendale (30,750).

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

According to additional data provided by the special censuses, about three-fifths of the increase in population between April 1960 and October 1965 occurred as the result of annexations, the largest of which took place in 1965. The population in the Primary Market Area now is estimated to be 717,500, over 78 percent of the HMA total. During the 1950's, the Primary Market Area experienced an exceptional increase in population, from 141,500 persons in April 1950 to nearly 523,600 in April 1960. Substantially all of this increase occurred because of annexations.

Remainder of Maricopa County. The population in the HMA outside the Primary Market Area increased by 58,750 between April 1960 and the current date, accounting for 23 percent of the total population increase in the HMA during that time. The increase in population would have been much greater but for annexations by the cities in the Primary Market Area. The population in the HMA outside the Primary Market Area declined by 50,300 between April 1950 and April 1960, as the result of annexations. During this period, the proportion of the population outside the Primary Market Area declined from 57 percent of the total in 1950 to only 21 percent in 1960.

Seasonal Factors. The population of the Phoenix HMA increases by several thousand persons each year between November and February because many persons establish temporary residence in the HMA to take advantage of the climate.

Estimated Future Population Growth. On the strength of expected gains in employment in the Phoenix HMA, the population is expected to increase by an average of 39,950 persons a year over the next three years to a total of 1,036,000 by September 1969. The projected average annual rate of increase is somewhat above that of the 1960-1966 period but somewhat below the apparent rate of population growth that the Phoenix HMA experienced in the late 1950's. Because of the possibility that employment increases in the HMA may slow a little after the fall of 1967, population growth is likely to be a little higher in the next twelve months than in either of the succeeding two years.

Natural Increase and Migration. According to Bureau of the Census data, the Phoenix HMA was one of twenty SMSA's that had a net in-migration of 100,000 persons or more between April 1950 and April 1960. Phoenix ranked ninth, with over 234,300 in-migrants during the 1950-1960 decade--no doubt, disproportionately concentrated in the latter half of the decade. In-migration accounted for approximately 70 percent of the total population increase in the HMA during both the April 1950-April 1960 period and the period since 1960--averaging nearly 27,400 a year since 1960. Many in-migrants come to the Phoenix area for reasons other than economic opportunity, especially elderly retired persons and, to a lesser degree, college students and uniformed military personnel and their dependents.

Components of Population Change
Phoenix, Arizona, Housing Market Area
April 1, 1950-September 1, 1966

<u>Source of change</u>	<u>April 1, 1950- April 1, 1960</u>	<u>April 1, 1960- September 1, 1966</u>
Net natural increase	97,413	77,000
In-migration	<u>234,327</u>	<u>175,700</u>
Total change	331,740	252,700

Sources: 1950 and 1960 Censuses of Population; Bureau of the Census, Current Population Reports, Series P-23, No. 7; and Arizona State Department of Health.

Military and Military-connected Civilian Population. The military and military-related activities have been an important part of the Phoenix economy since the early 1940's. Currently, that segment of the population consisting of the military and military-connected civilians plus dependents is estimated to total 31,550 persons, about three percent of the total population in the HMA. The total includes 20,550 uniformed military personnel and dependents and 11,000 civilian workers and dependents. Both the military population and military-connected civilian population have increased moderately since 1960.

Households

Housing Market Area. There are an estimated 266,700 households (occupied housing units) in the Phoenix HMA as of September 1, 1966. The number of households has increased by 75,600 or 11,800 (5.2 percent) a year since 1960, when the census counted 191,100 households in the HMA. During the 1950-1960 decade, the number of households increased from 96,450 to 191,100, an increase of 9,475 a year. A portion of the 1950-1960 increase reflects a change in census definition from "dwelling unit" in 1950 to "housing unit" in 1960. As in the case of population growth, the number of households increased at a much higher rate in the late 1950's than in the early 1950's and somewhat faster than during the 1960-1966 period.

The following table shows households changes in the Phoenix area since 1950. Details for the Primary Market Area and the rest of the county are shown in table VI.

Changes in Households
Phoenix, Arizona, Housing Market Area
April 1, 1950-September 1, 1969

<u>Date</u>	<u>Households</u>	<u>Average annual change from preceding date</u>
April 1, 1950	96,435	-
April 1, 1960	191,076	9,464
Sept. 1, 1966	266,700	11,800
Sept. 1, 1969	302,700	12,000

Sources: 1950 and 1960 Censuses of Housing.
1966 and 1969 estimated by Housing Market Analyst.

Primary Market Area. There are 215,300 households in the Primary Market Area at present, over 80 percent of the HMA total. The number of households, including those added by annexations, increased by nearly 59,800 during the 1960-1966 period, accounting for nearly 79 percent of the total household growth in the HMA (see table VI). The number of households in the Primary Market Area more than tripled during the 1950-1960 decade, increasing from only 43,850 in 1950 to 155,600 in 1960.

Remainder of Maricopa County. Despite annexations, over one-fifth of the household growth in the HMA since April 1960 has occurred outside the Primary Market, where there are 51,400 households at the present time, an increase of nearly 15,900 since April 1960. Annexation activity during the 1950's by the Primary Market cities reduced the number of households in the remainder of Maricopa County by 17,050 during the 1950-1960 decade.

Estimated Future Household Growth. Based on the projected gain in population in response to increases in employment, on moderate increases in the number of elderly persons and college students, and on the assumption that the average household size will continue to decline slowly, it is estimated that there will be 302,700 households in the HMA by September 1969, an increase of 36,000 (12,000 a year) over the present total. The projected annual rate of increase is slightly above the 1960-1966 average gain but is somewhat below the increases that occurred in the late 1950's. Most of the increase in households is expected to be in and near the Primary Market Area.

Household Size. The average size of all households in the HMA is 3.36 persons currently, a decline from 3.38 persons in 1960. The in-migration of a large number of younger families and elderly persons since 1960 and a decline in the birth rate have been responsible for the decline. The average size of all households in the Primary Market is 3.28 currently,

down from 3.31 persons in 1960. The average household size in the remainder of the HMA is 3.68 currently, down from 3.71 in 1960. It is estimated that the average household in the HMA will contain 3.35 persons by 1969, a continuation of the 1960-1966 decline.

Military and Military-connected Civilian Households. There are an estimated 4,150 military households and 3,250 military-connected civilian households in the Phoenix HMA at present. The total of 7,400 households constitutes less than three percent of all households in the area. Based on data obtained from the latest family housing surveys conducted by the military in March 1966, an estimated 25 percent of all military households in the HMA live off-base in owner-occupied housing (including trailers), 40 percent live off-base in private rental housing, and 35 percent live on-base in military controlled housing.

Based on data obtained locally and from the results of the latest family housing surveys conducted by the military, it is estimated that the current number of military and military-connected civilian households in the HMA will not change much in the next few years. Recent moderate increases in military strength and civilian employment at Luke and Williams Air Force Bases reflect, in large part, an increase in the number of student pilots at these installations. The number of student pilots is not expected to increase much above the current level. Any moderate increases in military strength and civilian employment at Luke and Williams will be offset somewhat by the closing of the Naval Air Facility at Litchfield Park in mid-1967.

Housing Market Factors

Housing Supply

Current Estimate. There are an estimated 300,200 housing units in the Phoenix HMA at present, a net addition to the inventory of 88,350 units, or an average increase of 13,750 (5.4 percent) a year since April 1960 (see table VII). The increase between April 1960 and September 1966 resulted from the construction of 79,850 new housing units and the net addition of about 11,300 mobile homes, less 2,800 units removed through demolitions and other losses in the inventory.

Past Trend. The housing supply in the Phoenix HMA nearly doubled during the 1950's, increasing from only 108,000 units in April 1950 to nearly 211,900 units in April 1960. A portion of the increase in the housing supply during the decade reflects a conceptual change from "dwelling unit" as used in the 1950 Census to "housing unit" as used in the 1960 Census.

Characteristics of the Supply. The proportion of one-unit structures in the Phoenix HMA has declined since 1960. Currently, an estimated 222,850 units, or 74 percent of all housing units, are in one-unit structures (excluding trailers). In April 1960, nearly 83 percent of the inventory (175,600 units) was in one-unit structures. The decline in the proportion of one-unit structures reflects the considerable number of units in multifamily structures that have been built in the last several years. The number of units in multifamily structures has more than doubled, increasing from 25,300 (12 percent of the inventory) in 1960 to 55,100 (18 percent) currently. The number of trailers in the HMA also has doubled, increasing from less than 10,950 units (five percent of the inventory) in 1960 to 22,250 units (seven percent of the inventory) at present. The composition of the housing inventory by units in structure is summarized in the following table.

The Housing Inventory by Units in Structure
Phoenix, Arizona, Housing Market Area
April 1, 1960 and September 1, 1966

<u>Units in structure</u>	<u>Number of units</u>		<u>Percent of total</u>	
	<u>April 1, 1960</u>	<u>September 1, 1966</u>	<u>1960</u>	<u>1966</u>
One	175,552	222,850	82.9	74.2
Two to four	14,544	25,500	6.8	8.5
Five or more	10,799	29,600	5.1	9.9
Trailers	10,932	22,250	5.2	7.4
Total	211,827 ^{a/}	300,200	100.0	100.0

^{a/} Differs slightly from the count of all units (211,865) because units in structure were enumerated on a sample basis.

Sources: 1960 Census of Housing.
1966 estimated by Housing Market Analyst.

Based on 1960 census data, adjusted to reflect new units added, trailers added, demolitions, and other changes in the inventory, it is estimated that 30 percent of the housing inventory in the Phoenix HMA has been added since April 1960. Another 40 percent of the current inventory was built in the 1950's. Only 14 percent of the current housing inventory was built before 1940, a reflection of the rapid growth of the Phoenix area since World War II.

Percentage Distribution of the Housing Inventory
By Year Structure Was Built
Phoenix, Arizona, Housing Market Area
As of September 1, 1966

<u>Year built^{a/}</u>	<u>Percent of total</u>
April 1, 1960 - Sept. 1, 1966	30
1955 - March 31, 1960	25
1950 - 1954	15
1940 - 1949	16
1930 - 1939	7
1929 or earlier	7
Total	100

^{a/} The basic census data contain an unknown degree of error in "year built", occasioned by the accuracy of response to enumerators' questions as well as errors caused by sampling.

Sources: 1960 Census of Housing and estimates by Housing Market Analyst.

The condition of the housing inventory in the Phoenix HMA has improved since 1960. It is estimated that less than seven percent of the current housing inventory is dilapidated or lacks one or more plumbing facilities. The 1960 Census reported that nearly 21,550 housing units, or ten percent of the inventory, were dilapidated or lacked one or more plumbing facilities at that time.

Residential Building Activity

Past Trends. New housing units authorized by building permits in the HMA have decreased substantially since 1963 because of considerable overbuilding. Authorizations, which exceeded 16,300 units in 1960, averaged 15,200 units a year between 1960 and 1963. However, fewer than 11,200 units were authorized in 1964. Only 5,925 units were authorized in 1965, and building permit data for the first eight months of 1966 suggest that authorizations this year will be at a similar low level. The trends in annual authorizations for single-family and multifamily units in the city of Phoenix and the remainder of Maricopa County since 1960 are shown in table VIII. All residential building activity in the HMA is covered by building permits.

Single-family houses authorized in the HMA averaged nearly 7,950 a year during the six-year 1960-1965 period. Authorizations were highest in 1960 (13,750 units); they have declined each year since then. The 3,950 single-family units authorized in 1965 represented a decline of roughly 70 percent from the 1960 peak. Single-family authorizations so far in 1966 are at an annual rate only a little above the 1965 low. Authorizations have declined sharply in both Phoenix and the remainder of the HMA in the last six years. Between 1960 and 1962, over 72 percent of all units authorized were single-family houses. Between 1963 and 1965, about 45 percent of the authorizations were for units in single-family structures.

Authorizations for units in multifamily structures also have declined sharply in recent years. Authorizations increased from 2,600 units in 1960 to 6,650 and 9,350 in 1962 and 1963, respectively. A total of 6,250 multifamily units were authorized in 1964, but only 1,975 in 1965. Authorizations in the first eight months of this year are below those in the same period a year earlier. About 60 percent of the units in multifamily structures authorized during the six-year 1960-1965 period were in the city of Phoenix. An estimated 2,000 units authorized since January 1964 are condominium units in townhouse types of structures (classified as multifamily).

Units Under Construction. Based on the postal vacancy survey conducted late in June 1966, on building permit data, and on personal observation, it is estimated that there are 2,100 units under construction in the Phoenix HMA at the present time, including 900 residences and 1,200 apartments.

Demolitions. Approximately 2,800 housing units have been removed from the housing inventory since January 1960 through demolitions, changes in use, and other inventory losses. Residential demolitions in the city of Phoenix have numbered about 2,100 since 1960. Demolition activity in the city has increased since 1964 because of fire code enforcement. Some other housing units have been demolished to allow expansion of commercial facilities. Based on data obtained from local sources, it is estimated that about 1,600 housing units in the HMA will be removed from the inventory in the next three years through code enforcement, commercial expansion, and highway construction.

Tenure of Occupancy

Current Estimate. Currently, over 67 percent of the 266,700 occupied housing units in the HMA are owner-occupied (see table VII). These figures represent a small increase in home ownership since 1960, when the ratio was nearly 66 percent. The rate of increase in owner-occupancy since 1960 is significantly less than the rate of gain between 1950 and 1960, largely because of the large volume of multifamily construction in the HMA since 1960, both inside and outside the city of Phoenix.

Past Trend. The proportion of owner-occupancy in the Phoenix HMA increased rapidly during the 1950-1960 decade, from 57 percent to almost 66 percent. Although the number of renter-households increased from 41,400 in April 1950 to 65,800 in April 1960, the proportion of renter-occupancy declined from 43 percent to 34 percent. Many of these families were accommodated in single-family units because the number of apartment units built in the HMA during the decade was well below the increase in the number of renter households.

Vacancy

1960 Census. There were nearly 11,525 vacant nonseasonal, nondilapidated housing units available for sale or rent in the Phoenix HMA in April 1960, a net available vacancy ratio of 5.7 percent. Of the total, 3,325 were available for sale and 8,200 were available for rent, representing homeowner and rental vacancy ratios of 2.6 percent and 11.1 percent, respectively. Only two percent of the available sales units and seven percent of the available rental units lacked one or more plumbing facilities, indicating that the vacant, available housing inventory was of relatively good quality. The extent of seasonal occupancy in the Phoenix area during the winter months is reflected in the fact that 90 percent of the available rental units had been vacant for four months or less.

Postal Vacancy Survey. A postal vacancy survey was conducted in the HMA late in June 1966, a period of the year in which the level of vacancies was at a seasonal peak. The survey covered nearly 256,000 possible deliveries, including 16,250 trailers, about 85 percent of the housing inventory in the HMA. The survey counted 7,100 vacant residences, a vacancy factor of 3.7 percent, and 8,650 vacancies in apartments, a vacancy ratio of 18.7 percent (see table IX).

Several postal vacancy surveys have been conducted in the last ten years in the area served by the Phoenix Post Office only. The results of the surveys conducted in the Phoenix Postal Delivery Area are summarized in table X. The over-all vacancy ratios reported in the November 1956 and April 1958 surveys are well below the vacancy ratios reported for any of the surveys done since then. The latter half of the 1950-1960 decade was characterized by a rapid growth in employment and a high level of immigration. The relatively high vacancy ratios found in the 1960's reflect the high level of residential construction in the HMA in the early 1960's; they also reflect the fact that increases in employment experienced during most of the 1960's have been somewhat below the gains reported in the late 1950's. The March 1966 survey reported an over-all vacancy ratio of 5.4 percent, the lowest rate since the May 1960 survey. However, the March 1966 survey was conducted during a period of the year in which some winter residents were still in the HMA.

There are indications that vacancy rates in both residences and apartments in the Phoenix delivery area only may have declined slightly in the last few years. The latest postal survey, conducted in June 1966, showed an over-all vacancy rate of 6.9 percent; vacancy ratios in the residence and apartment categories were 3.8 percent and 18.4 percent, respectively. An earlier survey (June 1962) indicated a 7.1 percent vacancy rate over-all, with a 4.7 percent vacancy factor in residences and 21.3 percent in apartments.

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 definitions, area delineations, 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 row houses, and some 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.

Other Vacancy Indicators. At the end of 1965, a period of the year in which seasonal occupancy in the Phoenix HMA is highest, the Phoenix Insuring Office surveyed over 90 rental projects that had been built since 1962. There was an occupancy rate of nearly 92 percent in the 4,750 units surveyed. The highest occupancy rate (nearly 98 percent) was in efficiency units, and the lowest rate (88 percent) was in two-bedroom units. The highest occupancy was in the \$135-\$165 monthly shelter rent range (97 percent), and the lowest was in the \$110 to \$135 range (88 percent). Nearly all of these projects were conventionally-financed.

The Phoenix Insuring Office conducted a more comprehensive rental vacancy study in July 1966, a period of the year in which seasonal occupancy is at a minimum. In addition to surveying 4,600 rental units in conventionally-financed apartment projects, nearly 2,850 were surveyed in a variety of FHA-insured rental projects. Over all, there was an occupancy rate of nearly 87 percent in the 7,450 units surveyed, substantially below the occupancy rate in January 1966. Occupancy in efficiency units declined from about 96 percent of all units surveyed in January 1966 to only 78 percent in July 1966. The occupancy rate also declined in the one-bedroom category between January and July, but actually increased in the two-bedroom units surveyed. In the three-bedroom category, the occupancy rate declined only slightly, from 96 percent in January to 94 percent in July. The larger units typically attract persons who are year-round residents.

The occupancy rate in FHA-insured projects in July 1966 (84 percent) was lower than the occupancy rate in conventionally-financed projects (89 percent). However, the portion of the survey that covered FHA projects included projects in the initial stage of occupancy and also included a few projects which have Commissioner-held mortgages, are owned by FHA, or are in the process of acquisition.

Current Estimate. There are an estimated 21,000 vacant housing units in the HMA available for sale or rent at the present time, an over-all available vacancy rate of 7.3 percent. About 5,000 of these units are available for sale, a homeowner vacancy rate of 2.7 percent, and 16,000 are available for rent, a rental vacancy rate of 15.5 percent (see table VII). Based on the results of the most recent postal vacancy surveys, on other vacancy data obtained locally, on field investigation, and on conversations with informed local persons, it is apparent that the over-all vacancy rate in the HMA has declined a little in the last year or so; however, the current level of vacancies in the HMA still is excessive because the high level of new construction in the early 1960's left a very substantial surplus of both sales and rental housing that has not been satisfactorily absorbed. The current levels of vacancies in both sales and rental housing are considerably higher than warranted, even during a period of the year when the number of vacancies is at a seasonal high. The current level of vacancies will decline somewhat in the next few months because of the increase in the number of temporary winter residents.

Sales Market

General Market Conditions. The market for sales housing in the Phoenix HMA has declined considerably in the last several years as reflected in the fact that the number of single-family houses authorized for construction has declined continuously since 1960. Despite the very low level of single-family construction in 1965 and so far in 1966 and the moderate increase in employment in the last year, there still is a surplus of vacant sales housing in the HMA over and above the number required in an area with a high degree of seasonal occupancy.

There are several indicators which show that the market has not improved as much as might be expected in view of the increase in the rate of population growth in the last year or so and the continued low level of residential construction. The results of the latest FHA unsold inventory surveys show a higher ratio of unsold speculatively-built new construction than is warranted; the number of foreclosed homes on the market still is excessive; the number of homes acquired by both FHA and VA has not declined much in the last year; and there are indications that there were slightly more unsold speculatively-built new homes on the market in mid-1966 than a year earlier.

Unsold Inventory of New Homes. In January of the last three years, the Phoenix FHA Insuring Office surveyed subdivisions in the Phoenix HMA in which five or more houses were completed in the twelve-month period preceding the date of the survey (see table XI). A comparison of the results of the surveys with the number of single-family units authorized during the same period indicates that roughly three-fourths of the single-family construction in the HMA in recent years has been in tract developments with five or more completions annually.

A comparison of the January 1965 and 1966 surveys shows that the number of speculatively-built new homes declined by one-half, from 2,250 in 1964 to 1,125 in 1965. The number of speculatively-built homes unsold at the end of each year also declined by about 50 percent, but the ratios of unsold speculatively-built new construction were about the same for the two years, 30 percent and 29 percent, respectively. Both were above the 23 percent unsold ratio reported in the January 1964 survey of houses completed in 1963.

The results of the three surveys, when analyzed by price class, indicate that homes priced at \$17,500 and above in 1965 accounted for a much higher proportion of the unsold speculatively-built new construction than in 1963. Only 75 unsold new homes, or 23 percent of total unsold completions in 1963, were priced at \$17,500 or above; by 1965, the proportion had increased to 63 percent (200 homes). The January 1966 survey also indicated that units in townhouse condominium projects were primarily responsible for the unsold inventory in the higher price ranges. Over all, about two-fifths of the 330 units unsold at the end of 1965 were in condominium developments. It is significant also that over one-half of these units had been unsold for more than six months.

Foreclosures. Trends in foreclosures of FHA-insured home mortgages (exclusive of deeds in lieu of foreclosures) in the HMA have paralleled closely the trend of all foreclosures. The 1,825 FHA foreclosures reported in 1965 were the highest in the last six years; however, the 1,775 foreclosures reported between July 1, 1965 and June 30, 1966 shows a moderate decline in activity. The increase in the number of foreclosures in the early 1960's reflects, in part, the fact that gains in employment during the period were well below those occurring in the late 1950's and were not sufficient to absorb the existing oversupply of available housing. Most of the foreclosures were single-family homes in the western and southern portions of the city of Phoenix. Foreclosures in the southern part of the city were mostly older homes selling for \$7,000-\$10,000, while those in western Phoenix were newer homes in the \$12,000-\$16,000 price range. Foreclosures in FHA-insured Section 213 cooperative projects were significant in 1963 and 1964, but have dropped somewhat since then. The trend of foreclosures of FHA-insured home mortgages is shown in the following table.

Trend of Foreclosures, of FHA-Insured Home Mortgages
Phoenix, Arizona, Housing Market Area
Annual Totals, 1960-1965

<u>Year</u>	<u>Mortgages foreclosed</u>
1960	22
1961	62
1962	397
1963	1,173
1964	1,570
1965	1,835
<u>Twelve months ending June 30</u>	
1966	1,787

Source: FHA Division of Research and Statistics.

The number of acquisitions (including foreclosures and deeds in lieu of foreclosure) of both FHA- and VA-insured home properties in the Phoenix HMA began to decline moderately about one year ago. There were 3,200 acquisitions in 1965, including nearly 2,300 FHA-insured properties and 900 insured by the VA. For the twelve-month period ending June 30, 1966, there were 1,925 FHA acquisitions and 549 VA acquisitions, a total of 2,474 for that period. The inventory of homes acquired by the FHA and VA also has declined a little in the past year. The FHA and VA inventory of repossessed homes numbered 890 as of June 30, 1966, compared to nearly 960 a year earlier.

Outlook. In spite of the persistent decline in single-family units authorized during the 1960-1965 period, from 13,750 in 1960 to about 4,075 a year in 1965 and 1966, the results of the annual FHA unsold inventory surveys, the continued high level of foreclosure activity, and the decline in real estate activity as reflected in the number of real estate transfers and mortgage recordings indicate that the sales market in the HMA has not improved as much as might be expected. The level of foreclosures of FHA-insured and VA-guaranteed homes still is excessive, and the inventory of homes acquired by FHA and VA has not decreased much in the last two years in spite of the continued decline in new construction. It is apparent that the number of available vacant sales units in the HMA must be reduced further to bring the market into better balance. A continued low level of single-family construction, especially in the number of units priced at \$17,500 and above, will be required to reduce the current number of vacant sales units to an acceptable level.

Rental Market

General Market Conditions. Authorizations for new multifamily units in the HMA have dropped sharply in recent years, from a peak of 9,350 in 1963 to only 1,975 in 1965. Unlike the sales market, the rental market in the HMA has improved moderately as a result of the low level of multifamily construction in the last two years and a sizable increase in employment in the last year or so. This improvement is reflected in several recent rental studies conducted both by the FHA and by local private groups which show improved absorption for the new multifamily units completed in recent months. Nevertheless, a large number of vacant rental units continue to be available in the HMA, as the 15.5 current rental vacancy rate indicates.

Military Housing

Luke Air Force Base. The inventory of military-controlled housing at Luke Air Force Base includes 725 Capehart units, located east of the main gate. The total inventory includes 209 two-bedroom units, 510 three-bedroom units, and six four-bedroom units. A total of 284 units are assigned to officer personnel and 441 units to eligible airmen. There were only a few vacancies in August 1966. All of the units are considered adequate. A total of 53 older substandard units provided under the Lanham Act have been removed in the last two years.

Williams Air Force Base. The military-controlled housing supply at Williams Air Force Base includes 500 Wherry units and 110 Lanham Act units, a total of 610 units. The total includes 15 one-bedroom units, 225 two-bedroom units, 355 three-bedroom units, and 11 four-bedroom units, and four five-bedroom units. The 110 temporary Lanham Act units are considered by the military to be substandard, but it is expected that they will continue to be utilized until replaced by new construction. No new construction is planned in the foreseeable future, however. Approximately one-half of the student pilots at the base are married but do not qualify for on-base housing because they are not considered to be permanent base personnel. The student families live mostly in the nearby Chandler, Gilbert, and Mesa areas.

The Naval Air Facility at Litchfield Park has no on-base family quarters. Most of the military personnel who have families have been accommodated in private housing in the nearby communities of Avondale and Goodyear. The facility began to be deactivated in 1964 and is scheduled to be closed by mid-1967. This closing has created some rental vacancies in nearby towns, but recent expansions at the local Goodyear and Unidynamics plants have taken up some of the slack in the housing market.

Public Housing

There are about 2,225 units of public low-rent housing in the Phoenix HMA including 1,600 units in the city of Phoenix and 625 in the remainder of the county. The 30-unit El Mirage project for low-income migrant workers, completed in 1964, is the only public low-rent project built in the HMA in recent years. Most of the projects reportedly are well occupied and have waiting lists. Many of the one-bedroom apartments are occupied by elderly low-income households. One of the most recent projects built in the city of Phoenix, the 202-unit A. L. Krohn Homes project, contains 60 units designed specifically for the elderly. There is little interest in the Phoenix area in urban renewal.

Demand for Housing

Quantitative Demand

The demand for additional new housing in the Phoenix HMA during the next three years is based primarily on the level of household growth, which is estimated to be 36,000, or an average of 12,000 a year. However, as in the recent past, it is assumed that about 12 percent of the household growth in the HMA in the next three years will be accommodated in mobile homes. To the remainder of the household growth, an average of 10,550 a year over the three-year forecast period, are added the number of housing units expected to be lost from the inventory through demolitions and other inventory changes. Account is taken of the need to reduce the current high number of both sales and rental vacancies to levels that reflect a more balanced demand-supply relationship in the market. In addition, consideration is given to the current tenure composition of the inventory and to the continuing slow trend from renter-occupancy to owner-occupancy. Giving consideration to these factors, there is an estimated annual demand for an average of 8,000 additional housing units a year during the next three years: 5,000 single-family sales units and 3,000 multifamily units, of which 2,600 multifamily units represent rental demand and 400 represent demand for condominium and cooperative units. These estimates do not include rent-supplement accommodations or public low-rent housing.

The average demand for 5,000 single-family units a year over the forecast period is significantly below the average of 7,950 single-family units a year authorized during the six-year 1960-1965 period, but it is above the annual rate of about 4,000 single-family houses authorized since January 1965. The average annual demand for 3,000 new multifamily units a year is substantially less than the average of 5,050 multifamily units a year authorized in the 1960-1965 period, but it exceeds the 2,000 units authorized in 1965 and the somewhat slower pace in the first eight months of 1966. It contrasts with almost 6,650 authorized in 1962, 9,350 in 1963, and 6,250 in 1964.

It is apparent that the high level of residential construction between 1960 and 1965 produced a serious over-supply of both sales and rental housing in the HMA. The much lower level of construction activity experienced in 1965 and 1966, coupled with a sizable increase in employment in the last year or so, has only partially reduced the surplus of housing. It is apparent that the satisfaction of the demand for new housing in the HMA over the next three years and the gradual reduction of the present high level of vacancies can be accomplished effectively

only with a continued low level of construction during the forecast period. The absorption of the existing excess supply of housing will be facilitated if construction in the early part of the forecast period is at a level somewhat below the average for the three-year period. Construction then could be increased as balance in the market begins to be restored. A schedule of construction similar that shown in the following table, coupled with anticipated increases in employment, could accomplish the objective of a balanced market in the Phoenix HMA by reducing the current level of vacancies to acceptable levels by the end of the forecast period.

<u>Year beginning September 1</u>	<u>Single-family houses</u>	<u>Multifamily units</u>
1966-1967	4,000	1,500
1967-1968	5,000	3,000
1968-1969	6,000	4,500
Annual average	5,000	3,000

Qualitative Demand

Single-Family Houses. The demand for 15,000 single-family units for sale during the next three years is expected to approximate the sales price pattern and annual volume presented in the following table. The distribution of demand by sales price is based on the distribution of Phoenix area families by current annual after-tax income and on the proportion of income that these families typically have paid for new sales housing in the recent past. The distribution also has been adjusted to reflect recent market experience.

Estimated Annual Demand for New Sales Housing Phoenix, Arizona, Housing Market Area September 1, 1966-September 1, 1969

<u>Price range</u>	<u>Year beginning September 1</u>		
	<u>1966-1967</u>	<u>1967-1968</u>	<u>1968-1969</u>
Under \$10,000	160	190	215
\$10,000 - 12,499	400	500	600
12,500 - 14,999	800	1,000	1,200
15,000 - 17,499	880	1,100	1,330
17,500 - 19,999	720	920	1,070
20,000 - 24,999	640	790	965
25,000 - 29,999	220	270	320
30,000 and over	180	230	300
Total	4,000	5,000	6,000

The foregoing distributions differ somewhat from those shown in table XI, which reflect only selected subdivision experience in the last three years. It must be noted that the unsold inventory survey 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. Some of the more expensive housing construction and much of the lowest-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 Units. The gross monthly rentals (or gross monthly charges for condominium and cooperative units) at which 3,000 privately-owned net additions a year to the multifamily housing inventory might best be absorbed are indicated for various unit sizes and gross rent levels achievable with market-interest-rate financing in the following table. The demand excludes rent-supplement accommodations and public low-rent housing. The minimum monthly gross rents achievable in the Phoenix HMA with market-interest-rate financing are \$95 for efficiencies, \$115 for one-bedroom units, \$135 for two-bedroom units, and \$155 for three-bedroom units.^{1/} The distribution is based on projected renter household incomes, on the size distribution of renter households, and on typical rent-paying propensities in the area and is adjusted to reflect recent absorption experience of new rental housing. It represents a pattern for guidance in the production of multifamily housing based on foreseeable quantitative and qualitative considerations, although individual projects may differ from the general pattern in response to specific neighborhood or submarket requirements. The production of new units in higher rental ranges than indicated on the following page may be justified if a competitive filtering of existing accommodations to lower ranges of rent can be anticipated as a result. The distribution is based on the average demand for 3,000 multifamily units a year. Demand during the first year, September 1, 1966 to September 1, 1967, will be about half of the figures shown in the following table. Demand in the third year will be one-third to one-half greater if the current excess of rental units has been substantially reduced in the meanwhile.

^{1/} Calculated on the basis of a long-term mortgage (40 years) at 6.0 percent interest and 1½ percent initial curtail; changes in these assumptions will affect minimum rents accordingly.

Estimated Average Annual Demand for Multifamily Units
by Monthly Gross Rent and by Unit Size
Phoenix, Arizona, Housing Market Area
September 1, 1966 to September 1, 1969

Monthly gross rent ^{a/}	Size of unit			
	<u>Efficiency</u>	<u>One bedroom</u>	<u>Two bedrooms</u>	<u>Three or more bedrooms</u>
\$ 95 and over	280	-	-	-
105 " "	235	-	-	-
115 " "	195	1,260	-	-
125 " "	165	1,080	-	-
135 " "	135	890	1,160	-
145 " "	115	730	890	-
155 " "	85	580	820	300
160 " "	60	500	760	260
180 " "	-	300	520	190
200 " "	-	180	300	120
220 " "	-	90	180	70
240 " "	-	-	100	50

^{a/} Gross rent is shelter rent plus the cost of utilities.

Note: The above figures are cumulative and cannot be added vertically.
For example, the average annual demand for one-bedroom units at
from \$115 to \$125 is 180 units (1,260 minus 1,080).

As indicated previously, the satisfaction of the demand for multifamily units in the HMA in the next three years can be accomplished most satisfactorily by moderately increasing increments of production. The suggested volume of 1,500 new multifamily units in the first year of the three-year forecast period is desirable because the absorption of the existing excess supply of multifamily housing will be greatest when the volume of new construction is still at a relatively low level. The rate of absorption of the excess supply may be expected to slow somewhat as the level of multifamily construction accelerates in the following two years.

The annual demand for 400 multifamily units for sale, included in the previous table, is distributed by equivalent sales prices in the following table. Because of the difficulty in differentiating between the multifamily rental and sales housing markets, the distribution should be considered as a guide only and may well require modification if a deviation from the pattern is indicated by recent market absorption

data. Available data indicate that most of the demand will be for cooperative and condominium units in the "townhouse", or row-house, type of structure. Only a very small demand for sales units in other types of multifamily structures is evident in the Phoenix HMA. In many cases, units in larger multifamily projects have had to be rented in order to obtain satisfactory occupancy. In any case, a cooperative or condominium project other than the townhouse type would be warranted in the current market only if it provides units for a segment of the market that is not now being satisfied. The market for cooperative and condominium townhouse units priced above \$22,500 is small because of the relatively large down-payment required for purchase and because of the comparatively high monthly charges and maintenance fees.

Estimated Average Annual Demand for New Multifamily Sales Units
Phoenix, Arizona, Housing Market Area
September 1, 1966-September 1, 1969

<u>Price range</u>	<u>Number of units</u>
Under \$15,000	45
\$15,000 - 17,499	120
17,500 - 19,999	135
20,000 - 22,499	80
22,500 and over	<u>20</u>
Total	400

Table I

Components of the Civilian Work Force
Phoenix, Arizona, Housing Market Area
Annual averages, 1956-1965
(in thousands)

<u>Year</u>	<u>Civilian work force</u>	<u>Unemployment</u>		<u>Workers on strike</u>	<u>Total employment</u>	<u>Agricultural employment</u>	<u>Nonagricultural employment</u>		
		<u>Number</u>	<u>Percent</u>				<u>Total</u>	<u>Wage and salary</u>	<u>Other^{a/}</u>
1956	179.6	6.1	3.4	0.3	173.2	23.8	149.4	124.7	24.7
1957	195.2	6.9	3.5	-	188.3	23.7	164.6	138.6	26.0
1958	211.2	11.5	5.4	-	199.7	24.9	174.8	147.9	26.9
1959	226.8	9.5	4.2	0.2	217.1	22.1	195.0	166.4	28.6
1960	245.4	11.7	4.8	-	233.8	22.1	211.7	181.8	29.9
1961	257.1	15.0	5.8	-	242.1	20.7	221.4	190.6	30.8
1962	265.7	13.3	5.0	-	252.4	19.6	232.8	201.1	31.7
1963	277.3	12.8	4.6	-	264.5	19.7	244.8	212.1	32.7
1964	290.1	12.9	4.4	0.1	277.1	19.3	257.8	224.0	33.8
1965	301.4	14.2	4.7	0.5	286.7	18.5	268.2	233.5	34.7
<u>First eight months</u>									
1965	298.2	15.8	5.3	0.8	281.8	18.0	263.8	229.4	34.3
1966	316.6	10.9	3.4	-	305.7	17.8	287.9	251.5	36.3

^{a/} Includes self-employed persons, domestics, and unpaid family workers.

Note: In some years, subtotals may not add to totals because of rounding.

Source: Employment Security Commission of Arizona.

Table II

Nonagricultural Wage and Salary Employment by Industry
Phoenix, Arizona, Housing Market Area
Annual averages, 1956-1965
(in thousands)

<u>Industry</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>First</u> <u>eight months</u>	
									<u>1965</u>	<u>1966</u>
Total wage and salary employment	<u>147.8</u>	<u>166.4</u>	<u>181.7</u>	<u>190.8</u>	<u>201.2</u>	<u>212.1</u>	<u>224.0</u>	<u>233.5</u>	<u>230.1</u>	<u>249.0</u>
Manufacturing	<u>25.3</u>	<u>29.9</u>	<u>33.6</u>	<u>35.6</u>	<u>38.7</u>	<u>41.1</u>	<u>44.5</u>	<u>49.9</u>	<u>47.4</u>	<u>58.3</u>
Food and kindred products	4.8	5.0	5.1	5.2	5.4	5.3	5.2	5.0	5.0	5.0
Printing and publishing	1.9	2.1	2.3	2.5	2.8	2.8	3.0	3.0	3.0	3.1
Primary and fabricated metals	4.0	4.6	4.4	4.9	4.7	4.3	4.4	5.0	4.8	5.1
Machinery, including electrical	4.8	6.3	8.5	9.8	11.7	14.2	16.9	21.1	19.5	27.8
Other manufacturing	9.8	11.9	13.3	13.2	14.1	14.5	15.0	15.7	15.1	17.3
Nonmanufacturing	<u>122.5</u>	<u>136.5</u>	<u>148.1</u>	<u>155.2</u>	<u>162.5</u>	<u>171.0</u>	<u>179.5</u>	<u>184.7</u>	<u>182.7</u>	<u>190.7</u>
Mining and quarrying	0.4	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.2
Contract construction	14.4	16.5	17.6	16.4	15.5	16.2	16.3	13.1	12.8	13.3
Trans., comm., and public util.	11.6	12.2	13.0	13.1	13.5	13.6	13.5	13.5	13.5	14.1
Wholesale and retail trade	39.2	43.5	47.3	49.8	51.6	54.8	57.3	58.5	58.6	60.3
Finance, insurance, and real est.	8.9	10.3	11.5	12.4	13.4	14.1	15.0	15.8	15.9	16.1
Services and miscellaneous	21.6	24.7	27.1	29.7	32.2	34.2	36.8	38.5	38.6	40.7
Government	26.4	28.8	31.1	33.4	36.0	37.9	40.4	44.0	43.2	46.0

Note: In some years, subtotals may not add to totals because of rounding.

Source: Employment Security Commission of Arizona.

Table III

Assigned Military Strength and Federal Civil Service Employment
at Luke and Williams Air Force Bases, Maricopa County, Arizona
January 1, 1957-August 1, 1966

<u>Date</u>	<u>Luke</u> <u>Air Force Base^{a/}</u>		<u>Williams</u> <u>Air Force Base</u>		<u>Total</u>		<u>Change in total</u> <u>from preceding date</u>	
	<u>Military</u>	<u>Civilian</u>	<u>Military</u>	<u>Civilian</u>	<u>Military</u>	<u>Civilian</u>	<u>Military</u>	<u>Civilian</u>
January 1, 1957	3,128	1,426	2,720	1,055	5,848	2,481	-	-
" 1958	2,932	1,154	2,731	1,014	5,663	2,168	-185	-313
" 1959	2,917	1,195	2,664	998	5,581	2,193	- 82	25
" 1960	2,986	1,186	2,066	980	5,052	2,166	-529	- 27
" 1961	3,517	1,366	1,232	587	4,749	1,953	-303	-213
" 1962	3,910	1,357	1,626	603	5,536	1,960	787	7
" 1963	4,207	1,347	1,961	612	6,168	1,959	632	- 1
" 1964	4,486	1,302	2,213	609	6,699	1,911	531	- 48
" 1965	3,853	1,284	2,352	646	6,205	1,930	-494	19
" 1966	3,900	1,254	2,403	645	6,303	1,899	98	- 31
August 1, 1966	4,297	1,319 ^{b/}	2,393	742 ^{b/}	6,690	2,061 ^{b/}	387	162

^{a/} Includes Gila Bend Auxiliary Field.

^{b/} As of July 1, 1966.

Source: Department of the Air Force.

Table IV

Percentage Distribution of All Families and Renter Households by Estimated Annual Income
After Deduction of Federal Income Tax
Phoenix, Arizona, Housing Market Area, 1966 and 1969

<u>Annual</u> <u>after-tax income</u>	<u>1966 income</u>		<u>1969 income</u>	
	<u>All</u> <u>families</u>	<u>Renter</u> <u>households</u> ^{a/}	<u>All</u> <u>families</u>	<u>Renter</u> <u>households</u> ^{a/}
Under \$ 2,000	8	11	7	9
\$ 2,000 - 2,999	6	12	6	11
3,000 - 3,999	7	11	6	11
4,000 - 4,999	9	11	7	11
5,000 - 5,999	9	11	9	10
6,000 - 6,999	10	12	9	10
7,000 - 7,999	9	8	8	9
8,000 - 8,999	8	7	8	7
9,000 - 9,999	9	5	8	6
10,000 - 12,499	11	6	15	8
12,500 - 14,999	6	2	7	3
15,000 and over	<u>8</u>	<u>4</u>	<u>10</u>	<u>5</u>
Total	100	100	100	100
Median	\$7,150	\$5,400	\$7,750	\$5,850

^{a/} Excludes one-person renter households.

Source: Estimated by Housing Market Analyst.

Table V

Changes in Population
Phoenix, Arizona, Housing Market Area
April 1, 1950-September 1, 1966

<u>Area</u>	<u>April 1, 1950</u>	<u>April 1, 1960</u>	<u>September 1, 1966</u>	<u>Average annual change^{a/}</u>			
				<u>1950-1960</u>		<u>1960-1966</u>	
				<u>Number</u>	<u>Percent^{b/}</u>	<u>Number</u>	<u>Percent^{b/}</u>
Phoenix	106,818	439,170	525,400	33,235	14.1	13,450	2.8
Scottsdale	2,032	10,026	58,000	799	16.0	7,475	27.3
Mesa	16,790	33,772	52,500	1,698	7.0	2,925	6.8
Tempe	7,684	24,897	49,900	1,721	11.8	3,900	10.7
Glendale	8,179	15,696	31,700	752	6.5	2,500	10.9
Primary Market Area	141,503	523,561	717,500	38,206	13.1	30,200	4.9
Rest of HMA	190,267	139,949	198,700	-5,032	-3.1	9,150	5.4
HMA total	331,770	663,510	916,200	33,174	6.9	39,400	5.0

^{a/} Subtotals may not add to totals because of rounding.

^{b/} Derived through the use of a formula designed to calculate the annual percentage change on a compound basis.

Sources: 1950 and 1960 Censuses of Population.
1966 estimated by Housing Market Analyst.

Table VI

Changes in Households
Phoenix, Arizona, Housing Market Area
April 1, 1950-September 1, 1966

<u>Area</u>	<u>April 1, 1950</u>	<u>April 1, 1960</u>	<u>September 1, 1966</u>	<u>Average annual change^{a/}</u>			
				<u>1950-1960</u>		<u>1960-1966</u>	
				<u>Number</u>	<u>Percent^{b/}</u>	<u>Number</u>	<u>Percent^{b/}</u>
Phoenix	34,245	132,083	160,000	9,784	13.5	4,350	3.0
Scottsdale	587	2,954	17,300	237	16.2	2,225	27.5
Mesa	4,739	9,586	15,200	485	7.0	870	7.1
Tempe	2,063	6,551	13,800	449	11.6	1,125	11.5
Glendale	<u>2,231</u>	<u>4,389</u>	<u>9,000</u>	<u>216</u>	<u>6.8</u>	<u>720</u>	<u>11.1</u>
Primary Market Area	43,865	155,563	215,300	11,170	12.7	9,300	5.1
Rest of HMA	<u>52,570</u>	<u>35,513</u>	<u>51,400</u>	<u>-1,706</u>	<u>-3.9</u>	<u>2,475</u>	<u>5.7</u>
HMA total	96,435	191,076	266,700	9,464	6.8	11,800	5.2

^{a/} Subtotals may not add to totals because of rounding.

^{b/} Derived through the use of a formula designed to calculate the annual percentage change on a compound basis.

Sources: 1950 and 1960 Censuses of Housing.
1966 estimated by Housing Market Analyst.

Table VII

Components of the Housing Inventory
Phoenix, Arizona, Housing Market Area
April 1, 1950-September 1, 1966

<u>Supply, tenure, and vacancy</u>	<u>April 1, 1950</u>	<u>April 1, 1960</u>	<u>September 1, 1966</u>	<u>Average annual change^{a/}</u>			
				<u>1950-1960</u>		<u>1960-1966</u>	
				<u>Number</u>	<u>Percent^{b/}</u>	<u>Number</u>	<u>Percent^{b/}</u>
Total housing supply	108,047	211,865	300,200	10,382	6.7	13,750	5.4
Total occupied housing units	<u>96,435</u>	<u>191,076</u>	<u>266,700</u>	<u>9,464</u>	<u>6.8</u>	<u>11,800</u>	<u>5.2</u>
Owner-occupied	55,016	125,267	179,500	7,025	8.3	8,450	5.6
Percent	57.0	65.6	67.3	-	-	-	-
Renter-occupied	41,419	65,809	87,200	2,439	4.6	3,325	4.4
Percent	43.0	34.4	32.7	-	-	-	-
Total vacant housing units	<u>11,612^{d/}</u>	<u>20,789</u>	<u>33,500</u>	<u>918</u>	<u>5.8</u>	<u>1,975</u>	<u>7.4</u>
Available	<u>5,693</u>	<u>11,528</u>	<u>21,000</u>	<u>584</u>	<u>7.0</u>	<u>1,475</u>	<u>9.3</u>
For sale	1,012	3,325	5,000	231	11.9	260	6.3
Homeowner vacancy rate	1.8	2.6	2.7	-	-	-	-
For rent	4,681	8,203	16,000	352	5.6	1,225	10.3
Rental vacancy rate	10.2	11.1	15.5	-	-	-	-
Other vacant ^{c/}	5,919 ^{d/}	9,261	12,500	334	4.5	500	4.7

^{a/} Subtotals may not add to totals because of rounding.

^{b/} Derived through the use of a formula designed to calculate the annual percentage change on a compound basis.

^{c/} Includes vacant seasonal units, dilapidated units, units rented or sold and awaiting occupancy, and units held off the market.

^{d/} Includes 845 units occupied temporarily by nonresidents.

Sources: 1950 and 1960 Censuses of Housing.
1966 estimated by Housing Market Analyst.

Table VIII

New Housing Units Authorized by Building Permits by Type of Structure
Phoenix, Arizona, Housing Market Area
Annual Totals, 1960-1965

Year	City of Phoenix				Rest of HMA				HMA total			
	Single-family	Two- to four-family	Five- or more-family	Total	Single-family	Two- to four-family	Five- or more-family	Total	Single-family	Two- to four-family	Five- or more-family ^{a/}	Total
1960	3,249	786	937	4,972	10,476	431	439	11,346	13,725	1,217	1,376	16,318 ^{b/}
1961	3,298	681	1,503	5,482	8,326	463	797	9,586	11,624	1,144	2,300	15,068 ^{c/}
1962	3,271	1,119	2,551	6,941	4,452	920	2,051	7,423	7,723	2,039	4,602	14,364 ^{d/}
1963	2,006	2,337	3,354	7,697	3,672	1,873	1,780	7,325	5,678	4,210	5,134	15,022
1964	1,646	1,375	2,454	5,475	3,285	714	1,702	5,701	4,931	2,089	4,156	11,176 ^{e/}
1965	1,549	167	1,060	2,776	2,395	233	521	3,149	3,944	400	1,581	5,925

First eight months

1965	1,024	140	913	2,077	1,316	122	378	1,816	2,340	262	1,291	3,893
1966	1,235	87	420	1,742	1,607	160	531	2,298	2,842	247	951	4,040

^{a/} Includes units in condominium projects as follows: 997 in 1964 and 587 in 1965. A total of 395 units were authorized in the first nine months of 1966.

^{b/} No permits were issued by Maricopa County in January and February 1960. Housing starts have been included, based on estimates made by the First National Bank of Arizona.

^{c/} Includes 144 public housing units.

^{d/} Includes 202 public housing units.

^{e/} Includes 30 public housing units.

Source: U.S. Bureau of the Census, Construction Reports C-40 and C-42.

Table IX

Phoenix, Arizona, Area Postal Vacancy Survey

June 27 - July 1, 1966

Postal area	Total residences and apartments						Residences						Apartments						House trailers		
	Total possible deliveries	Vacant units				Under const.	Total possible deliveries	Vacant units				Under const.	Total possible deliveries	Vacant units				Under const.	Total possible deliveries	Vacant	
		All	%	Used	New			All	%	Used	New			All	%	Used	New			No.	%
The Survey Area Total	239,744	15,768	6.6	14,453	1,315	2,155	193,499	7,112	3.7	6,305	807	1,342	46,245	8,656	18.7	8,148	508	813	16,247	2,159	13.3
Phoenix	164,717	11,400	6.9	10,678	722	780	129,498	4,934	3.8	4,633	301	543	35,219	6,466	18.4	6,045	421	237	8,608	388	4.5
Main Office	7,663	1,159	15.1	929	230	24	3,650	207	5.7	207	-	-	4,013	952	23.7	722	230	24	-	-	-
Stations:																					
Capital	18,259	1,498	8.2	1,483	15	13	14,788	679	4.6	675	4	13	3,471	819	23.6	808	11	-	1,317	55	4.2
Indian School	23,675	1,757	7.4	1,710	47	61	13,893	357	2.6	342	15	38	9,782	1,400	14.3	1,368	32	23	922	54	5.9
McDowell	21,576	1,306	6.1	1,269	37	48	16,253	535	3.3	529	6	16	5,323	771	14.5	740	31	32	2,220	76	3.4
Maryvale	16,344	758	4.6	701	57	91	15,857	728	4.6	671	57	91	487	30	6.2	30	-	-	113	6	5.3
Northeast	16,039	728	4.5	611	117	173	12,697	244	1.9	198	46	94	3,342	484	14.5	413	71	79	388	18	4.6
Northwest	15,533	1,092	7.0	1,073	19	21	11,792	262	2.2	256	6	9	3,741	830	22.2	817	13	12	954	51	5.3
South Central	12,020	1,032	8.6	1,026	6	24	10,963	715	6.5	709	6	24	1,057	317	30.0	317	-	-	728	47	6.5
Southeast	6,219	460	7.4	460	-	5	4,818	130	2.7	130	-	1	1,401	330	23.6	330	-	4	244	8	3.3
Sunnyslope	20,094	994	4.9	881	113	199	18,129	608	3.4	528	80	146	1,965	386	19.6	353	33	53	1,083	58	5.4
Sunnyslope Annex	7,295	616	8.4	535	81	121	6,658	469	7.0	388	81	111	637	147	23.1	147	-	10	639	15	2.3
Other Cities and Towns	75,027	4,368	5.8	3,775	593	1,375	64,001	2,178	3.4	1,672	506	799	11,026	2,190	19.9	2,103	87	576	7,639	1,771	23.2
Avondale	1,842	106	5.8	105	1	12	1,538	58	3.8	58	-	4	304	48	15.8	47	1	8	89	-	-
Buckeye	1,818	163	9.0	162	1	2	1,707	107	6.3	106	1	2	111	56	50.5	56	-	-	104	3	2.9
Chandler	4,083	227	5.6	218	9	9	3,633	124	3.4	115	9	5	450	103	22.9	103	-	4	401	30	7.5
Glendale	9,875	445	4.5	406	39	57	8,343	216	2.6	195	21	32	1,532	229	14.9	211	18	25	940	12	1.3
Goodyear	680	47	6.9	44	3	1	423	12	2.8	9	3	1	257	35	13.6	35	-	-	-	-	-
Mesa	17,376	1,189	6.8	1,054	135	95	15,363	617	4.0	493	124	89	2,013	572	28.4	561	11	6	4,669	1,604	34.4
Scottsdale	19,307	1,178	6.1	1,020	158	548	16,043	488	3.0	348	140	202	3,264	690	21.1	672	18	346	720	54	7.5
Sun City	4,243	214	5.0	50	164	125	3,774	178	4.7	47	131	119	469	36	7.7	3	33	6	-	-	-
Tempe	14,680	749	5.1	680	69	520	12,108	341	2.8	272	69	339	2,572	408	15.9	408	-	181	716	68	9.5
Youngtown	1,123	50	4.5	36	14	6	1,069	37	3.5	29	8	6	54	13	24.1	7	6	-	-	-	-

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

Summary of Results of Postal Vacancy Surveys
Conducted in the City of Phoenix Postal Delivery Area
Selected Dates, November 1956-June 1966

<u>Units surveyed</u>	<u>Residences</u>	<u>Apartments</u>	<u>Total, all units^{a/}</u>
November 1956	95,479	6,486	101,965
April 1958	93,314	11,779	105,093
May 1960	102,791	16,070	118,861
June 1962 ^{b/}	124,629	21,352	145,981
March 1966 ^{c/}	79,219	29,387	108,606
June 1966	129,498	35,219	164,717
<u>Number of vacant units</u>			
November 1956	2,737	874	3,611
April 1958	2,071	1,367	3,438
May 1960	2,754	2,797	5,551
June 1962 ^{b/}	5,888	4,548	10,436
March 1966 ^{c/}	2,885	2,944	5,829
June 1966	4,934	6,466	11,400
<u>Percent vacant</u>			
November 1956	2.9	13.5	3.5
April 1958	2.2	11.6	3.3
May 1960	2.7	17.4	4.7
June 1962 ^{b/}	4.7	21.3	7.1
March 1966 ^{c/}	3.6	10.0	5.4
June 1966	3.8	18.4	6.9

^{a/} Deliveries to trailers have been omitted from all survey results.

^{b/} Survey conducted by the Post Office on its own forms. Vacant units not previously occupied were not counted.

^{c/} Survey was conducted only on selected routes.

Source: Surveys conducted by the Phoenix Post Office in the Phoenix Postal Delivery Area.

Table XI

New Homes Completed in Selected Subdivisions^{a/}
Phoenix, Arizona, Housing Market Area
As of January 1, of 1964, 1965, and 1966

<u>Sales price</u>	<u>Total completions</u>		<u>Contract construction</u>	<u>Speculative construction</u>			
	<u>Number</u>	<u>Percent</u>	<u>Number of houses pre-sold</u>	<u>Total</u>	<u>Number sold</u>	<u>Number unsold</u>	<u>Percent unsold</u>
<u>Houses completed in 1963</u>							
Under \$10,000	67	2	40	27	21	6	22
\$10,000 - 12,499	431	13	183	248	196	52	21
12,500 - 14,999	838	25	373	465	378	87	19
15,000 - 17,499	1,148	35	792	356	261	95	27
17,500 - 19,999	510	15	315	195	154	41	21
20,000 - 24,999	179	5	121	58	41	17	29
25,000 - 29,999	71	2	50	21	11	10	48
30,000 and over	83	3	74	9	4	5	56
Total	3,327	100	1,948	1,379	1,066	313	23
<u>Houses completed in 1964</u>							
Under \$10,000	472	10	259	213	154	59	28
\$10,000 - 12,499	703	14	345	358	225	133	37
12,500 - 14,999	1,212	24	715	497	379	118	24
15,000 - 17,499	1,002	20	589	413	267	146	35
17,500 - 19,999	812	16	409	403	300	103	26
20,000 - 24,999	552	11	260	292	233	59	20
25,000 - 29,999	92	2	71	21	15	6	29
30,000 and over	120	3	63	57	12	45	79
Total	4,965	100	2,711	2,254	1,585	669	30
<u>Houses completed in 1965</u>							
Under \$10,000	10	-	8	2	1	1	50
\$10,000 - 12,499	218	7	140	78	62	16	21
12,500 - 14,999	542	18	391	151	99	52	34
15,000 - 17,499	689	22	462	227	174	53	23
17,500 - 19,999	743	24	416	327	261	66	20
20,000 - 24,999	533	17	338	195	127	68	35
25,000 - 29,999	93	3	75	18	11	7	39
30,000 and over	264	9	143	121	58	63	52
Total	3,092	100	1,973	1,119	793	326	29

^{a/} Covers all subdivisions in which five or more houses were completed in the preceding twelve months.

Source: Annual Unsold Inventory Survey of New Homes conducted by the Phoenix FHA Insuring Office.