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Analysis of the
**PHOENIX, ARIZONA
HOUSING MARKET**

as of September 1, 1968

(A supplement to the September 1, 1966, analysis)

DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT

JUN 29 1971

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

May 1969

ANALYSIS OF THE
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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 current and future 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 at the time (the "as of" date) 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. Of course, estimates and judgments made on the basis of information available on the "as of" date may be modified considerably by subsequent market developments.

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ANALYSIS OF THE
PHOENIX, ARIZONA, HOUSING MARKET
AS OF SEPTEMBER 1, 1968

(A supplement to the September 1, 1966, analysis)

Summary and Conclusions

1. Nonagricultural wage and salary employment in the Phoenix Housing Market Area (HMA) averaged 270,000 during the twelve-month period through July 1968. Because of a very large gain in 1966 and a subsequent slowdown in 1967, yearly increases in wage and salary employment have varied considerably in recent years. Wage and salary employment in 1965 was up 9,500 over 1964. A large increase in manufacturing employment in 1966 helped to push total wage and salary employment to 21,300 above 1965. Manufacturing employment declined in 1967, and the increase in total wage and salary employment was limited to 7,700 jobs. Based on known plans of plant expansion and on trends in nonmanufacturing industries, wage and salary employment is forecast to increase by about 10,000 annually during the two-year forecast period of this report.
2. The Phoenix HMA has been an area of moderate unemployment in recent years. There was an increase in 1967, however, to 3.9 percent of the work force, up from 3.3 percent in 1966. The jobless rate declined to 3.3 percent during the twelve-month period through July 1968.
3. The 1968 median income of all families in the Phoenix HMA is estimated at \$7,750, after the deduction of federal income tax. The 1968 median after-tax income of renter households of two persons or more is estimated at \$5,625. The median after-tax income of all families is forecast to increase to \$8,175 in 1970, and that of renter households to \$5,950.
4. The population of the Phoenix HMA is estimated at 933,800 persons as of September 1, 1968, reflecting an increase of 57,000 since September 1966, or 28,500 (3.2 percent) annually. The population of the Phoenix HMA is expected to increase by about 26,600 (2.8 percent) annually during the September 1968-September 1970 period.
5. There were about 281,400 households in the Phoenix HMA as of September 1968, reflecting an increase of 20,400, or 10,200 (3.8 percent) annually since September 1966. The number of households will increase by about 9,600 (3.4 percent) annually during the September 1968-September 1970 period.

6. There were about 311,400 housing units in the Phoenix HMA as of September 1, 1968, reflecting average yearly gains of 8,350 since September 1, 1966. As measured by building permits, residential construction averaged over 15,000 units a year in the early 1960's. There was a sharp reduction in unit authorizations, to 5,925 in 1965. There was a recovery to almost 6,150 units in 1966, and to 7,600 in 1967. There were about 6,625 units authorized in the first seven months of 1968, up from 4,250 in the corresponding period in 1967. Authorizations of both single-family units and units in multifamily structures increased in 1968.
7. There were about 30,000 vacant housing units in the Phoenix HMA as of September 1, 1968. About 14,900 of these units were available for rent or for sale--an over-all available vacancy rate of 5.0 percent. The sales vacancy rate was at 1.7 percent, and the rental vacancy rate at 11.1 percent. Both the sales and rental vacancy rates were substantially below the rates reported for September 1966--2.8 percent and 14.8 percent, respectively.
8. There will be annual demand for about 7,800 units of new, privately-financed housing during the September 1968-September 1970 period, including 5,000 units of single-family housing and 2,800 units of housing in multifamily structures. At the lower rents achievable only with below-market-interest-rate financing or other public benefits or assistance or with interest subsidy, there may be additional annual demand for 700 units of multifamily housing. This estimate of demand is exclusive of public low-rent housing and rent-supplement accommodations.

The demand for new single-family accommodations is expected to approximate the price range distribution shown on page 20. The demand forecast for multifamily housing is distributed by unit size and rent range on page 21.

ANALYSIS OF THE
PHOENIX, ARIZONA, HOUSING MARKET
AS OF SEPTEMBER 1, 1968

(A supplement to the September 1, 1966, analysis)

Housing Market Area

The Phoenix, Arizona, Housing Market Area (HMA) is defined as the Phoenix Standard Metropolitan Statistical Area (Maricopa County, Arizona). The HMA is situated in the fertile, but arid, Salt River Valley in southcentral Arizona.

The population of the HMA was about 876,800 as of the date of the last FHA market analysis,^{1/} accounting for over one-half of the population of the entire state. The combined populations of Phoenix and four large, contiguous cities (Glendale, Mesa, Scottsdale, and Tempe) comprise over four-fifths of the HMA total population. The remainder of the HMA is sparsely populated, for the most part, although one other city (Chandler, southeast of Phoenix) has a population in excess of 10,000 persons. Most of the remainder consists of desert, some of which is irrigated farmland, and mountainous areas.

Economy of the Area

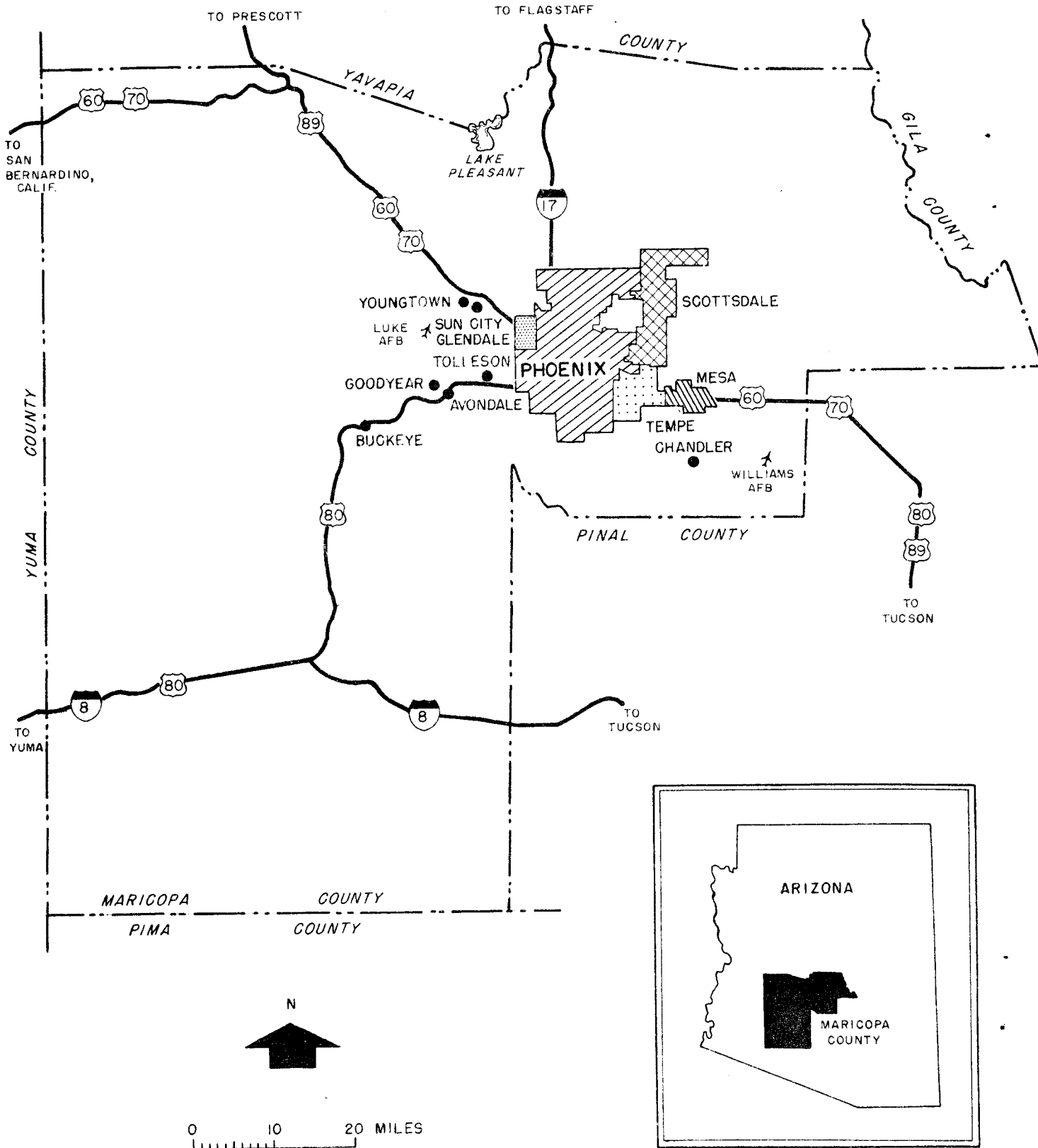
Character

The economy of the Phoenix HMA first developed principally with an irrigated-desert agricultural base. Agriculture remains significant; nearly one-half of all land under cultivation in Arizona is in Maricopa County. Later, the warm, dry climate made Phoenix attractive as a winter vacation area and as a home after retirement. There are numerous resorts, and thousands of persons make the area a winter residence.

The economy of the Phoenix HMA has been strongly influenced by a number of manufacturing companies which located in the area during relatively recent years. Each of the four largest manufacturers established plants in the HMA within the past twenty years. These firms, producing electrical and nonelectrical machinery, instruments, and air transportation equipment, have grown to employ a total of almost 30,000 persons.

^{1/} All estimates of demographic and housing data as of September 1966 are from the previous analysis, adjusted where necessary to reflect information not available at the time of field work for that study.

PHOENIX, ARIZONA, HOUSING MARKET AREA



Employment

Recent Estimate and Past Trend. The civilian work force of the Phoenix HMA averaged 335,800 persons during the twelve-month period ending July 31, 1968, of whom 324,600 were employed. There were 270,000 nonagricultural wage and salary workers among the employed.

Because of an exceptionally large gain in 1966 and a subsequent slowdown in 1967, year-to-year changes in employment have varied considerably in recent years. Wage and salary employment in 1965 was up 9,500 over 1964. Led by an 11,000-job increase in manufacturing industries (mostly in the rapidly growing machinery manufacturing sector), the gain in wage and salary employment amounted to 21,300 jobs in 1966. Average annual manufacturing employment declined slightly in 1967, and the increase in total wage and salary employment was limited to 7,700 jobs, the smallest annual gain in 13 years. Judging from the 11,000 increase in 1967-68 over 1966-67,^{1/} the area economy appears to have regained some of the momentum lost in 1967.

The table below is a summary of wage and salary employment trends in the Phoenix HMA during the 1964-1968 period. See table II for a more detailed description, by industry.

Average Annual Nonagricultural Wage and Salary Employment
Phoenix, Arizona, HMA, 1964-1968
(in thousands)

<u>Year</u>	<u>Wage and salary employment</u>			<u>Change in total from preceding date</u>
	<u>Manufac- turing</u>	<u>Nonmanu- facturing</u>	<u>Total</u>	
1964	44.5	179.5	224.0	-
1965	49.9	183.6	233.5	9.5
1966	60.9	193.9	254.8	21.3
1967	60.8	201.7	262.5	7.7

12-month period ending July 31:

1967	60.8	198.2	259.0	-
1968 ^{a/}	64.3	205.7	270.0	11.0

^{a/} Preliminary.

Source: Employment Security Commission of Arizona.

^{1/} All references in this report to 1966-67 and 1967-68 refer to twelve-month periods ending July 31 of 1967 and 1968, respectively.

Major Industries. Although nonmanufacturing industries provide most of the economic support of the Phoenix HMA, the manufacturing sector has been growing in importance and has furnished most of the impetus for economic growth in recent years. During 1967, manufacturing employment averaged about 60,800, up from 44,500 in 1964. Manufacturing jobs averaged 64,300 in 1967-68, equal to slightly less than one-fourth of all wage and salary employment. While this represents a relatively small proportion, manufacturing has comprised an increasing share of all employment; at the beginning of the 1950's, only 12 percent of all wage and salary workers were in manufacturing.

The largest manufacturing category shown in table II is machinery, with an average of 28,700 employees in the 1967-68 twelve-month period. Most machinery manufactured in the area is electrical machinery (primarily transistors and related products) and computer systems. The largest and most rapidly growing manufacturer in the area (Motorola) produces machinery. In 1966, the combined effects of booming national economic growth and increased hiring to staff recently completed plant expansions helped to produce a 7,200-job increase in machinery manufacturing--to an average of 28,400 jobs. There was a decline to 26,100 in 1967, but the decrease was reversed late in the year, and the average level of employment during 1967-68 represented a new high.

The "all other manufacturing" category shown in table II accounted for about 21,000 workers in 1967-68, equal to almost one-third of all manufacturing employment. Much of the employment increase in manufacturing in recent years has been in this category. "All other manufacturing" is up from 15,000 in 1964. Most of the growth has been in companies which manufacture equipment and instruments for the air transportation industry. Employment in primary metals production also has increased in recent years from 4,400 in 1964 to 5,900 in 1967-68.

Nonmanufacturing jobs increased from 179,500 in 1964 to 205,700 in the 1967-68 twelve-month period, a gain of 25,200. The largest non-manufacturing employment category is trade, which employed an average of 64,900 workers in 1967-68. There were 43,700 workers in service occupations in 1967-68. Many of the jobs in both trade and services are dependent on tourists, retired persons, and temporary residents.

There were an average of 51,000 government workers in 1967-68, up from 40,400 in 1964. In addition to the usual local government activities and services, there are two Air Force installations in the HMA, employing a total of over 2,000 civilians.

Principal Employment Sources

Motorola, Incorporated, is the largest manufacturing employer in the Phoenix HMA. Motorola has contributed much economic growth to the area since the first plant was established in 1948; the gains have been especially impressive during the 1960's. The company produces electrical machinery (semiconductors, communications products, etc.) in three divisions in the area. Around three-fourths of all production workers are female. The company has announced plans for the construction of 175,000 square feet of additional plant space within the two-year forecast period of this report. The addition will add materially to the work force of Motorola.

The second largest manufacturing employer is the General Electric Company. General Electric was established in the Phoenix area in 1956. The company produces computer systems and supplies in two plants.

The Airesearch Manufacturing Company produces engines, turbines, and other equipment for the aerospace industry. Over one-half of the production of Airesearch is for the federal government. The company was re-established in Phoenix in 1952 after closing the original plant at the end of World War II.

The Sperry Flight Systems Division of the Sperry-Rand Corporation was first established in Phoenix in 1956. Sperry-Rand manufactures aircraft flight control instruments in the Phoenix HMA.

Other large (over 1,500 employees) manufacturing companies in the Phoenix area are the Goodyear Aerospace Division (aerospace components, military products, and research) and the Reynolds Metals Company (aluminum extrusions). Western Electric has established a plant for the production of communications wire. Employment at the facility is growing, and may exceed 1,500 within the forecast period of this report.

In addition to 2,000 civilian employees at Luke and Williams Air Force Bases, there were almost 8,600 uniformed military personnel in March 1968. Reflecting the military effort in southeast Asia, assigned military strength was up by about 1,900 above 1966. Civilian employment remained unchanged. The increases in assigned military strength took place in the 1966-1967 period, however, and the level appears to have stabilized; 1968 strength is almost unchanged from 1967. A continuation of current levels of military and military-connected employment appears likely.

Unemployment

The Phoenix HMA has been an area of moderate unemployment in recent years. There was an increase in 1967, however, to an average of 3.9 percent of the work force, up from 3.3 percent in 1966. The rate of joblessness declined in late 1967; the average for the 1967-68 period was down to 3.3 percent.

Future Employment Prospects

Based on known plans of manufacturing plant expansions and on trends in nonmanufacturing industries, nonagricultural employment is expected to increase by around 10,000 (3.7 percent) annually during the two-year forecast period of this report. Substantial employment increases are expected to result from the staffing of the addition to the Motorola production facilities. Some other area manufacturers may grow, also, especially the new Western Electric wire plant, for a total annual manufacturing gain of 2,500 jobs. Nonmanufacturing industries will continue to provide most of the employment increase in the Phoenix HMA, however, accounting for three-fourths of the gain during the forecast period.

The above forecast appears to be compatible with information available as of the writing of this report. As pointed out earlier, the majority of the manufacturing employment increase in recent years has been at companies which are relative newcomers to the area. The location in the HMA of another large, new employer could produce rates of growth substantially above the forecast. On the other hand, much of the production of manufacturing plants in the Phoenix HMA is for military or aerospace application. A change in military policies of the U.S. (especially in southeast Asia) or in the space program would have a bearing on employment levels in the HMA. Also a factor, as in most areas, is the future trend in the national economy.

Income

The estimated 1968 median annual income of all families in the Phoenix HMA is \$7,750, after deduction of federal income tax. The 1968 median after-tax income of renter households of two persons or more is estimated at \$5,625. About 22 percent of all families and 43 percent of the renter households have 1968 after-tax incomes of less than \$5,000. These high percentages reflect large numbers of retirees living on reduced income and a sizeable Spanish-speaking minority. Approximately 16 percent of all families and six percent of the renter households have 1968 after-tax incomes in excess of \$12,500.

The median annual after-tax income of all families is forecast to increase to \$8,175 in 1970, and that of renter households to \$5,950. Table III provides a distribution of families and renter households by annual after-tax income classes.

Demographic Factors

Population

1968 Estimate and Past Trends. The Phoenix HMA has been one of the most rapidly growing urban areas of the United States, but the rate of growth has slowed somewhat. The total population is estimated at 933,800 as of September 1, 1968, reflecting an increase of 57,000 persons since September 1966, or 28,500 (3.2 percent^{1/}) annually. In the 1960-1966 period, population gains averaged about 33,200 (4.3 percent) annually. During the 1950's, population increase had averaged 33,175 (6.9 percent) a year.

1960-1966. The combined populations of Phoenix and four adjacent incorporated areas (Glendale, Mesa, Scottsdale, and Tempe) amounted to 756,400 in September 1968, equal to 81 percent of the HMA total. In aggregate, the population of the five largest cities increased by 4.9 percent a year during the 1960-1966 period, somewhat more rapidly than the HMA as a whole. These five cities have had ambitious annexation programs. Annexations between 1960 and 1966 helped to double the populations of Glendale (to 31,700 persons in 1966) and Tempe (to 49,900); the population of Scottsdale increased by five and one-half times during the period, to 56,000 in 1966.

1966-1968. Annexations of land by the incorporated areas slackened after 1966, and their total population growth slowed to 2.7 percent annually, a rate below the HMA as a whole. The incorporated area with the most rapid relative rate of growth during the 1966-1968 period was Tempe, which increased by 3,850 (7.2 percent) annually. Phoenix had the largest absolute increase in population (18,800 persons), but the lowest relative rate of gain (1.8 percent annually). The population of the area outside the five largest cities increased by about 8,050 (4.8 percent) annually between 1966 and 1968, to 177,400 persons.

The following table is a summary of population trends in the Phoenix HMA since 1960, including a forecast to September 1970. See table IV for a more detailed description of trends by geographic area.

^{1/} See Appendix A, paragraph 2.

Trends in Population
Phoenix, Arizona, HMA, 1960-1970

<u>Date</u>	<u>Number of persons</u>	<u>Average annual change from preceding date</u>	
		<u>Number</u>	<u>Percent</u>
April 1960	663,510	-	-
September 1966	876,800	33,200	4.3
September 1968	933,800	28,500	3.2
September 1970	987,000	26,600	2.8

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

Net Natural Increase and Migration. Both components of population growth--net natural increase and in-migration--have been declining in the Phoenix HMA. The highest rates of in-migration took place in the 1950's, when net in-migration averaged 23,400 a year. Between April 1960 and September 1966, the net natural increase (excess of resident births over deaths) of the HMA population averaged 12,000 annually. Since the population increased by an average of 33,200 yearly during the period, in-migration amounted to a net of 21,200 a year. There are indications that the in-migration did not proceed steadily from year to year, however, but that the rates of in-migration were somewhat higher during the early years than in the latter years of the period.

Annual births declined throughout most of the 1960's, while the annual number of resident deaths increased. Lower rates of natural increase resulted. During the September 1966-September 1968 period, net natural increase averaged about 9,800 yearly. Population gains averaged 28,500 annually during the period, indicating that net in-migration was 18,700 a year.

The table below summarizes the components of population changes in the Phoenix HMA.

Components of Population Changes
Phoenix, Arizona, HMA, 1960-1968

<u>Components</u>	<u>Average annual changes</u>	
	<u>April 1960- September 1966</u>	<u>September 1966- September 1968</u>
Net natural increase	12,000	9,800
Resident births	(17,800)	(16,500)
Resident deaths	(5,800)	(6,700)
In-migration	<u>21,200</u>	<u>18,700</u>
Net change	33,200	28,500

Sources: 1960 Census of Population, Arizona State Department of Health and estimates by Housing Market Analyst.

Estimated Future Population. Based on anticipated increases in employment opportunities and changes in employment patterns and migration trends, the population of the Phoenix HMA is expected to increase by about 26,600 (2.8 percent) annually during the September 1968-September 1970 period.

In-migration, the main cause of population increase in the Phoenix HMA, will continue to decline. The decline in net natural increase appears to be slowing; the number of births in 1967 outnumbered the previous year for the first time since 1961. Given a continuation of the slow decline in net natural increase, the population forecast indicates a net in-migration of about 17,300 persons annually.

Households

1968 Estimate and Past Trends. There were about 281,400 households (occupied housing units) in the Phoenix HMA as of September 1968, reflecting an increase of 20,400 (10,200, or 3.8 percent, annually) since September 1966. As shown in the table below, the number of households had increased by an average of 10,900 (4.9 percent) annually during the 1960-1966 period. Table V provides a more detailed description, by geographic area.

Trends in Households
Phoenix, Arizona, HMA, 1960-1970

<u>Date</u>	<u>Number of households</u>	<u>Average annual change from preceding date</u>	
		<u>Number</u>	<u>Percent</u>
April 1960	191,076	-	-
September 1966	261,000	10,900	4.9
September 1968	281,400	10,200	3.8
September 1970	300,600	9,600	3.4

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

Estimated Future Households. Based on the expected population increments and on anticipated household formation and changes in population per household, the number of households will increase by about 9,600 (3.4 percent) annually during the September 1968-September 1970 period.

Housing Market Factors

Housing Supply

1968 Estimate and Past Trends. There were about 311,400 housing units in the Phoenix HMA as of September 1, 1968, reflecting net gains of 8,350 yearly since September 1, 1966 (see table VI). During the 1960-1966 period, the housing inventory had increased by about 12,900 annually. About 15,500 housing units were completed during the 1966-1968 period. In addition, a net of about 3,000 mobile homes were added to the area housing inventory. An estimated 1,800 units were removed from the inventory through demolitions and all other causes.

Residential Building Activity. All of the Phoenix HMA is covered by building permit systems. As measured by building permits, residential construction averaged over 15,000 units a year in the early 1960's. The lowered rate of in-migration and an increasing number of vacancies led to a sharp reduction in housing authorizations, to 5,925 units in 1965. There was a recovery to 6,146 units in 1966, and to 7,600 in 1967. There were 6,613 units authorized in the first seven months of 1968, up from 4,247 during the corresponding period in 1967.

The table below summarizes trends in building permit authorizations during the 1964-1968 period. Table VII gives a geographically detailed description of building permit authorizations in the Phoenix HMA.

Privately Financed Housing Units Authorized by Building Permits Phoenix, Arizona, HMA, 1964-1968

<u>Year</u>	<u>Number of units by type of structure</u>			<u>Total units</u>
	<u>Single-family</u>	<u>Two to four units</u>	<u>Five or more units</u>	
1964	4,931	2,059	4,156	11,146
1965	3,944	400	1,581	5,925
1966	4,231	378	1,537	6,146
1967	4,925	484	2,191	7,600
<u>First seven months</u>				
1967	2,865	293	1,089	4,247
1968	4,179	595	1,839	6,613

Sources: Bureau of the Census and local building officials and records.

There were significant variations in the number of authorizations in all types of structures during the 1964-1967 period, but changes in authorizations of units in multifamily structures were much greater than single-family units. (The classification of rowhouses varies according to each building permit authority, but most are listed as single-family units.) Authorizations of single-family units decreased by less than 1,000 between 1964 and 1965, from 4,931 to 3,944. Single-family authorizations increased after 1965, to near the 1964 level in 1967. Multifamily unit authorizations (includes all structures containing more than one unit) decreased by two-thirds between 1964 and 1965, from 6,215 units to 1,981. After a further decline in 1966 (to 1,915 units), there was an increase to 2,675 multifamily-unit authorizations in 1967. The recoveries in both single-family and multifamily construction continued into 1968. There were 4,179 single-family units authorized during the first seven months of 1968, compared to 2,865 in the corresponding period in 1967. Multifamily authorizations in the 1968 seven-month period amounted to 2,434 units, compared to 1,382 in 1967.

Units Under Construction. Based on surveys of the delivery areas of Phoenix HMA post offices conducted during July 1968, building permit data, and information obtained locally, there were an estimated 3,500 units under construction in the Phoenix HMA on September 1, 1968. About 1,400 of the units were in multifamily structures. About 1,950 of the units under construction, including 1,100 of the multifamily units, were in Phoenix.

Tenure of Occupancy

The trend toward owner-occupancy which marked the 1950's and early 1960's has been reversed, at least temporarily. About 65.6 percent of the 1960 occupied housing inventory was owner-occupied. The ratio increased to 66.9 percent in 1966, but declined to 66.7 percent as of September 1968.

Vacancy

Past Trends. As of September 1, 1966, there were approximately 33,700 vacant housing units in the Phoenix HMA. Of these, 19,700 were available for sale or rent, an over-all available vacancy rate of 7.0 percent. The 1966 sales vacancy rate, at 2.7 percent, was one-tenth of a percentage point above 1960. The 1966 rental vacancy rate, at 14.8 percent, was substantially above the 11.1 percent reported for 1960; the number of rental vacancies increased by 83 percent during the 1960-1966 period, from 8,200 vacant units up to 15,000.

Seasonal Factors. The Phoenix HMA has developed an economy which has attracted many permanent residents, and, while the winter tourist and related industries are large and growing, the effects of seasonal factors on the rates of vacancy have diminished. Vacancy rate variations between seasons are still pronounced, however, and continue to be a factor in the housing market.

Postal Vacancy Surveys.^{1/} The results of postal vacancy surveys conducted during July 1968 are summarized in table VII. The surveys covered a total of almost 254,100 possible deliveries to residences and apartments, equal to 88 percent of the estimated housing supply (excluding trailers). About 11,400 of the units were reported as vacant, equal to 4.5 percent of all deliveries to residences and apartments. Vacant residences amounted to 2.7 percent of all residences reported, and 12.1 percent of the apartments were vacant. About 1,175 of the vacant units were "new" (never occupied).

Postal vacancy surveys were conducted in the Phoenix HMA two times each year during the 1966-1968 period. The table below is a summary of these six postal vacancy surveys.

Summary of Vacancy Rates from Surveys of Postal Delivery Areas
Phoenix, Arizona, HMA, 1966-1968

Type delivery	Percentage of possible deliveries vacant ^{a/}					
	1966		1967		1968	
	March ^{b/}	July	March	July	March	July
Total deliveries	5.0	6.6	3.6	5.5	3.0	4.5
Residences	3.4	3.7	2.7	3.2	2.4	2.7
Apartments	10.1	18.7	7.4	15.2	5.3	12.1

^{a/} In some cases, months are approximate.

^{b/} Survey was restricted to sample coverage.

Sources: Vacancy surveys conducted by cooperating postmasters in Maricopa County.

The series of postal vacancy surveys summarized in the table above indicates decreasing rates of vacancy in the respective corresponding seasons. Vacancies during March decreased from 5.0 percent of all units surveyed in 1966 to 3.6 percent in 1967 and to 3.0 percent in 1968. July vacancies decreased from 6.6 percent in 1966 through 1967 to 4.5 percent in 1968. According to the surveys, vacancies in both residences and apartments in the respective seasons decreased during the period.

^{1/} See Appendix A, paragraph 7.

Other Vacancy Indicators. The Phoenix FHA Insuring Office has conducted periodic apartment vacancy surveys in Phoenix and its vicinity during recent years. The vacancy survey conducted at the end of 1965 (a seasonal period of high occupancy) covered 4,750 units in over 90 rental projects built after 1962. The survey revealed a vacancy rate of about eight percent. The survey conducted during July 1966 indicated that apartment vacancies had increased to over 13 percent, reflecting seasonal influences.

More recent FHA apartment surveys were conducted in December 1967 and July 1968. The survey performed in the winter covered almost 9,375 units in 155 recently completed apartment buildings. Only about 3.1 percent of the units were vacant, for the lowest vacancy rate since the series of studies began several years ago. The survey conducted at approximately the same time during the previous winter indicated an apartment vacancy rate of 4.1 percent. Almost 10,950 units were included in the July 1968 apartment survey. Vacancies amounted to about 8.3 percent of the total. The survey of a year earlier indicated a vacancy rate of 9.8 percent.

A local private research company conducts quarterly vacancy surveys in the Phoenix vicinity. The surveys are conducted by teams which canvass sample blocks. According to the surveys, the over-all trend in the rate of vacancy has been downward--single-family vacancy downward steadily and multifamily vacancy downward with seasonal fluctuations. The single-family vacancy rate was estimated at four percent in early 1965. The rate was down to three percent at year-end, and to two percent by the end of 1966. During March and June of 1968, single-family vacancy was estimated at one percent. According to the surveys, multifamily vacancy varied considerably throughout each year. With only two exceptions (June and September of 1967), however, each of the quarterly estimates in every year after 1965 were below the estimates for the same month in the preceding year. The most recent estimates available are for March and June 1968, when multifamily vacancies were estimated at six percent and 13 percent, respectively (see table below).

Vacancy Ratios by Housing Unit Type
Phoenix, Arizona, Area^{a/}

<u>Months</u>	<u>Single-family units</u>				<u>Multifamily units</u>			
	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
March	4	3	2	1	19	12	9	6
June	4	3	2	1	27	14	17	13
September	4	2	2	-	17	11	12	-
December	3	2	2	-	11	7	5	-

^{a/} Includes Phoenix and surrounding incorporated and unincorporated built-up areas.

Sources: Quarterly vacancy surveys conducted by M.R. West and Company

It should be noted that the two series of surveys discussed above are selective and do not reflect all sales or rental units in the HMA. The FHA surveys include only those multifamily rental units which are in relatively new apartment buildings. The M.R. West and Company surveys include only units which are "livable," according to the judgment of the company field staff. These two sources of data appear to indicate actual trends in vacancies in the HMA; however, the number of vacant units in 1968 is reduced from the level of the mid-1960's.

A month-to-month series of vacancy data for 1967 is available for the 2,840 units in 23 apartment projects which have FHA-insured mortgages. These data provide some information on seasonal patterns of rental occupancy. Vacancies were at 6.1 percent in January 1967. Vacancy rates decreased to 4.3 percent in March 1967, and then increased steadily to 13.1 percent in June. Vacancy remained near the latter level through the summer, and were at 12.4 percent in August. The rate of vacancy decreased steadily during the remainder of the year, to 6.4 percent in December.

1968 Vacancy Estimate. On the basis of postal vacancy survey results and information gained from local sources, it is judged that there were about 30,000 vacant housing units as of September 1, 1968. About 14,900 of these units were available for rent or for sale--an overall available vacancy rate of 5.0 percent. The 1968 available vacancy rate represents a substantial reduction from September 1966, when the rate was estimated at 7.0 percent.

The September 1968 sales vacancy rate is estimated at 1.7 percent, and the rental vacancy rate at 11.1 percent; both were considerably below the 2.7 percent vacant sales and 14.8 percent vacant rental rates estimated for 1966. About 50 of the 1968 available vacant sales units and 600 of the available rental units were substandard in that they lacked one or more plumbing facilities.

Although the September 1968 rates of vacancy are relatively high, a substantial part of the vacancies reflected the seasonal factors discussed above. The number of rental vacancies during September is estimated to have been almost double the number which were available during the winter season of peak occupancy. Sales vacancies also were up by several hundred. The seasonality of occupancy is a factor in the consideration of rates of vacancy which might maintain reasonable year-around market equilibrium in the Phoenix HMA. Even though the September level of vacancies is somewhat high, recent trends appear to indicate that vacancies have approached a reasonable equilibrium for the year-around market.

Sales Market

General Market Conditions. The market for sales housing in the Phoenix HMA has firmed appreciably. The volume of construction was reduced in the mid-1960's, and, as of September 1968, most of the surplus of sales vacancies evidenced in the 1966 market analysis had been eliminated. There remains a small surplus which must be absorbed before full market equilibrium will be attained. The market appears to have strengthened throughout the HMA, but there are areas in which conditions are somewhat less favorable than others. The central and southern parts of Phoenix continue to be soft market areas.

Foreclosures. From the experience of the FHA, the rate of foreclosures in the Phoenix HMA has been declining in recent years, but is still far above the rates of the early 1960's. Only 22 house mortgages were foreclosed and tendered to the FHA in 1960. There were substantial increases each subsequent year, to 1,835 in 1965, an all-time high. Reflecting a strengthening in the sales market, among other things, FHA foreclosures declined to 1,357 in 1967. There were 536 foreclosures in the first six months of 1968, down from 754 during the corresponding period in 1967 (see table below).

Trend of Foreclosures, FHA-Insured Home Mortgages Phoenix, Arizona, HMA, 1964-1968

<u>Year</u>	<u>National Housing Act section</u>			<u>Total</u>
	<u>203</u>	<u>213</u>	<u>Other^{a/}</u>	
1964	1,242	307	21	1,570
1965	1,633	177	25	1,835
1966	1,412	140	31	1,583
1967	1,246	78	33	1,357

First six months:

1967	679	53	22	754
1968	501	24	11	536

^{a/} Includes Sections 221, 222, 603, and 809.

Source: FHA Division of Research and Statistics..

The number of acquisitions (including foreclosures and deeds in lieu of foreclosure) of both FHA-insured and VA-guaranteed home properties in the Phoenix HMA have continued the decline which was indicated in the 1966 market analysis. There were about 1,625 properties acquired by the FHA and VA in 1967, down from 2,825 in 1965, the peak year of acquisitions. There were about 600 acquisitions in the first six months of 1968, compared to 900 during the corresponding period in 1967.

Concurrent with the declining rate of property acquisition, there was a decreasing number of properties in the FHA and VA acquired inventory in the over-all 1965-1968 period. As of mid-1968, there were about 500 units on hand, equal to about one-half the inventory in mid-1965. The 1968 inventory reflects a 30-unit increase above 1967, however, which might reflect the increasing rate of house construction. Most of the FHA and VA acquired properties are located in south Phoenix, the oldest part of the city and an area of chronic market difficulties. The typical property in the area is in the \$7,000-\$10,000 price range. There are acquired properties in other parts of the HMA which are valued to \$15,000 and more.

Mortgage Recordings. Some information on the activity of the market for existing, as well as new, sales units is provided by trends in the number of mortgage recordings in the HMA. There were about 26,350 mortgages recorded in Maricopa County in 1964. The annual number declined to 21,000 in 1966, and then increased to 22,250 in 1967. There were 13,100 mortgages recorded in the first six months of 1968, compared to 10,650 in the corresponding period in 1967. The larger number of recordings suggests a market which is becoming increasingly active.

Unsold Inventory of New Sales Units. The annual FHA surveys of sales unit completions provide some information on the market absorption of new houses constructed in the Phoenix HMA. The January 1968 survey (of 1967 completions) enumerated about 4,175 units in 135 subdivisions (the unit count includes 840 townhouses built for sale). About 1,475 of the units, or 35 percent of the total completions, were built speculatively. About 400 (27 percent) of the speculatively built units were unsold as of the date of the survey. There were an additional 12 units which had been finished for over one year and were still unsold. About 900 sales units were under construction in the surveyed subdivisions.

The January 1968 unsold speculative construction ratio represented an increase from January 1967, when about 290 (18 percent) of all surveyed units speculatively built in 1966 were unsold. There were also fewer units under construction in the earlier survey (780 units). These findings apparently indicate a somewhat more active and bullish market in 1967 than earlier. However, there were fewer

units built on speculation in 1967 (about 1,475 units) than in 1966 (1,600). Most of the reduction resulted from the "tight money" situation which developed in 1966; most speculatively built units in 1966 were committed early in the year. The increase in the unsold speculative rate may indicate a turn toward the optimism which characterized the Phoenix HMA in past years.

A significant finding of the FHA surveys of completions during the 1965-1968 period is the rising trend in prices. By interpolation from table X, a median sales price of about \$17,800 can be determined for 1965 completions. The median increased to \$18,950 in 1966 and to \$19,250 in 1967, or increases of six percent and two percent, respectively. These increases are similar to estimates provided by the Bureau of the Census on price trends for the western U. S. as a whole--a seven percent increase in 1966 and three percent in 1967.

Trailer Housing Sales. A reduced availability of low-cost sales housing in desirable locations and continued suburban economic growth have helped to stimulate sales of trailer housing. An estimated 3,000 mobile homes have been sold and put in place since September 1966. Areas in the vicinity of Mesa and Glendale and in north Phoenix have been the locations of most large trailer park development since 1966.

Outlook. Although the over-supply of sales housing has been almost completely eliminated, there is some cause for concern that the better market may be generating over-optimism in the building industry. Speculative activity was on the increase in mid-1968. The small increase in the number of FHA-acquired properties on hand may have resulted, in part, from increased marketing of speculative units. Money for construction is plentiful, and many builders have plans for increasing operations. It will be prudent for area developers to observe closely the over-all trends in vacancies, as well as the success of individual subdivisions, and to act accordingly to avoid a recurrence of the over-built markets of the mid-1960's.

Rental Market

The rental market in the Phoenix HMA is in relatively good condition. Despite the reduction in the number of vacancies since 1966, however, the 11.1 percent September 1968 rental vacancy rate may be somewhat above the rate desirable for market equilibrium in an area with the characteristics of the Phoenix HMA. In view of the high degree of seasonality in the area, the surplus supply of rental housing as of September is not as severely out of line as it may appear.

The market for rental housing of almost all types and rents has firmed in recent years, especially in the lower rent ranges. According to the July 1968 FHA vacancy survey of recently completed apartment projects, available vacancies have declined substantially. The survey indicated that 7.3 percent of the units renting for less than \$135 were vacant; 9.1 percent of the units renting for between \$135 and \$165 were vacant, and units renting for more than \$165 had 13.0 percent vacancies. The 1968 vacancy rates in both the lowest-and middle-rent ranges were down substantially from the rates of 12.8 percent and 16.2 percent, respectively, reported in the survey conducted during the corresponding period in 1966. The 1968 vacancy rate in units renting for more than \$165 were slightly above the 12.7 percent rate in 1966.

From the above and from local observation, most of the excess apartment vacancy appears to be concentrated in the upper rent ranges. Except for substandard units, the surplus supply of low- and moderate-rental housing which existed in 1966 appears to have been substantially eliminated.

Public Housing

There are approximately 2,275 units of public housing in the Phoenix HMA. The housing authority of Phoenix manages almost 1,600 of the units. Another 300 units are in areas annexed by Phoenix, but are managed by the Maricopa County authority. Maricopa also manages 130 additional units in five communities in the county. There are 120 units of public housing in Glendale and 100 units in Mesa. The remaining units in the HMA are on the Salt River Pima Indian Reservation. All of the units in the HMA are low-rent; none is especially designed for occupancy by elderly persons. Vacancies in all of the projects are frictional, only.

Demand for Housing

Quantitative Demand

The demand for new housing units in the Phoenix HMA during the September 1968-September 1970 period is based primarily on the housing needs of the 19,200 new households expected in the area during the period. About one-eighth of the new households will be accommodated in house trailers. The demand is adjusted to allow for households which might be displaced by demolition activity and all other causes, and for vacancy adjustments which are required to achieve as nearly as possible year-around market equilibrium in the HMA. The potential for additional demand at the lower rents achievable with below-market-interest-rate financing or other public benefits is also taken into consideration. Based on these factors, there will be annual demand for 7,800 units of privately financed housing during the forecast period of this report--5,000 units of single-family housing (including about 500 units of row housing) and 2,800 units in multifamily structures. At the lower rents achievable with 221(d)(3)(BMIR) financing or with Section 236 mortgage interest subsidies, there may be additional demand for 700 multifamily units annually. These estimates are exclusive of rent-supplement housing or public low-rent accommodations.

The above forecast of demand is based on the rate of in-migration and family formation which might be associated with an annual increase of around 10,000 wage and salary jobs. If economic change should proceed at a rate substantially different from this estimate, the levels of demand might be adjusted accordingly. It is important to note, however, that increases in households do not vary directly with rates of economic change. Factors which can moderate migration to the HMA (which has been the main source of new households in the area) include changes in the proportion of the existing population which participates in the work force and relative conditions in other competing labor market areas. The former influence may be especially a factor in the Phoenix HMA since several of the newer firms which could be instrumental in a substantial change in the economic growth of the area rely heavily on the female work force to staff plant additions. The recruitment of females tends to increase the over-all participation of the area population in the work force.

Reflecting the improved condition of the housing market, the forecast of demand is substantially above the number of units authorized by building permits during any year since 1964, when 11,150 units were authorized. Demand for both single-family and multifamily housing is expected to increase during the forecast period to levels above the construction activity of the 1965-1967 period.

Qualitative Demand

Single-Family Housing. Based on recent market experience, the annual demand for 5,000 units of single-family housing is expected to be distributed by sales price as shown in the table below. The 500 row houses which might be absorbed annually during the forecast period are included, mostly in the low- and moderate-price ranges.

Estimated Annual Demand for Single-Family Housing Units
Phoenix, Arizona, Housing Market Area
September 1968-September 1970

<u>Price range</u>	<u>Single-family units^{a/}</u>	
	<u>Number</u>	<u>Percent</u>
Under \$12,500	250	5
\$12,500 - 14,999	450	9
15,000 - 17,499	850	17
17,500 - 19,999	950	19
20,000 - 22,499	750	15
22,500 - 24,999	450	9
25,000 - 29,999	650	13
30,000 - 34,999	350	7
35,000 and over	300	6
Total	5,000	100

a/ See Appendix A, paragraph 9.

Multifamily Housing. The monthly rents or charges at which 2,800 market-interest-rate financed net additions to the privately-owned multifamily housing inventory might be absorbed annually are indicated for various size units in the following table. Part of the demand for multifamily units will be satisfied through the construction of units in multifamily structures for sale to owner occupants (cooperative or condominium).^{1/}

^{1/} See Appendix A, paragraphs 10 and 11.

Estimated Annual Demand for New Private Multifamily Housing
At Rents Achievable with Market-Interest-Rate Financing
Phoenix, Arizona, Housing Market Area
September 1968-September 1970

<u>Monthly gross rent^{a/}</u>	<u>Units by number of bedrooms</u>			
	<u>Efficiency</u>	<u>One bedroom</u>	<u>Two bedrooms</u>	<u>Three or more bedrooms</u>
\$100 - \$119	130	-	-	-
120 - 139	100	560	-	-
140 - 159	50	340	600	-
160 - 179	20	160	390	90
180 - 199	-	40	150	80
200 and over	-	-	60	30
Total	300	1,100	1,200	200

^{a/} Gross rent is shelter rent plus the cost of utilities; it is also the rental equivalent of monthly charges for multifamily units marketed as cooperatives or condominiums.

The 700 units of additional annual demand at rents achievable only with below-market-interest-rate financing or other public benefits (not included in the table above) will be distributed as follows: 10 efficiencies, 160 one-bedroom units, 300 two-bedroom units, and 230 units with three bedrooms or more.^{1/}

^{1/} See Appendix A, paragraph 12.

APPENDIX A
OBSERVATIONS AND QUALIFICATIONS
APPLICABLE TO ALL FHA HOUSING MARKET ANALYSES

1. When the rural farm population constitutes less than five percent of the total population of the HMA, all demographic and housing data used in the analysis refer to the total of farm and non-farm data; if five percent or more, all demographic and housing data are restricted to non-farm data.
2. All average annual percentage changes used in the demographic section of the analysis are derived through the use of a formula designed to calculate the rate of change on a compound basis.
3. Because of the change in definition of "farm" between 1950 and 1960 censuses, many persons living in rural areas who were classified as living on farms in 1950 would have been considered to be rural nonfarm residents in 1960. Consequently, the decline in the farm population and the increase in nonfarm population between the two census dates is, to some extent, the result of this change in definition.
4. The increase in nonfarm households between 1950 and 1960 was the result, in part, of a change in the definition of "farm" in the two censuses.
5. The increase in the number of households between 1950 and 1960 reflects, in part, the change in census enumeration from "dwelling unit" in the 1950 census to "housing unit" in the 1960 census. Certain furnished-room accommodations which were not classed as dwelling units in 1950 were classed as housing units in 1960. This change affected the total count of housing units and the calculation of average household size as well, especially in larger central cities.
6. The basic data in the 1960 Census of Housing from which current housing inventory estimates are developed reflect an unknown degree of error in "year built" occasioned by the accuracy of response to enumerators' questions as well as errors caused by sampling.
7. Postal vacancy survey data are not entirely comparable with the data published by the Bureau of Census because of differences in definition, 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.
8. Because the 1950 Census of Housing did not identify "deteriorating" units, it is possible that some units classified as "dilapidated" in 1950 would have been classified as "deteriorating" on the basis of the 1950 enumeration procedures.
9. The distribution of the qualitative demand for sales housing differs from any selected experience such as that reported in FHA unsold inventory surveys. The latter data do not include new construction in subdivisions with less than five completions during the year reported upon, 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 demand estimates reflect all home building and indicate a greater concentration in some price ranges than a subdivision survey would reveal.
10. Monthly rentals at which privately owned net additions to the aggregate rental housing inventory might best be absorbed by the rental market are indicated for various size units in the demand section of each analysis. 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 may be justified if a competitive filtering of existing accommodations to lower ranges of rent can be anticipated as a result of the availability of an ample rental housing supply.
11. Distributions of average annual demand for new apartments are based on projected tenant-family incomes, the size distribution of tenant households, and rent-paying propensities found to be typical in the area; consideration also is given to the recent absorptive experience of new rental housing. Thus, they represent a pattern for guidance in the production of rental housing predicated on foreseeable quantitative and qualitative considerations. However, individual projects may differ from the general pattern in response to specific neighborhood or sub-market requirements. Specific market demand opportunities or replacement needs may permit the effective marketing of a single project differing from these demand distributions. Even though a deviation from these distributions may experience market success, it should not be regarded as establishing a change in the projected pattern of demand for continuing guidance unless a 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 sub-markets.
12. 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. Proximity to or quick and economical transportation to place of work frequently is a governing consideration in the place of residence preferred by families in this group.

Table I

Components of the Civilian Work Force
Phoenix, Arizona, Housing Market Area, 1964-1968
(Averages in thousands)

<u>Components</u>	<u>Annual average</u>				<u>12 months ending July 31</u>	
	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1967</u>	<u>1968^{a/}</u>
Total civilian work force	<u>290.1</u>	<u>301.4</u>	<u>320.1</u>	<u>329.4</u>	<u>325.7</u>	<u>335.8</u>
Unemployment	12.9	14.2	10.7	12.9	12.4	11.2
Percent of work force	4.4%	4.7%	3.3%	3.9%	3.8%	3.3%
Employment	<u>277.1</u>	<u>286.7</u>	<u>309.3</u>	<u>316.5</u>	<u>313.3</u>	<u>324.6</u>
Agricultural	19.3	18.5	17.9	16.7	17.3	16.6
Nonagricultural	<u>257.2</u>	<u>268.2</u>	<u>291.4</u>	<u>299.8</u>	<u>296.0</u>	<u>308.0</u>
Wage and salary	224.0	233.5	254.8	262.5	259.0	270.0
All other ^{b/}	33.8	34.7	36.6	37.3	37.0	38.0
Persons involved in labor-management disputes	.1	.5	.1	<u>c/</u>	<u>c/</u>	<u>c/</u>

^{a/} Preliminary.

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

^{c/} An average of fewer than 50.

Source: Employment Security Commission of Arizona.

Table II

Nonagricultural Wage and Salary Employment
Phoenix, Arizona, Housing Market Area, 1964-1968

(Averages in thousands)

<u>Industry</u>	<u>Annual average</u>				<u>12 months ending July 31</u>	
	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1967</u>	<u>1968a/</u>
Wage and salary employment	<u>224.0</u>	<u>233.5</u>	<u>254.8</u>	<u>262.5</u>	<u>259.0</u>	<u>270.0</u>
Manufacturing	<u>44.5</u>	<u>49.9</u>	<u>60.9</u>	<u>60.8</u>	<u>60.8</u>	<u>64.3</u>
Food and kindred products	5.2	5.0	5.0	5.1	5.0	5.2
Printing and publishing	3.0	3.0	3.3	3.5	3.4	3.5
Primary and fabricated metals	4.4	5.0	5.6	5.8	5.9	5.9
Machinery	16.9	21.2	28.4	26.1	26.6	28.7
All other manufacturing	15.0	15.7	18.6	20.3	19.9	21.0
Nonmanufacturing	<u>179.5</u>	<u>183.6</u>	<u>193.9</u>	<u>201.7</u>	<u>198.2</u>	<u>205.7</u>
Mining and quarrying	.2	.2	.2	.2	.2	.3
Construction	16.3	13.1	13.5	13.8	13.5	13.9
Trans., comm., and utilities	13.5	13.5	14.5	14.8	14.8	14.9
Trade	57.3	58.5	61.4	63.7	62.7	64.9
Fin., ins., and real estate	15.0	15.8	16.5	16.8	16.7	17.0
Services and miscellaneous	36.8	38.5	40.5	42.8	41.7	43.7
Government	40.4	44.0	47.3	49.6	48.6	51.0

a/ Preliminary.

Source: Employment Security Commission of Arizona.

Table III

Estimated Percentage Distribution of All Families and Renter Households
By Income and Tenure After Deduction of Federal Income Tax
Phoenix, Arizona, Housing Market Area, 1968 and 1970

<u>Annual after-tax</u> <u>incomes</u>	<u>1968</u>		<u>1970</u>	
	<u>All families</u>	<u>Renter households^{a/}</u>	<u>All families</u>	<u>Renter households^{a/}</u>
Under \$2,000	6	11	5	10
\$ 2,000 - 2,999	4	10	4	9
3,000 - 3,999	5	11	5	10
4,000 - 4,999	7	11	6	10
5,000 - 5,999	8	11	8	11
6,000 - 6,999	12	11	9	11
7,000 - 7,999	10	9	11	9
8,000 - 8,999	9	7	9	8
9,000 - 9,999	8	5	8	6
10,000 -12,499	15	8	16	8
12,500 -14,999	7	3	8	4
15,000 and over	9	3	11	4
Total	100	100	100	100
Median	\$7,750	\$5,625	\$8,175	\$5,950

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

Source: Estimated by Housing Market Analyst.

Table IV

Trends in Population
Phoenix, Arizona, Housing Market Area
April 1960-September 1968

<u>Area</u>	<u>April 1960</u>	<u>September 1966</u>	<u>September 1968</u>	<u>Average annual change</u>			
				<u>1960-1966</u>		<u>1966-1968</u>	
				<u>Number^{a/}</u>	<u>Percent^{b/}</u>	<u>Number^{a/}</u>	<u>Percent^{b/}</u>
HMA total	633,510	876,800	933,800	33,200	4.3	28,500	3.2
Phoenix	439,170	525,400	544,200	13,450	2.8	9,400	1.8
Glendale	15,696	31,700	35,000	2,500	10.8	1,650	5.0
Mesa	33,772	52,500	57,600	2,925	6.9	2,550	4.6
Scottsdale	10,026	56,000	62,000	7,150	26.8	3,000	5.1
Tempe	24,897	49,900	57,600	3,900	10.8	3,850	7.2
Remainder of HMA	139,949	161,300	177,400	3,325	2.2	8,050	4.8

a/ Rounded; may not add to totals.

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

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

Table V

Trends in the Number of Households
Phoenix, Arizona, Housing Market Area
April 1960-September 1968

<u>Area</u>	<u>April 1960</u>	<u>September 1966</u>	<u>September 1968</u>	<u>Average annual changes</u>			
				<u>1960-1966</u>		<u>1966-1968</u>	
				<u>Number^{a/}</u>	<u>Percent^{b/}</u>	<u>Number^{a/}</u>	<u>Percent^{b/}</u>
HMA total	<u>191,076</u>	<u>261,000</u>	<u>281,400</u>	<u>10,900</u>	4.9	<u>10,200</u>	3.8
Phoenix	<u>132,083</u>	<u>164,900</u>	<u>173,700</u>	<u>5,100</u>	3.5	<u>4,400</u>	2.6
Glendale	<u>4,389</u>	<u>9,200</u>	<u>10,250</u>	<u>750</u>	11.4	<u>525</u>	5.4
Mesa	<u>9,586</u>	<u>15,200</u>	<u>16,800</u>	<u>870</u>	7.2	<u>800</u>	5.0
Scottsdale	<u>2,954</u>	<u>16,500</u>	<u>18,350</u>	<u>2,100</u>	26.8	<u>925</u>	5.3
Tempe	<u>6,551</u>	<u>13,600</u>	<u>15,850</u>	<u>1,100</u>	11.2	<u>1,125</u>	7.7
Remainder of HMA	<u>35,513</u>	<u>41,600</u>	<u>46,450</u>	<u>950</u>	2.5	<u>2,425</u>	5.5

^{a/} Rounded; may not add to total.

^{b/} Percentages derived through the use of a formula designed to calculate the rate of change on a compound basis.

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

Table VI

Components of the Housing Inventory
Phoenix, Arizona, Housing Market Area
1960-1968

<u>Tenure and vacancy</u>	<u>April 1960</u>	<u>September 1966</u>	<u>September 1968</u>	<u>Average annual changes^{a/}</u>			
				<u>1960-1966</u>		<u>1966-1968</u>	
				<u>Number</u>	<u>Percent^{b/}</u>	<u>Number</u>	<u>Percent^{b/}</u>
Total housing inventory	<u>211,865</u>	<u>294,700</u>	<u>311,400</u>	<u>12,900</u>	5.1	<u>8,350</u>	2.8
Occupied housing units	<u>191,076</u>	<u>261,000</u>	<u>281,400</u>	<u>10,900</u>	4.9	<u>10,200</u>	3.8
Owner-occupied	<u>125,267</u>	<u>174,500</u>	<u>187,600</u>	<u>7,675</u>	5.1	<u>6,550</u>	3.6
Percent of occupied	65.6%	66.9%	66.7%	-		-	
Renter-occupied	<u>65,809</u>	<u>86,500</u>	<u>93,800</u>	<u>3,225</u>	4.3	<u>3,650</u>	4.0
Vacant housing units	<u>20,789</u>	<u>33,700</u>	<u>30,000</u>	<u>2,000</u>	7.5	<u>-1,850</u>	-5.8
Available vacant units	<u>11,528</u>	<u>19,700</u>	<u>14,900</u>	<u>1,275</u>	8.3	<u>-2,400</u>	-14.0
For sale only	<u>3,325</u>	<u>4,700</u>	<u>3,200</u>	<u>210</u>	5.4	<u>-750</u>	-15.3
Homeowner vacancy rate	2.6%	2.7%	1.7%	-		-	
For rent	<u>8,203</u>	<u>15,000</u>	<u>11,700</u>	<u>1,050</u>	9.4	<u>-1,650</u>	-10.4
Renter vacancy rate	11.1%	14.8%	11.1%	-		-	
Other vacant units ^{c/}	<u>9,261</u>	<u>14,000</u>	<u>15,100</u>	<u>740</u>	6.4	<u>550</u>	3.8

^{a/} Rounded; may not add to totals.

^{b/} Percentages derived through the use of a formula designed to calculate the rate of change on a compound basis.

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

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

Table VII

Privately Financed Housing Units
Authorized by Building Permits
Phoenix, Arizona, Housing Market Area, 1964-1968

<u>Area</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>First seven mos.</u>	
					<u>1967</u>	<u>1968</u>
HMA total	<u>11,146</u> ^{a/}	<u>5,925</u>	<u>6,146</u>	<u>7,600</u>	<u>4,247</u>	<u>6,613</u>
Single-family	4,931	3,944	4,231	4,925	2,865	4,179
Two to four units	2,059	400	378	484	293	595
Five or more units	4,156	1,581	1,537	2,191	1,089	1,839
Phoenix	5,475	2,776	2,696	3,484	1,598	3,432
Glendale	524	145	94	155	74	87
Mesa	659	309	350	495	312	470
Scottsdale	1,223	678	817	854	583	513
Tempe	1,324	813	869	1,187	702	795
Remainder of HMA	<u>1,941</u> ^{a/}	<u>1,204</u>	<u>1,320</u>	<u>1,425</u>	<u>978</u>	<u>1,316</u>

^{a/} Excludes 30 units of public housing.

Sources: Bureau of the Census, Construction Reports C-40 and C-42; local building officials and records.

Table VIII

Phoenix, Arizona, Area Postal Vacancy Survey

July 12-26, 1968

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	Old	Used	New			All	Old	Used	New			All	Old	Used	New			No.	
The Survey Area Total	254,070	11,408	4.5	10,230	1,178	3,435	206,003	5,591	2.7	4,773	818	2,094	48,067	5,817	12.1	5,487	360	1,341	18,801	1,515	8.1
Phoenix	168,913	8,228	4.9	7,654	574	1,975	134,448	4,069	3.0	3,775	294	374	34,465	4,159	12.1	3,879	280	1,101	9,464	637	6.7
Main Office	13,948	1,224	8.8	1,224	-	16	5,373	460	5.5	460	-	2	5,575	764	13.7	764	-	14	15	-	0.0
Stations:																					
Arcadia	11,393	450	3.9	411	39	177	8,678	112	1.3	105	7	80	2,715	338	12.4	306	32	97	173	6	3.5
Capital	12,138	651	5.4	604	47	168	10,209	284	3.8	379	5	8	1,929	267	13.8	225	42	160	1,049	63	5.9
Indian School	19,617	1,178	6.0	1,084	94	95	11,505	278	2.4	265	13	19	8,112	900	11.1	819	81	76	562	26	4.6
Maryvale	16,931	518	3.1	406	112	119	16,615	493	3.0	381	112	119	316	25	7.9	25	-	-	251	-	0.0
McDowell	21,775	1,011	4.6	1,008	3	21	17,249	498	2.9	497	1	13	4,526	513	11.3	511	2	8	2,446	164	6.7
Northeast	9,870	351	3.6	270	81	492	6,900	79	1.1	75	4	20	2,970	272	9.2	195	77	472	464	22	4.7
Northwest	15,989	587	3.7	554	33	71	12,603	193	1.5	192	1	27	3,386	394	11.6	362	32	44	824	78	9.5
South Central	12,180	1,019	8.4	1,009	10	19	11,222	830	7.4	820	10	19	958	189	19.7	189	-	-	724	122	16.9
Southeast	5,803	294	5.1	294	-	-	4,694	126	2.7	126	-	-	1,109	168	15.1	168	-	-	293	41	14.0
Sunnyslope	20,218	556	2.8	498	58	464	17,833	356	2.0	310	46	236	2,385	200	8.4	188	12	228	1,155	50	4.3
Sunnyslope Annex	9,051	389	4.3	292	97	333	8,567	260	3.0	165	95	331	484	129	26.7	127	2	2	1,488	65	4.4
Other Cities and Towns	85,157	3,180	3.7	2,576	604	1,460	71,555	1,522	2.1	998	524	1,220	13,602	1,658	12.2	1,578	80	240	9,337	878	9.4
Avondale	1,459	53	3.6	53	-	3	1,191	3	0.3	3	-	3	268	50	18.7	50	-	-	152	6	3.9
Buckeye	1,425	72	5.1	72	-	-	1,287	43	3.3	43	-	-	138	29	21.0	29	-	-	50	2	4.0
Chandler	4,785	183	3.8	174	9	12	4,195	100	2.4	91	9	12	590	83	14.1	83	-	-	576	139	24.1
Glendale	10,137	271	2.7	252	19	118	7,196	139	1.9	123	16	72	2,941	132	4.5	129	3	46	1,738	27	1.6
Goodyear	719	14	1.9	10	4	-	458	4	0.9	-	4	-	261	10	3.8	10	-	-	3	-	0.0
Mesa	20,751	757	3.6	635	122	241	18,273	376	2.1	254	122	151	2,478	381	15.4	381	-	90	5,281	592	11.2
Scottsdale	22,060	863	3.9	677	186	285	18,692	356	1.9	244	112	254	3,368	507	15.1	433	74	31	738	19	2.6
Sun City	5,507	268	4.9	64	204	426	5,507	268	4.9	64	204	426	-	-	-	-	-	-	-	-	-
Tempe	16,113	660	4.1	603	57	366	12,663	196	1.5	142	54	293	3,450	464	13.4	461	3	73	724	89	12.3
Tolleson	1,133	21	1.9	20	1	9	1,059	20	1.9	19	1	9	74	1	1.4	1	-	-	75	4	5.3
Youngtown	1,068	18	1.7	16	2	-	1,034	17	1.6	15	2	-	34	1	2.9	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; and apartment represents one possible stop with more than one possible delivery.

The estimates of total possible deliveries to residences, apartments, and house trailers were made by the postal carriers. The data in this table, therefore, are not strictly comparable to the corresponding data for surveys conducted prior to 1966. The combined totals, however, are as recorded in official route records.

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

Table IX

Summary of Postal Vacancy Surveys
Conducted in the Phoenix, Arizona, Housing Market Area^{a/}, 1966-1968

	Dates of survey ^{b/}					
	March 1966 ^{c/}	July 1966	March 1967	July 1967	March 1968	July 1968
Total possible deliveries	167,389	239,744	245,922	247,045	253,516	254,070
Vacant	8,310	15,768	8,773	13,707	7,599	11,408
Percent vacant	5.0%	6.6%	3.6%	5.5%	3.0%	4.5%
Deliveries to residences ^{d/}	127,407	193,499	201,670	198,334	202,572	206,003
Vacant	4,277	7,112	5,504	6,321	4,906	5,591
Percent vacant	3.4%	3.7%	2.7%	3.2%	2.4%	2.7%
Deliveries to apartments ^{d/}	39,982	46,245	44,252	48,711	50,944	48,067
Vacant	4,033	8,656	3,269	7,386	2,693	5,817
Percent vacant	10.1%	18.7%	7.4%	15.2%	5.3%	12.1%

^{a/} Delivery areas of post offices in Phoenix, Avondale, Buckeye, Chandler, Glendale, Goodyear, Mesa, Scottsdale, Sun City, Tempe, Tolleson (except 7/66 and 3/67), and Youngtown (except 7/67) are included. Excludes deliveries to trailers.

^{b/} In some cases, months are approximate.

^{c/} Survey was restricted to sample coverage; may not be comparable to other surveys.

^{d/} The break-down of total deliveries by type of structure is according to the judgement of individual mail carriers and is subject to variation.

Sources: Postal Vacancy Surveys conducted by cooperating Postmasters.

Table X

Status of New Housing Unit Completions in Selected Subdivisionsa/
Phoenix, Arizona, Housing Market Area
January 1 of 1966, 1967, and 1968

<u>Sales price</u>	<u>Total units</u>	<u>Pre-sold</u>	<u>Speculative construction</u>			
			<u>Total</u>	<u>Sold</u>	<u>Unsold</u>	
					<u>Number</u>	<u>Percent</u>
Units Completed During 1965						
Under \$12,500	228	148	80	63	17	21.2
\$12,500 - 14,999	542	391	151	99	52	34.4
15,000 - 17,499	689	462	227	174	53	23.3
17,500 - 19,999	743	416	327	261	66	20.2
20,000 - 22,499	(533	(338	(195	(127	(68	(37.4
22,500 - 24,999	(533	(338	(195	(127	(68	(37.4
25,000 - 29,999	93	75	18	11	7	38.9
30,000 and over	<u>264</u>	<u>143</u>	<u>121</u>	<u>58</u>	<u>21</u>	<u>17.4</u>
Total	3,092	1,973	1,119	793	326	29.1
Units Completed During 1966						
Under \$12,500	148	107	41	35	6	17.1
\$12,500 - 14,999	497	351	146	114	32	21.9
15,000 - 17,499	786	525	261	222	39	14.9
17,500 - 19,999	840	446	394	334	60	15.2
20,000 - 22,499	(1,096	(505	(591	(484	(107	(18.1
22,500 - 24,999	(1,096	(505	(591	(484	(107	(18.1
25,000 - 29,999	255	181	74	64	10	13.5
30,000 and over	<u>225</u>	<u>143</u>	<u>82</u>	<u>46</u>	<u>36</u>	<u>43.9</u>
Total	3,847	2,258	1,559	1,299	290	18.3
Units Completed During 1967						
Under \$12,500	81	50	31	21	10	32.3
\$12,500 - 14,999	578	349	229	105	124	54.1
15,000 - 17,499	905	604	301	221	80	26.6
17,500 - 19,999	756	485	271	197	74	27.3
20,000 - 22,499	699	418	281	229	52	18.5
22,500 - 24,999	282	158	124	103	21	16.9
25,000 - 29,999	481	328	153	137	16	10.5
30,000 and over	<u>402</u>	<u>311</u>	<u>91</u>	<u>64</u>	<u>27</u>	<u>29.7</u>
Total	4,184	2,703	1,481	1,077	404	27.3

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

Sources: Annual Unsold Inventory Surveys of New Houses conducted by the Phoenix FHA Insuring Office.

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