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1966

Analysis of the
FORT WORTH, TEXAS
HOUSING MARKET

as of March 1, 1966

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL HOUSING ADMINISTRATION
WASHINGTON, D. C. 20411

September 1966

ANALYSIS OF THE
FORT WORTH, TEXAS, HOUSING MARKET
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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, of course, be differences of opinion 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.

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ANALYSIS OF THE
FORT WORTH, TEXAS, HOUSING MARKET
AS OF MARCH 1, 1966

Summary and Conclusions

1. Nonagricultural employment in the Fort Worth, Texas, Housing Market Area (HMA) increased from 208,300 in 1960 to 238,700 in 1965, an average gain of almost 6,100 annually. Year-to-year changes during the past several years have varied widely, from a gain of 4,000 between 1960 and 1961 to about 9,600 between 1963 and 1964. During the past year, the net increase was 5,400 workers. The wide variations in employment resulted largely from the employment fluctuations in the transportation equipment industry, principally the aircraft industry. The two major aircraft companies and the fifteen major suppliers of the aircraft industry are expected to add a substantial number of workers during the next two years. Total nonagricultural employment in the HMA is expected to increase by about 8,000 from 1966 to 1967 and by 6,000 from 1967 to 1968.

Unemployment averaged 9,600 persons (3.8 percent of the work force) in 1965, down from 10,500 (4.2 percent) in 1964. Both levels are below those of the 1960-1963 period.
2. The current median annual income of all families in the Fort Worth HMA is approximately \$6,400, after deduction of Federal income tax. By 1968, median family income is expected to increase to approximately \$6,675.
3. The current population of the Fort Worth HMA is approximately 670,000, an increase of 96,800 (17 percent), or 16,350 annually, since April 1960. Projected employment and economic gains will be sufficient to support an increase of about 20,000 persons a year during the two-year period ending March 1, 1968.
4. The 205,600 households currently in the HMA reflect an increase of almost 30,300 (17 percent) since April 1960, or about 5,125 annually. By March 1, 1968, households in the HMA are expected to increase by about 6,400 annually.
5. The current inventory of about 224,000 housing units represents a net gain of 29,150 units since April 1960, the net result of about 33,150 new units added and the loss of about 4,000 units from the inventory. During the past six years, new housing units authorized for construction have averaged 5,650 a year, 4,100 single-family houses and almost 1,550 units in multifamily structures (including duplexes). The number of single-family units authorized in 1965 (4,150) was about the same as the number authorized in 1964; but

the 2,000 multifamily units authorized in 1965 represented a decline of 39 percent from the 1964 level. Currently, approximately 1,000 single-family houses and 1,400 multifamily units are under construction.

6. Vacancies in both sales and rental housing increased during the 1960-1962 period, but have decreased somewhat since 1962. There currently is a net available homeowner vacancy ratio of 2.5 percent and a rental vacancy ratio of 13.0 percent in the HMA, down from 3.0 percent and 15.5 percent, respectively, in April 1960.
7. The number of privately-owned additions to the supply of sales housing that will meet the demand occasioned by anticipated growth during the next two years and result in an acceptable quantitative demand-supply relationship in the market is approximately 3,900 units a year. Demand for new sales houses by sales price ranges is expected to approximate the pattern indicated on page 21.
8. The continuing serious surplus of rental housing at all rent levels indicates that if no additional new rental units were constructed during the next two years, there would remain at the end of the two-year forecast period a quantitative excess of available vacant rental units over the number that would represent a balanced demand-supply relationship in the Fort Worth HMA. However, many of the units in the low and moderate rent ranges are of inferior quality. For that reason it is judged that production of 100 to 200 private rental units a year in the lower rent range attainable with below-market-interest-rate financing or assistance in land acquisition and cost, exclusive of low-rent public housing and rent-supplement accommodations might facilitate the upgrading of low- and middle-income families into more acceptable housing.

ANALYSIS OF THE
FORT WORTH, TEXAS, HOUSING MARKET
AS OF MARCH 1, 1966

Housing Market Area

The Fort Worth Housing Market Area (HMA) is defined as being coterminous with the Fort Worth Standard Metropolitan Statistical Area (SMSA), which includes the counties of Tarrant and Johnson. The HMA is coextensive with the SMSA as defined in the 1960 Censuses of Population and Housing, and with the Fort Worth Labor Market Area.

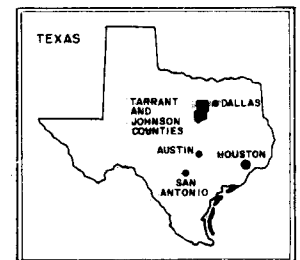
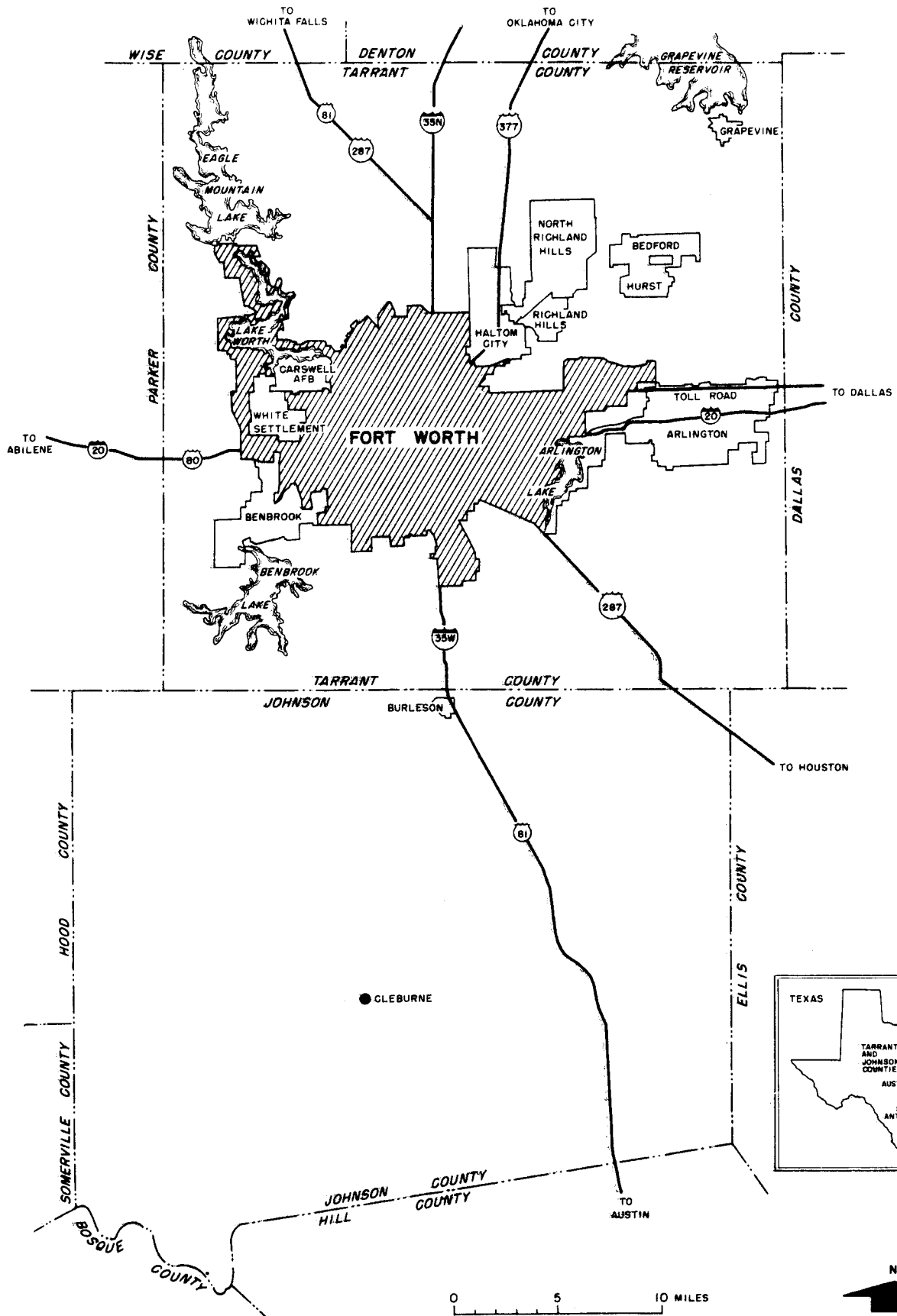
The Fort Worth HMA had a population of 573,215 in 1960. Approximately 62 percent of the population of the HMA lived in the city of Fort Worth in April 1960, but a substantial portion of the growth since 1960 has accrued to the communities in Tarrant County between Fort Worth and Dallas. In addition to Fort Worth, there were five cities in the HMA with 1960 populations of 10,000 or more (Arlington, Hurst, Haltom, White Settlement, and Cleburne), and eight other cities had populations of 3,000 or more. Approximately 94 percent of the population of the HMA lives in Tarrant County and six percent in Johnson County.

Fort Worth is situated in north-central Texas near the center of the fast growing Southwest Region, about thirty miles west of Dallas. The Fort Worth-Dallas area is served by a diversified transportation network. Air, rail, bus, and motor carriers provide excellent service. The area is served by a network of State and Federal roads, including major transcontinental highways. In addition, a joint Fort Worth-Dallas regional airport is proposed to be in operation in a few years. Although they still constitute separate housing market areas, the Fort Worth and the Dallas areas are rapidly becoming one integrated economic area.

According to the 1960 Census of Population, the net daily out-commutation to employment outside the HMA totaled about 800 persons. More than 3,600 persons from eight contiguous counties (excluding Dallas County) and almost 2,400 Johnson County residents commuted to employment in Tarrant County. Net daily out-commutation from Tarrant County to employment in Dallas County totaled about 6,800 workers. However, employment opportunities in the HMA have increased during the past six years. Since 1960, more than 180 national, regional, and local manufacturing, distribution, and research firms have located in the 6,660-acre Great Southwest Industrial District in Tarrant County, located midway between Fort Worth and Dallas. As a result, net out-commutation from Tarrant County to employment in Dallas County is believed to be less now than six years ago. The Greater Southwest Corporation also has purchased for industrial development 1,000 acres in Tarrant County north of Fort Worth.

Inasmuch as the rural farm population of the Fort Worth HMA constituted less than two percent of the total population in 1960, all demographic and housing data used in this analysis refer to the total of farm and nonfarm data.

FORT WORTH, TEXAS, HOUSING MARKET AREA



Economy of the Area

Character and History

Fort Worth was established as a military outpost in 1849 on the banks of the Trinity River. In a little over a century Fort Worth has grown into a modern and progressive city. In the early years of its history, great herds of cattle passed through Fort Worth to the northern markets and to the railhead in Kansas. The first railroad entered Fort Worth in 1876, to be followed in the next seventeen years by five other railroads. The network of railroads made Fort Worth a major shipping point for cattle. Fort Worth also became the trading point for a large region to the northwest of the city.

With the discovery of oil in north and west Texas in 1917, Fort Worth became an oil center and as a result its economy expanded significantly. Prior to World War II, the Fort Worth economy was based primarily on cattle, agriculture, oil, trade, and diversified manufacturing oriented principally toward the processing of agricultural products, petroleum products, and oil field equipment. Meat packing was the major manufacturing industry.

However, World War II resulted in the establishment (in 1942) of a major aircraft assembly plant and of Carswell Air Force Base west of the city, and a new era of expansion and development began. In 1951, another aircraft plant located in nearby Hurst to manufacture helicopters. In the same year, General Motors established an automobile assembly plant near Arlington. These installations prompted the growth of numerous supporting industries in aircraft parts manufacturing, machine tooling, and metal casting and fabrication. Trade and service industries also expanded.

Employment

Current Estimate. Nonagricultural employment in the Fort Worth HMA totaled 243,200 in February 1966, according to the Texas Employment Commission. This represented an increase of 8,700 jobs over the February 1965 level; 78 percent of the gain was in manufacturing, notably in the transportation equipment and nonelectrical machinery industries which expanded because of military contracts. Nonmanufacturing employment increased by 1,900 during the year. Trade, service, and local government employment was up by some 3,000 workers, in line with the expansion generated by the increase in manufacturing employment. Federal government employment was down because of the closing of the Army Depot, and employment in construction was lower because of contract completions.

Past Trend. Total nonagricultural employment in the HMA averaged 238,700 monthly in 1965. This represented a gain of 5,400 over the monthly average for 1964, the smallest gain since the 1960-1961 period. During the past five years, total nonagricultural employment increased by an average of 6,100 workers (2.9 percent) annually. Between 1950 and 1960 nonagricultural employment of residents of the HMA increased from 152,150 to 210,900, an average annual gain of about 5,875 (four percent), according to the Censuses of Population.^{1/}

As reflected by the following table, year-to-year changes during the past several years have varied from a gain of 4,000 between 1960 and 1961 to about 9,600 between 1963 and 1964; the increase in each year was quite significant.

Trend of Nonagricultural Employment
in the Fort Worth HMA, 1960-1965

<u>Year</u>	<u>Average monthly employment</u>		<u>Annual change</u>	
	<u>Total</u>	<u>Manu- facturing</u>	<u>Total</u>	<u>Manu- facturing</u>
1960	208,300	54,900	-	-
1961	212,300	53,400	4,000	-1,500
1962	218,200	50,300	5,900	-3,100
1963	223,700	53,700	5,500	3,400
1964	233,300	59,700	9,600	6,000
1965	238,700	62,300	5,400	2,600

Source: Texas Employment Commission.

The trend of employment in various industry groups between 1960 and 1965, presented in table II, indicates that virtually all major industry groups gained during the past six years. Of the gain of 30,400 from 1960 to 1965, about 7,400 (24 percent) occurred in manufacturing and 23,000 (76 percent) in nonmanufacturing industries.

^{1/} Employment data from the Censuses of Population relate to persons living in the Fort Worth HMA even though some may work outside this HMA, whereas Texas Employment Commission data relate to persons working in the Fort Worth HMA even though some may reside outside this HMA.

In manufacturing industries, gains since 1962 have more than offset a decline of about 4,600 from 1960 to 1962. That decline and a majority of the subsequent increase are attributed to the volatile aircraft industry and its suppliers. Employment in the nondurable goods segment increased by 400 jobs (two percent) during the 1960-1965 period; in the durable goods segment (which includes the transportation equipment industry) the increase was 7,000, or almost 19 percent.

In nonmanufacturing activities, the largest numerical gains between 1960 and 1965 were in wholesale and retail trade, up 14,700 workers (28 percent); business, personal, and professional services, up 4,000 workers (15 percent); contract construction, up 1,900 workers (15 percent); government, up 1,800 workers (8 percent); and finance, insurance, and real estate, up 1,500 workers (16 percent). These gains more than offset small losses in mining, and in transportation, communication, and utilities, resulting in a net gain of 23,000 workers (15 percent) in nonmanufacturing during the 1960-1965 period.

Employment by Industry. The economic character of the Fort Worth area is indicated by the kinds of employment opportunities available. The civilian work force in 1965 averaged 251,800 persons, of whom 242,200 were employed. Unemployment averaged 9,600, or 3.8 percent of the work force. Agriculture accounted for 3,500 workers, or less than two percent of total employment. Nonagricultural wage and salary employment totaled 203,200 and there were 35,500 self-employed, unpaid family workers, and domestic workers in private households.

Of the 238,700 nonagricultural workers employed in 1965, approximately 26 percent were engaged in manufacturing, of which almost three-fourths were employed in the production of durable goods and over one-fourth in nondurable goods production. The transportation equipment industry, principally aircraft, dominates manufacturing employment, accounting for almost half of all employment in manufacturing. One of each nine nonagricultural workers in the HMA in 1965 was employed in the transportation equipment industry. The next largest group was food products which accounted for three percent of nonagricultural employment, followed closely by the primary and fabricated metals, and the machinery industries which accounted for more than two percent each.

Among the nonmanufacturing industries, trade provided 29 percent of all nonagricultural jobs; retail trade accounted for about 22 percent, and wholesale trade for seven percent. This high proportion of employment in trade reflects the importance of Fort Worth as a trade and distribution center. Business, personal, and professional services accounted for 13 percent of all workers, and government of all types for 10 percent. The proportion in government is down since 1960. Transportation, communications, and utilities account for seven percent; and finance, insurance and real estate account for less than five percent of all nonagricultural workers.

Military. At Carswell AFB there was an assigned military strength of about 4,675 persons as of November 1965, up twelve percent from December 1964, but down twenty percent from December 1960. Uniformed military personnel are not counted in the civilian work force, but they add significantly to the economic support of the area. The 675 civil service workers, up almost fifty percent since 1960, are included in the civilian work force by the Texas Employment Commission.

Employment Participation Rate. The participation rate (the ratio of employment to population) in the Fort Worth HMA declined moderately from 1950 to 1960, but appears to have changed at a slower rate since 1960. The 1960 and the current ratios of nonagricultural employment to total population are about 36.34 percent and 35.63 percent, respectively. No significant further decline in the rate is expected in the near future.

Unemployment

Currently, about 7,500 workers are unemployed in the HMA, representing 3.0 percent of the civilian work force. This represents a decline from 9,800 unemployed in February 1965, an unemployment ratio of 4.0 percent. There were 9,600 workers unemployed in the Fort Worth HMA in the average month of 1965, representing an unemployment ratio of 3.8 percent. This was the lowest number unemployed and the lowest unemployment ratio during the entire 1960-1965 period. In 1961, recession layoffs caused the rate to rise to 5.7 percent, but since then the ratio has declined each year, as shown in table I.

Estimated Future Employment

As previously indicated, the transportation equipment industry in the Fort Worth HMA was established early in 1942 by the introduction of production of military aircraft at the Convair Aircraft Plant (now General Dynamics), followed by establishment of the Bell Helicopter Plant and the General Motors Assembly Plant in the early part of the 1950-1960 decade. The effect of the addition of those plants was a substantial expansion of the economy, but it also introduced an element of instability in the employment pattern of the area.

For example, General Dynamics employment dropped from an average of almost 20,000 workers in 1959 to a low of about 11,600 in 1963, increased to 14,700 in 1964, but dropped to an average of about 13,750 in 1965. Current employment exceeds 14,000 but General Dynamics employment is expected again to approximate 20,000 in 1968 and 1969. Bell Helicopter Company employment declined from a high of 3,400 in 1960 to 3,200 in 1961, but employment has increased each year since 1961 to about 8,500 currently. An additional 1,500 workers are to be added during the next twelve months. Employment changes by the aircraft companies will continue

to depend on government contracts. The fifteen major suppliers of the aircraft industry are expected to add approximately 2,000 workers in the Fort Worth HMA during the next two years. Trade and service employment is expected to increase in response to the expansion in the basic aircraft industry. By 1968, total nonagricultural employment in the HMA is expected to increase to an average of approximately 253,000, up about 8,000 from 1966 to 1967 and 6,000 from 1967 to 1968. Those rates of increase are dependent, however, on the aircraft industry reaching the employment levels now anticipated. Changes in contracts for military aircraft could alter those levels significantly, in which case estimates of employment gains would be subject to change.

Income

Weekly Earnings. The trend in average weekly earnings of all production workers in manufacturing industries, shown in the following table, indicates that average earnings in the Fort Worth area have increased each year during the 1959-1965 period; average weekly hours increased, except from 1963 to 1964. In 1965, weekly wages of production workers in the Fort Worth HMA averaged about \$110 compared with \$94 in 1959, representing a six-year increase of seventeen percent. Earnings in Fort Worth are above the State average and above those in Dallas.

Average Gross Weekly Hours and Earnings
of Manufacturing Production Workers
1959 to 1965
(Rounded to dollars)

<u>Year</u>	<u>Fort Worth</u>		<u>Dallas</u>	
	<u>Earnings</u>	<u>Hours</u>	<u>Earnings</u>	<u>Hours</u>
1959	\$ 94	40.9	\$ 80	41.6
1960	95	41.0	81	41.3
1961	97	41.5	85	41.8
1962	99	41.8	86	41.3
1963	102	41.9	88	41.7
1964	106	41.7	91	41.5
1965	110	42.1	95	41.6

Sources: U.S. Bureau of Labor Statistics.
Texas Employment Commission.

Weekly earnings in manufacturing averaged \$115 in February 1966, up from \$105 in February 1965. In durable goods production weekly earnings averaged \$123 in February 1966 as compared with \$112 in February 1965. During the February 1965-February 1966 period, earnings in nondurable goods production increased from an average of \$88 to \$92 a week.

Family Income. The current median annual income, after deduction of Federal income tax, of all families in the Fort Worth HMA is \$6,400, and the median income of all renter families is \$4,675. By 1968, the median annual after-tax income of all families is expected to approximate \$6,675 and the median income of all renter families is expected to rise to \$4,875. As shown in table III, nineteen percent of all families and eight percent of the renter families have a current after-tax income of \$10,000 a year or more; ten percent of all families and four percent of renter families have an income of \$12,000 a year or more. About 24 percent of all families and 40 percent of the renter families have an annual after-tax income of less than \$4,000.

Demographic Factors

Population

Current Estimate and Past Trends. The population of the Fort Worth Housing Market Area as of March 1, 1966 is approximately 670,000 persons, an average gain of about 16,350 persons (2.9 percent) annually since April 1, 1960. This is below the growth rate experienced during the 1950-1960 decade, when the population increase averaged just over 18,000 (4.6 percent) a year.

The current population of Fort Worth City is approximately 382,500 persons, an average increase of 4,425 (1.3 percent) a year since 1960. According to the Fort Worth City Planning Department, very little population has been added through annexation since 1960, although annexations have increased the area of the city by about one-fifth. Between 1950 and 1960, the city of Fort Worth gained about 77,500 persons, or 7,750 a year. During the decade, however, Fort Worth had annexed substantial areas of land which had a 1960 population of approximately 56,800 persons, indicating that the 1960 population within the 1950 corporate limits represented a gain of 20,700 during the decade.

Areas of the HMA outside Fort Worth have recorded a population gain of 70,550 persons, or 11,925 (5.5 percent) a year, since 1960.^{1/} In spite of the substantial annexations to Fort Worth between 1950 and 1960, areas of the HMA outside the central city had a population increase of almost 103,100, or 10,300 (9.1 percent) a year, during the decade.

Population Trends Fort Worth HMA, 1950-1966

<u>Area</u>	<u>April</u> <u>1950</u>	<u>April</u> <u>1960</u>	<u>March</u> <u>1966</u>	<u>Average annual change</u>			
				<u>1950-1960</u>		<u>1960-1966</u>	
				<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<u>HMA total</u>	<u>392,643</u>	<u>573,215</u>	<u>670,000</u>	<u>18,057</u>	<u>4.6</u>	<u>16,350</u>	<u>2.9</u>
<u>Fort Worth</u>	<u>278,778</u>	<u>356,268</u>	<u>382,500</u>	<u>7,749</u>	<u>2.8</u>	<u>4,425</u>	<u>1.3</u>
<u>Rest of HMA</u>	<u>113,865</u>	<u>216,947</u>	<u>287,500</u>	<u>10,308</u>	<u>9.1</u>	<u>11,925</u>	<u>5.5</u>

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

^{1/} Population gains in Johnson County since 1960 have been small and are included in the HMA outside Fort Worth City.

Estimated Future Population. Based on prospective economic growth of the Fort Worth area and the outlook for increased employment opportunities, population growth in both Fort Worth City and the suburban portions of the market area is expected to continue. It is expected that the March 1, 1968 population of the Fort Worth HMA will be approximately 710,000, a growth of approximately 40,000 persons, or six percent, for the two-year period. Population growth is expected to average 5,750 annually in Fort Worth City and 14,250 a year in the remainder of the HMA during the two-year period. These gains are significantly above the average annual increases of 4,425 and 11,925, respectively, for the past six years.

Net Natural Increase and Migration. During the 1950-1960 decade, natural increase (excess of births over deaths) accounted for approximately 94,000 of the population increase, and about 86,000 represented net in-migration into the Fort Worth HMA in response to increasing economic and employment opportunities. Most of the in-migration was to areas of Tarrant County outside Fort Worth City.

From April 1960 to the present time there has been an average net natural increase of 8,750 persons a year in the Fort Worth HMA. Compared with the average annual population growth of 16,350, an average net in-migration of 7,600 persons a year is indicated since April 1960, somewhat below the average net in-migration of 8,600 persons a year during the 1950-1960 decade. In-migration since April 1960 accounted for about 46 percent of the population increment, as compared with 48 percent during the previous decade.

Households

Current Estimate and Past Trends. Currently, there are approximately 205,600 households in the Fort Worth HMA, representing an average annual gain of 5,125 from April 1960 to March 1966. By comparison the increases in the 1950-1960 decade averaged almost 5,650 a year.^{1/} As shown in the following table, there are approximately 123,100 households in the city of Fort Worth and about 82,500 in the remainder of the HMA. Of the total increase of 86,650 households since 1950, approximately 37,550 accrued to the city of Fort Worth and 49,100 to the remainder of the HMA.

^{1/} The increase in households between 1950 and 1960 was due in part to a conceptual change from "dwelling unit" in the 1950 Census to "housing unit" in the 1960 Census.

Household Trends
Fort Worth HMA, 1950-1966

<u>Area</u>	<u>April 1950</u>	<u>April 1960</u>	<u>March 1966</u>	<u>Average annual change</u>			
				<u>1950-1960</u>		<u>1960-1966</u>	
				<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<u>HMA total</u>	<u>118,939</u>	<u>175,330</u>	<u>205,600</u>	<u>5,639</u>	<u>4.7</u>	<u>5,125</u>	<u>2.9</u>
Fort Worth	85,538	113,317	123,100	2,778	3.2	1,650	1.5
Rest of HMA	33,401	62,013	82,500	2,861	8.6	3,475	5.6

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

Estimated Future Households. Projected employment and population increases indicate that by March 1, 1968 the number of households in the Fort Worth HMA will total approximately 218,400; 127,400 in the city of Fort Worth and 91,000 in the remainder of the HMA. These estimates reflect an average annual increase of 6,400 households during the next two years, 2,150 in Fort Worth City and 4,250 in the remainder of the HMA, significantly above the average annual increases since 1960.

Household Size Trends. Population in households in the Fort Worth HMA averaged 3.18 persons per household in 1950, 3.22 in 1960, and 3.24 in 1966. Households in the city of Fort Worth average somewhat smaller in size than those in the remainder of the HMA; the average household size declined from 3.11 in 1950 to 3.09 in 1960. In the remainder of the HMA, the average household size increased from 3.34 in 1950 to 3.45 in 1960. The average has continued to increase in some parts of the area, primarily in the suburbs, but the average in the city of Fort Worth has not changed significantly since 1960. No significant change in the average size of households is expected during the next two years.

Military Households. The March 1965 housing survey conducted by Carswell Air Force Base indicated that about 2,225 military households were residing in the Fort Worth HMA. Of this number, approximately 825 households occupied military-controlled housing; the remaining 1,400 households were housed in private off-base housing. During the March 1966 to March 1968 forecast period, the number of military households in the HMA is not expected to change significantly.

Housing Market Factors

Housing Supply

Current Estimate and Past Trend. Currently, there are approximately 224,000 housing units in the Fort Worth HMA, a net increase of about 29,150 housing units since April 1960. About one-third of the units added were in the city of Fort Worth. The net increase of 29,150 housing units resulted from approximately 33,150 units added through new construction and conversions, and the loss of about 4,000 units through demolitions, mergers, and other means. The inventory increase since 1960 has averaged 4,925 units a year, 29 percent below the average of 6,975 units a year during the 1950-1960 decade.

The inventory of housing in the Fort Worth HMA as of April 1, 1960 was reported by the Census of Housing at 194,865 units of all types, a net increase of 69,750 units (56 percent) from April 1950. Of the net increase during the decade approximately 36,000 accrued to the city of Fort Worth; the portion of the HMA outside Fort Worth gained about 33,750 units.

Type of Structure. The inventory of housing in the Fort Worth HMA is composed predominantly of single family houses. About 87 percent of all housing units were single-family houses in April 1960. Four percent of the housing inventory was in structures containing five units or more. However, since April 1960 about as many units in structures containing five units or more have been started as existed in the HMA in April 1960. Currently, about six percent of the housing inventory is indicated to be in structures containing five units or more.

Year Built. About fifteen percent of the housing inventory in the Fort Worth HMA is in structures built since April 1, 1960; approximately thirty-seven percent of the inventory was built between January 1, 1950 and April 1, 1960. Of the owner-occupied units, approximately 44 percent were built during the 1950-1960 period. By contrast, about 23 percent of the renter-occupied units were in structures built during the 1950-1960 decade.

Distribution of the Housing Supply by Year Built
Fort Worth, Texas, HMA, March 1966

<u>Year built</u> ^{a/}	<u>Number of units</u>	<u>Percentage distribution</u>
April 1960-March 1966	32,300	15
1955-March 1960	40,900	18
1950-1954	42,900	19
1940-1949	42,000	19
1930-1939	22,800	10
1929 or earlier	<u>43,100</u>	<u>19</u>
Total	224,000	100

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

Source: Estimated by Housing Market Analyst.

Condition. Principally because of the relative newness of the inventory, coupled with removals from the inventory, a relatively small proportion (approximately eight percent) of the housing units in the HMA are dilapidated or lack one or more plumbing facilities. The 1960 Census of Housing revealed that about 19,000 housing units were dilapidated or lacked one or more plumbing facilities, about ten percent of all housing units.

In 1960 only five percent of the owner-occupied units were dilapidated or lacking plumbing facilities as compared with seventeen percent of the renter-occupied units. About the same proportions of the housing inventory in the city of Fort Worth were dilapidated or lacked some plumbing facilities as in the HMA as a whole.

Value and Rent. The median value of owner-occupied single-family houses in the Fort Worth HMA as of April 1, 1960 was \$8,800 as compared with \$8,500 in the city of Fort Worth and with \$9,900 for all SMSA's in Texas. Asking prices for vacant houses were considerably higher, \$9,800 in the HMA and \$9,400 in the city of Fort Worth. Most FHA-acquired properties are priced at less than \$10,000.

The median monthly gross rent of renter-occupied units in the Fort Worth HMA as of April 1, 1960 was \$65, about the same as the \$64 median in the city of Fort Worth and the \$64 median for all SMSA's in Texas. Of the 51,725 units in the HMA for which rent was reported, less than two-percent (about 775 units) rented for \$150 or more a month. Over three-fourths of all units renting for \$120 or more were single-family houses.

Residential Building Activity

Annual Volume. Building activity in the Fort Worth HMA, as measured by building permits issued, was up sharply in 1963 (almost 5,850 units authorized) and again in 1964 (over 7,300 units) from the average of about 4,850 units authorized during the 1960-1962 period. In 1965, new units authorized totaled about 6,150, 16 percent below 1964. During the first two months of 1966, about 700 units were authorized, up about thirteen percent from the first two months of 1965.

Trend of Residential Construction by Units in Structure in the Fort Worth, Texas, HMA, 1960-1965 a/

<u>Year</u>	<u>Units in structure</u>			<u>Total units</u>
	<u>One</u>	<u>Two</u>	<u>Three or more</u>	
1960	4,372	68	345	4,785
1961	4,440	36	493	4,969
1962	3,719	84	956	4,759
1963	3,877	80	1,881	5,838
1964	4,079	148	3,093	7,320
1965	4,160	154	1,836	6,150

a/ Includes the following public units: Fort Worth City, 28 units in 1961 and 244 units in 1962; and Haltom City, 60 units in 1965.

Sources: U.S. Bureau of the Census, Construction Report, C-40.
Local Building departments. University of Texas,
Construction Reports.

As a proportion of the total authorizations, units in structures with three or more units increased from seven percent in 1960 to 42 percent in 1964, but dropped to 30 percent in 1965. Multifamily units authorized increased from about 350 in 1960 to about 3,100 in 1964; the volume dropped to less than 1,850 units in 1965, which still was over five times the 1960 volume. During the January-February 1966 period, only 113 multifamily units were authorized, an annual rate of about 675 units.

Since April 1960, about 9,300 multifamily housing units have been authorized, about 56 percent of which have been authorized in the city of Fort Worth and 44 percent in the remainder of the HMA (see table IV).

Single-family construction, which accounted for 91 percent of total construction in 1960, dropped from an average of about 4,400 units in the 1960-1961 period to about 3,800 units in 1962-1963 period. The decline was reversed in 1964 and 1965 when an average of about 4,100 units were authorized. During the first two months of 1966, about 565 single-family units were authorized, down about eight percent from the January-February 1965 period.

Approximately two of each five units authorized in the HMA in 1964 and 1965 were built in the city of Fort Worth. Residential construction outside Fort Worth City is widely dispersed, although a high proportion is constructed east of the city. Building permits issued in the 31 communities in the remainder of the HMA are recorded in Table V.

Units Under Construction. Based on building permit data, the recent postal vacancy survey, and local sources, it is estimated that about 2,400 housing units are under construction in the HMA at this time. This total includes approximately 1,000 single-family houses and 1,400 multifamily units.

Demolitions. Losses to the housing inventory from demolitions, conversions, right-of-way clearance, and catastrophe have been extensive since 1950. Comparison of the year-built data from the 1960 Census of Housing with the net change in the housing inventory of the Fort Worth HMA between April 1, 1950 and April 1, 1960 suggests that approximately 1,525 housing units were removed from the inventory annually during the period.

Records of demolitions for the city of Fort Worth indicate that almost 2,900 units were removed from the inventory during the 1960-1965 period. The annual rate averaged almost 600 units during the 1963-1965 period. Based on the information available it is estimated that during the April 1, 1960-March 1, 1966 period at least 4,000 units were lost from the Fort Worth HMA housing inventory. During the next two years, net inventory losses are expected to total at least 500 units a year.

Tenure of Occupancy

Largely as a result of the high proportion of single-family houses built and the loss of some existing multifamily units, the proportion of owner-occupancy increased from 61 percent in 1950 to 70 percent in 1960. During the past three years over one-third of the new housing units constructed

have been in multifamily structures. As a result, the net shift from renter to owner status has slowed, and owner-occupancy has increased only slightly, to about 71 percent as of March 1, 1966. Among nonwhite households the change in owner-occupancy was from 47 percent in 1950 to 52 percent in 1960, and to 53 percent currently. The shift in tenure in the Fort Worth HMA during the past sixteen-year period is reflected in table VI.

Vacancy

As of Census Dates. The Census of Housing revealed that as of April 1, 1960 there were about 13,450 nondilapidated, nonseasonal, vacant housing units available for sale or rent in the Fort Worth HMA, a net available vacancy ratio of 7.1 percent. There was an increase of about 10,450 available vacant units between April 1950 and April 1960; in 1950 there were 3,000 such units available, representing a net available vacancy ratio of 2.5 percent. The number of vacancies increased during the decade in both sales and rental housing. The homeowner vacancy ratio increased from 1.9 percent to 3.0 percent and the rental vacancy ratio increased from 3.4 percent to 15.5 percent. In April 1960, the city of Fort Worth had a homeowner vacancy ratio of 2.6 percent and a renter vacancy ratio of 15.1 percent. Higher vacancy ratios were reported for portions of the HMA outside the city of Fort Worth.

Approximately 11 percent of the available rental vacancies in 1960 were units lacking some plumbing facilities; lack of plumbing facilities was considerably less among sales vacancies, about three percent. Some 83 percent of the rental vacancies lacking plumbing facilities were located in the city of Fort Worth.

Postal Vacancy Survey. At the request of FHA, postmasters with city delivery routes in the Fort Worth HMA made a survey of vacant units in residences and in apartments as of March 2, 1966. The survey covered a total of about 203,525 dwelling units, about 91 percent of the estimated current inventory of 224,000 units in the HMA. The survey disclosed a vacancy ratio of 4.3 percent in residences and 19.5 percent in apartments. A high level of vacancies was found throughout the HMA, in the new sections of the area as well as in the older sections. Table VII reveals the results of the 1966 vacancy survey in detail.

It is important to note that the postal vacancy survey data are not entirely comparable with the data published by the Bureau of the Census because of differences in definition, area 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. 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 Surveys. Vacancy surveys conducted by the Fort Worth Insuring Office also reflect relatively high vacancy ratios. A survey taken in late December 1965 and early January 1966 covered 5,465 apartment units completed in the last six years. Older, less expensive units not competitive with newer rental construction were excluded from the survey. Vacancies represented 12.5 percent of the units surveyed. Vacancies were high in all areas and in all unit sizes, except efficiencies (see tables X and XI).

Vacancy in FHA Projects. In March 1966 there were 1,558 vacant units in 4,040 units in rental projects which had been insured by the FHA, a vacancy ratio of 38.6 percent. Of the 2,807 in projects which were either Commissioner-owned or for which the Commissioner held the mortgage, the vacancy ratio in March 1966 was 45.2 percent. Vacancies in the 1,233 units in projects still under FHA-insured mortgages in good standing in March 1966 totaled 288 units, a vacancy ratio of 23.4 percent.

Current Estimate. Available data indicate that vacancies in both sales and rental housing increased somewhat during the 1960-1962 period, but have decreased during the 1963-1966 period. Currently there are about 12,500 nondilapidated, nonseasonal, vacant dwelling units available for sale or rent in the Fort Worth FMA, equal to 5.6 percent of the total inventory. Of the current vacancies, about 3,700 are vacant sales units, representing a homeowner vacancy ratio of 2.5 percent, and 8,800 are vacant units available for rent, reflecting a current renter vacancy ratio of 13.0 percent. Table VI compares these estimates with the April 1960 and April 1950 vacancy counts.

Of the current available vacant units, about 3,600 sales units and 7,700 rental units are nondilapidated and have all plumbing facilities. Current vacancy in both sales and rental units is substantially above that which would represent a balanced demand-supply relationship in the Fort Worth area with the current rate of growth.

Sales Market

General Market Conditions. As indicated by a comparison of current and 1960 homeowner vacancy ratios of 2.5 percent and 3.0 percent, respectively, the present condition of the sales market has improved over the situation of substantial excess that existed as of the 1960 Census date. However, there are indications that during the first half of the

1960-1966 period the homeowner vacancy ratio reached a higher level than is evident now. During the past three years, the homeowner vacancy ratio has declined below the 1960 level, indicating a movement toward a better balanced sales market. A comparison of the results of the unsold inventory surveys, conducted by the Fort Worth Insuring Office, covering houses completed in 1964 and 1965 and remaining unsold at the end of each year, confirms other reports that the condition of the sales market has improved.

Unsold Inventory. As indicated in table VIII, the January 1966 FHA unsold inventory survey reported 3,200 houses completed in 1965 in subdivisions with five or more completions during the year. Of the 3,200 completions, 2,026 were sold before start of construction. The remaining 1,174 completions represented speculative construction, of which 418 were unsold, an unsold to completions ratio of 36 percent, down from 40 percent as of January 1, 1965. However, the data suggest that an average of about four and one-third months supply of speculatively-built houses is available.

As indicated in table IX, about 35 percent of the houses completed speculatively in 1965 in Fort Worth City and the close-in satellite communities were unsold as compared with 37 percent in Arlington and 39 percent in the Bedford-Euless-Hurst-Richland Hills area.

Approximately 63 percent of new houses were pre-sold in 1965 and 1964, up from 55 percent in 1963. In Fort Worth and the close-in satellites 58 percent were pre-sold in 1965 as contrasted with 83 percent pre-sold in Arlington and 72 percent pre-sold in Crowley. In Burleson and Cleburne in Johnson County, 66 percent and 63 percent, respectively, were pre-sold. One-half of the speculatively-built houses in Cleburne and one-fourth in Burleson were unsold as of January 1, 1966.

A comparison of the 1965 and 1966 surveys suggests that lower priced houses accounted for a smaller proportion of construction in 1965 than in 1964. Houses priced from \$12,500 to \$14,999 accounted for one-fourth of all completions in 1965, up from 23 percent in 1964. New houses priced from \$15,000 to \$19,999 accounted for one-third of all completions in 1965, up from 31 percent in 1964. The proportion over \$20,000 remained unchanged at 26 percent of total completions.

FHA-Acquired Properties. The FHA inventory of acquired homes declined from 1,750 as of December 31, 1962 to about 650 as of January 1, 1966. Over 500 of the houses are in Fort Worth City; the remainder are located in some twenty other communities in the HMA. Most of the acquired single-family houses in Fort Worth are located in the southeast quadrant of the city. The postal vacancy survey conducted as of March 2, 1966 also shows a relatively high vacancy ratio for single-family houses in the southeast quadrant. Almost 90 percent of the acquired properties offered for sale are priced at less than \$10,000.

Rental Market

General Market Conditions. The rental market, like the sales market, has improved somewhat during the past several years. The large volume of new multifamily construction during the past few years suggests an increased rate of demand for apartments. However, the current vacancy ratio of 12.5 percent in units completed during the past six years and the estimated current rental vacancy ratio of 13.0 percent (including single-family houses rented and vacant) suggest a significant excess of available rental housing. Vacancies are high in all areas and in all size units, except efficiencies (see tables X and XI). The excess supply of rental housing is a factor in the sharp decline in multifamily permits in 1965 from 1964.

Urban Renewal

Fort Worth City is engaged in plans to improve housing in the city. In March 1962, an \$89,800 Federal grant was received to aid in the preparation of a Community Renewal Program. This program is citywide in scope and is designed to provide a comprehensive and coordinated approach to the area's over-all urban renewal needs. A total of \$80,800 in Federal grants has been disbursed for Community Renewal Project R-65 according to the Urban Renewal Directory as of June 30, 1965.

In February 1966, the State of Texas received a \$9,530 Federal grant to aid Azle, in Tarrant County, in its program of comprehensive planning for growth and development. The Federal grant, supplemented by \$4,765 in State and local contributions, will finance comprehensive planning activities for up to two years.

In February 1966, the City of Grapevine, in Tarrant County, received approval from the Department of Housing and Urban Development of its Workable Program.

Public Housing

Excluding 822 units under military control, there are 1,184 units of public housing in the Fort Worth HMA; 1,074 units are in the city of Fort Worth and 110 units, including 60 under construction, are in Haltom City. All of the completed units in Haltom City are occupied; 60 units under construction will become available in mid-1966. About 150 of the 1,074 units in Fort Worth City are vacant, a vacancy ratio of fourteen percent, because of a decline in applications.

Demand for Housing

Quantitative demand for additional housing during the next two years is based on a projected level of household growth of 6,400 annually, on the number of housing units expected to be demolished, and on the need to reduce vacancies to a level that reflects a balanced demand-supply situation in the Fort Worth housing market. Consideration is given also to the current tenure composition of the inventory and to the current trend from renter occupancy to owner occupancy.

Demand for New Sales Housing

Giving consideration to the above factors, the volume of privately-owned additions to the supply of housing units for sale that will meet the demand occasioned by anticipated growth during the next two years and result in an appreciable improvement in the demand-supply relationship in the sales market is approximately 3,900 units annually. That volume of construction of sales houses would be down moderately from the volume of almost 4,100 single-family houses authorized in 1964 and over 4,150 authorized in 1965.

The estimated distribution of the annual demand for 3,900 new sales houses during the next two years is expected to approximate the pattern presented in the following table. The distribution is based on the ability to pay, as measured by current family incomes after tax and ratios of sales prices to incomes typical in the HMA, and on recent market experience.

Because of current construction and land costs, it is judged that few, if any, adequate new sales houses can be built to sell below \$10,000. Therefore, all of the 3,900 sales housing units expected to be in demand annually during the next two years have been distributed at and above this minimum on the assumption that purchasers with the ability to pay these prices will purchase new homes and the units vacated by them will be purchased by other families in the area moving up in the quality scale of housing (filtering).

Estimated Annual Demand for New Sales Housing
Fort Worth, Texas, HMA, March 1966 to March 1968

<u>Price range</u>	<u>Number of houses</u>	<u>Percent of total</u>
\$10,000 - \$11,999	470	12
12,000 - 13,999	660	17
14,000 - 15,999	660	17
16,000 - 17,999	620	16
18,000 - 19,999	510	13
20,000 - 24,999	550	14
25,000 and over	<u>430</u>	<u>11</u>
Total	3,900	100

Approximately 46 percent of the projected annual demand is for sales housing selling for less than \$16,000; housing in the \$16,000 to \$20,000 price range represents about 29 percent of demand, about 14 percent is in the range from \$20,000 to \$25,000, and 11 percent is in the \$25,000 and over range.

The foregoing distribution differs from those in tables VIII and IX, which reflect only selected subdivision experience. It must be noted that those 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. The preceding demand estimates reflect all home building and indicate a greater concentration in some price ranges than a subdivision survey would reveal.

Demand for New Rental Housing.

Although the rental vacancy situation has improved somewhat recently, the continuing serious surplus of rental housing at all rent levels suggests that if there were no additional new rental units constructed during the next two years, there would remain at the end of the two-year forecast period a quantitative excess of available vacant rental units over the number that would represent a balanced demand-supply relationship in the Fort Worth HMA. It is apparent that a continuation of current construction levels will prevent the market adjustments essential to maintenance of the soundness of investment in rental housing. However, many of the units in the low and moderate rent ranges are of inferior quality. For that reason it is judged that production of from 100 to 200 private rental units a year in the lower rent range attainable with below-market-interest-rate financing or assistance in land acquisition and cost might facilitate the upgrading of low- and middle-income families into more acceptable housing. Superior location and unit amenities as compared with existing accommodations at similar rentals could provide effective upgrading through small projects in the Fort Worth market. The units considered above are exclusive of public low-rent housing and rent-supplement accommodations.

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 the other economic segments, they are less able or willing to break with established social, church, and neighborhood relationships, and proximity to place of work frequently is a governing consideration in the place of residence preferred by families in this group. Thus, the utilization of lower-priced land for new rental housing in outlying locations to achieve lower rents may be self-defeating unless the existence of a demand potential is clearly evident. Experience suggests, also, that smaller projects of 50 to 75 units are marketed most successfully.

Table I

Trend of Civilian Work Force Components
Fort Worth, Texas, HMA, 1960-1965
 (Annual average in thousands)

<u>Components</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Civilian work force	<u>223.5</u>	<u>229.6</u>	<u>234.1</u>	<u>239.3</u>	<u>247.8</u>	<u>251.8</u>
Unemployed	11.1	13.1	12.0	11.9	10.5	9.6
Percent of work force	5.0%	5.7%	5.1%	5.0%	4.2%	3.8%
Labor-management disputes	0	0	0	0	0.3	0
Employment	<u>212.4</u>	<u>216.5</u>	<u>222.1</u>	<u>227.4</u>	<u>237.0</u>	<u>242.2</u>
Agricultural employment	4.1	4.2	3.9	3.7	3.7	3.5
Nonagricultural employment	<u>208.3</u>	<u>212.3</u>	<u>218.2</u>	<u>223.7</u>	<u>233.3</u>	<u>238.7</u>
Wage and salary	176.6	180.1	184.6	189.2	198.2	203.2
Other ^{a/}	31.7	32.2	33.6	34.5	35.1	35.5

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

Source: Texas Employment Commission.

Table II

Nonagricultural Employment by Type of Industry
Fort Worth, Texas, HMA, 1960-1965
 (Annual average in thousands)

<u>Industry</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Nonagricultural employment	<u>208.3</u>	<u>212.3</u>	<u>218.2</u>	<u>223.7</u>	<u>233.3</u>	<u>238.7</u>
Manufacturing	54.9	53.4	50.3	53.7	59.7	62.3
Durable goods	<u>37.6</u>	<u>36.2</u>	<u>33.1</u>	<u>36.7</u>	<u>42.3</u>	<u>44.6</u>
Primary and fabricated metals	3.8	4.2	4.6	4.9	5.5	6.1
Machinery	4.2	4.6	4.8	5.2	5.3	5.4
Transportation equipment	25.6	23.5	19.7	22.0	26.7	27.8
Aircraft	(21.5)	(20.4)	(16.3)	(17.3)	(21.2)	(21.4)
Other durable goods	4.0	3.9	4.0	4.6	4.8	5.3
Nondurable goods	<u>17.3</u>	<u>17.2</u>	<u>17.2</u>	<u>17.0</u>	<u>17.4</u>	<u>17.7</u>
Food products	9.0	8.9	8.2	7.6	7.6	7.7
Apparel products	1.5	1.5	1.6	1.7	1.8	2.0
Paper products	1.0	1.0	1.2	1.3	1.6	1.3
Printing	2.6	2.7	2.7	2.9	3.1	3.0
Chemical products	1.0	1.0	1.0	1.2	1.2	1.2
Rubber products	0.9	0.9	1.1	1.1	1.2	1.2
Other nondurable goods	1.3	1.2	1.4	1.2	0.9	1.3
Nonmanufacturing	<u>153.4</u>	<u>158.9</u>	<u>167.9</u>	<u>170.0</u>	<u>173.6</u>	<u>176.4</u>
Mining	3.5	3.4	3.3	3.2	3.0	2.8
Construction	12.9	12.2	13.0	13.6	14.1	14.8
Transportation	11.4	11.7	11.1	10.4	10.8	10.9
Communication and utility	5.4	5.1	4.9	5.0	5.1	5.1
Wholesale trade	12.9	13.0	14.2	14.8	15.7	16.0
Retail trade	40.1	42.9	48.6	49.4	50.4	51.7
Finance, ins., & real estate	9.3	9.8	10.0	10.2	10.5	10.8
Services (exc. pvt. household)	27.1	28.4	29.2	29.4	30.4	31.1
Private household	7.9	7.9	8.2	8.4	8.4	8.5
Government	22.9	24.5	25.4	25.6	25.2	24.7

Source: Annual averages computed from monthly data estimated by Texas Employment Commission.

Table III

Percentage Distribution of Families by Annual Income
After Deduction of Federal Income Tax
Fort Worth, Texas, HMA, 1966 and 1968

<u>Family income</u>	<u>1966</u>		<u>1968</u>	
	<u>All families</u>	<u>Renter families</u>	<u>All families</u>	<u>Renter families</u>
Under \$3,000	15	26	14	25
\$3,000 - 3,999	9	14	8	13
4,000 - 4,999	10	15	10	14
5,000 - 5,999	12	13	11	13
6,000 - 6,999	11	10	11	10
7,000 - 7,999	10	6	10	7
8,000 - 8,999	8	5	8	6
9,000 - 9,999	6	3	7	3
10,000 -11,999	9	4	9	5
12,000 -14,999	5	2	6	2
15,000 and over	<u>5</u>	<u>2</u>	<u>6</u>	<u>2</u>
Total	100	100	100	100
Median	\$6,400	\$4,675	\$6,675	\$4,875

Source: Estimated by Housing Market Analyst.

Table IV

Trend of Residential Construction by Type of Structure
in the Major Segments of the Fort Worth HMA
1960 to 1965 a/

<u>Year</u>	<u>Units in structure</u>				<u>Total units</u>
	<u>One</u>	<u>Two</u>	<u>Three or four</u>	<u>Five or more</u>	
<u>Fort Worth HMA</u>					
1960	4,372	68	50	295	4,785
1961	4,440	36	32	461	4,969
1962	3,719	84	8	948	4,759
1963	3,877	80	24	1,857	5,838
1964	4,079	148	23	3,070	7,320
1965	4,160	154	-1,836-		6,150
<u>Fort Worth City</u>					
1960	1,818	44	6	263	2,131
1961	1,487	22	28	299	1,836
1962	1,328	24	4	731	2,087
1963	1,123	46	-	687	1,856
1964	1,140	52	16	1,759	2,967
1965	1,115	-132-		1,038	2,285
<u>Remainder of HMA</u>					
1960	2,554	24	44	32	2,654
1961	2,953	14	4	162	3,133
1962	2,391	60	4	217	2,672
1963	2,754	34	24	1,170	3,982
1964	2,939	96	7	1,311	4,353
1965	3,045	-820-			3,865

a/ Includes the following public units: Fort Worth City, 28 units in 1961 and 244 units in 1962; and Haltom City, 60 units in 1965.

Sources: Bureau of the Census, Construction Report C-40.
 Local building departments. University of Texas,
 Construction Reports.

Table V

Housing Units Authorized by Building Permits
Fort Worth, Texas, Housing Market Area
1959 to 1965 a/

<u>Area</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Tarrant County							
Arlington	986	585	805	677	1,432	1,362	1,388
Bedford	109	206	307	134	136	227	191
Benbrook Village	183	155	98	63	102	188	211
Colleyville	20	11	15	NA	NA	28	NA
Crowley	NA	NA	4	7	25	43	61
Dalworthington Gardens	2	1	2	6	5	5	13
Edgecliff	NA	2	0	29	46	52	NA
Eules	332	202	379	479	648	515	312
Forest Hill	77	136	124	208	192	130	147
Fort Worth	3,037	2,131	1,836	2,087	1,856	2,967	2,285
Grapevine	43	26	31	18	9	48	53
Haltom City	479	314	228	188	281	294	197
Hurst	535	432	446	263	407	625	466
Kennedale	41	15	18	17	27	23	19
Lake Worth	NA	124	70	52	42	24	68
Mansfield	NA	21	0	21	18	31	NA
North Richland Hills	341	229	242	194	194	296	156
Pantego	NA	5	7	NA	13	31	NA
Richland Hills	23	35	17	12	13	34	26
River Oaks	20	10	14	8	24	7	14
Saginaw	5	2	43	60	58	51	64
Sansom Park	NA	1	0	0	0	0	0
Southlake	NA	7	14	12	9	5	0
Watauga	NA	NA	NA	NA	NA	86	NA
Westover Hills	0	3	0	1	1	1	0
Westworth	3	7	2	1	1	0	0
White Settlement	0	0	141	44	76	95	116
Total	6,236	4,660	4,843	4,581	5,615	7,168	5,787
Johnson County							
Alvarado	NA	NA	12	7	NA	10	NA
Cleburne	118	98	108	155	182	122	85
Grandview	NA	17	0	6	10	7	NA
Keene	11	7	5	6	27	12	10
Venus town	2	3	1	4	4	1	6
Total	131	125	126	178	223	152	101
Housing Market Area	6,367	4,785	4,969	4,759	5,838	7,320	5,888

a/ Includes the following public units: Fort Worth City, 28 units in 1961 and 244 units in 1962; and Haltom City, 60 units in 1965.

Source: Bureau of the Census, Construction Reports C-40; local building departments; and University of Texas, Construction Reports.

Table VI

Tenure and Vacancy in the Housing Inventory
Fort Worth, Texas, Housing Market Area
April 1950-March 1966

<u>Tenure and vacancy</u>	<u>April</u> <u>1950</u>	<u>April</u> <u>1960</u>	<u>March</u> <u>1966</u>	<u>Average annual change</u>			
				<u>1950-1960</u>		<u>1960-1966</u>	
				<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Total housing supply	124,853 ^{b/}	194,865	224,000	7,001	5.6	4,925	2.5
Occupied housing units	118,939	175,330	205,600	5,639	4.7	5,125	2.9
Owner-occupied	72,445	122,721	146,000	5,027	6.9	3,950	3.2
Percent of total occupied	60.9	70.0	71.0	-	-	-	-
Renter-occupied	46,494	52,609	59,600	612	1.3	1,175	2.2
Percent of total occupied	39.1	30.0	29.0	-	-	-	-
Vacant housing units	5,914	19,535	18,400	1,362	23.0	-200	-1.0
Available	2,994	13,437	12,500	1,044	34.9	-175	-1.2
For sale	1,382	3,808	3,700	243	17.6	-25	-0.5
Homeowner vacancy rate	1.9	3.0	2.5	-	-	-	-
For rent	1,612	9,629	8,800	801	50.0	-150	-1.5
Rental vacancy rate	3.4	15.5	13.0	-	-	-	-
Other vacant units ^{a/}	2,920	6,098	5,900	318	10.9	-25	-0.5

^{a/} Excludes 262 nonresidential units.

^{b/} Includes vacant units in following categories: seasonal, dilapidated, rented or sold awaiting occupancy, and held off market.

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

Table VII

Fort Worth, Texas, Area Postal Vacancy Survey

March 2, 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	201,913	11,924	5.9	10,795	1,129	2,838	180,214	7,685	4.3	6,872	813	1,351	21,699	4,232	19.5	3,923	316	1,487	1,610	96	6.0
Fort Worth	155,271	9,907	6.4	9,237	670	1,999	137,549	6,263	4.6	5,809	454	816	17,722	3,644	20.6	3,428	216	1,183	1,057	83	7.9
Main Office	16,392	1,443	8.8	1,437	6	51	11,429	603	5.3	597	6	11	4,963	840	16.9	840	-	40	-	-	-
Branches:																					
Everman	867	25	2.9	18	7	25	867	25	2.9	18	7	25	-	-	-	-	-	-	-	-	-
Haltom City	8,207	283	3.4	258	25	116	7,929	255	3.2	232	23	116	278	28	10.1	26	2	-	159	3	1.9
Oaks	11,103	623	5.6	551	72	26	10,765	554	5.1	482	72	17	338	69	20.4	69	-	9	549	2	0.4
Richland Hills	5,493	260	4.7	195	65	66	5,457	260	4.8	195	65	66	36	-	-	-	-	-	11	-	-
White Settlement	3,965	340	8.6	330	10	29	3,928	334	8.5	324	10	29	37	6	16.2	6	-	-	79	2	2.5
Stations:																					
Arlington Heights	13,011	695	5.3	626	69	219	11,283	442	3.9	390	52	13	1,728	253	14.6	236	17	206	-	-	-
Berry Street	16,808	1,043	6.2	953	90	101	13,248	464	3.5	447	17	99	3,560	579	16.3	506	73	2	-	-	-
Glencrest	10,306	673	6.5	650	23	79	10,226	668	6.5	645	23	79	80	5	6.3	5	-	-	55	6	10.9
Handley	7,807	399	5.1	303	96	162	6,961	224	3.2	194	30	74	846	175	20.7	109	66	88	116	66	56.9
Polytechnic	14,283	984	6.9	953	31	45	12,459	671	5.4	656	15	6	1,824	313	17.2	297	16	39	-	-	-
Ridglea	9,860	845	8.6	765	80	705	8,336	377	4.5	326	51	73	1,524	468	30.7	439	29	632	11	4	36.4
Seminary Hill	8,325	520	6.2	488	32	183	7,293	319	4.4	300	19	60	1,032	201	19.5	188	13	123	50	-	-
Stock Yards	14,647	1,234	8.4	1,229	5	23	13,510	686	5.1	681	5	21	1,137	548	48.2	548	-	2	12	-	-
Sylvania	7,730	333	4.3	333	-	2	7,501	174	2.3	174	-	-	229	159	69.4	159	-	2	15	-	-
Wedgwood	6,260	207	3.3	148	59	167	6,150	207	3.4	148	59	127	110	-	-	-	40	-	-	-	-
Carswell AFB	207	-	-	-	-	-	207	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Cities and Towns	46,642	2,017	4.3	1,558	459	839	42,665	1,422	3.3	1,063	359	535	3,977	595	15.0	495	100	304	553	13	2.4
Arlington	21,093	915	4.3	689	226	507	18,298	521	2.8	380	141	229	2,795	394	14.1	309	85	278	279	4	1.4
Asle	2,036	95	4.7	86	9	15	2,026	93	4.6	85	8	15	10	2	20.0	1	1	-	74	-	-
Bedford	1,906	63	3.3	32	31	47	1,906	63	3.3	32	31	47	-	-	-	-	-	-	3	2	66.7
Burleson	2,446	68	2.8	56	12	35	2,446	68	2.8	56	12	35	-	-	-	-	-	-	19	3	15.8
Cleburne	6,683	260	3.9	234	26	3	6,599	253	3.9	227	26	3	124	7	5.6	7	-	-	-	-	-
Euless	3,770	279	7.4	249	30	54	3,105	138	4.4	108	30	30	665	141	21.2	141	-	24	15	2	13.3
Grapevine	2,394	67	2.8	43	24	35	2,322	47	2.0	35	12	33	72	20	27.8	8	12	2	126	2	1.6
Hurst	6,314	270	4.3	169	101	143	6,003	239	4.0	140	99	143	311	31	10.0	29	2	-	37	-	-

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 VIII

FHA Survey of Unsold Inventory of New Sales Houses
Fort Worth, Texas, Housing Market Area
1964-1966

<u>Sales price</u>	<u>Total completions</u>		<u>Presold</u>	<u>Speculatively built</u>		
	<u>Number</u>	<u>Percent</u>		<u>Total</u>	<u>Unsold</u>	
					<u>Number</u>	<u>Percent</u>
<u>Houses completed in 1963^{a/}</u>						
Under \$10,000	179	8	138	41	9	22
\$10,000 - 12,499	439	18	282	157	54	34
12,500 - 14,999	575	24	280	295	97	33
15,000 - 17,499	555	24	255	300	118	39
17,500 - 19,999	370	16	198	172	67	39
20,000 - 24,999	164	7	99	65	34	52
25,000 - 29,999	57	2	31	26	13	50
30,000 - 34,999	15	1	14	1	0	-
35,000 and over	3	-	2	1	1	100
Total	2,357	100	1,299	1,058	393	37
<u>Houses completed in 1964^{a/}</u>						
Under \$10,000	29	1	23	6	4	67
\$10,000 - 12,499	503	19	350	153	53	35
12,500 - 14,999	623	23	368	255	111	44
15,000 - 17,499	555	21	306	249	117	47
17,500 - 19,999	259	10	169	90	44	49
20,000 - 24,999	412	16	261	151	34	23
25,000 - 29,999	207	8	146	61	23	38
30,000 - 34,999	31	1	23	8	0	0
35,000 and over	26	1	23	3	3	100
Total	2,645	100	1,669	976	389	40
<u>Houses completed in 1965^{a/}</u>						
Under \$10,000	67	2	43	24	7	29
\$10,000 - 12,499	440	14	289	151	54	36
12,500 - 14,999	798	25	519	279	115	41
15,000 - 17,499	653	20	411	242	88	36
17,500 - 19,999	421	13	252	169	57	34
20,000 - 24,999	446	14	253	193	67	35
25,000 - 29,999	272	9	170	102	27	26
30,000 - 34,999	69	2	55	14	3	21
35,000 and over	34	1	34	0	0	0
Total	3,200	100	2,026	1,174	418	36

^{a/} Survey includes subdivisions with five or more completions during the year.

Source: Annual Survey of Unsold Inventory of New Houses conducted by Fort Worth, FHA Insuring Office as of January 1, 1964, 1965, and 1966.

Table IX

Houses Completed in the Past Twelve Months and the
Number Unsold by Price Class as of January 1, 1966 a/
in the Major Segments of the Fort Worth, Texas, HMA

<u>Sales price</u>	<u>Total completions</u>		<u>Pre-sold</u>	<u>Speculatively built</u>		
	<u>Number</u>	<u>Percent</u>		<u>Total</u>	<u>Unsold</u>	
					<u>Number</u>	<u>Percent</u>
<u>Fort Worth and Close in Satellites</u>						
Under \$10,000	51	3	28	23	6	26
\$10,000 - 12,499	159	10	91	68	20	29
12,500 - 14,999	335	20	203	132	62	47
15,000 - 17,499	267	16	164	103	37	36
17,500 - 19,999	200	12	107	93	35	38
20,000 - 24,999	369	22	199	170	56	33
25,000 - 29,999	221	13	130	91	22	24
30,000 - 34,999	44	3	30	14	3	21
35,000 and over	<u>9</u>	<u>1</u>	<u>9</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	1,655	100	961	694	241	35
<u>Arlington</u>						
\$10,000 - 12,499	190	25	154	36	16	44
12,500 - 14,999	200	27	161	39	12	31
15,000 - 17,499	142	19	117	25	9	36
17,500 - 19,999	101	13	80	21	8	38
20,000 - 24,999	29	4	27	2	1	50
25,000 - 29,999	45	6	36	9	3	33
30,000 - 34,999	24	3	24	0	0	0
35,000 and over	<u>24</u>	<u>3</u>	<u>24</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	755	100	623	132	49	37
<u>Azle</u>						
\$10,000 - 12,499	9	75	0	9	1	11
12,500 - 14,999	<u>3</u>	<u>25</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>33</u>
Total	12	100	0	12	2	17

(Continued)

Table IX (Continued)

Houses Completed in the Past Twelve Months and the
Number Unsold by Price Class as of January 1, 1966 a/
in the Major Segments of the Fort Worth, Texas, HMA

<u>Sales price</u>	<u>Total completions</u>				<u>Unsold</u>	
	<u>Number</u>	<u>Percent</u>	<u>Pre-sold</u>	<u>Total</u>	<u>Number</u>	<u>Percent</u>
<u>Bedford-Euless-Hurst & Richland Hills</u>						
Under \$10,000	16	3	15	1	1	100
\$10,000 - 12,499	32	6	17	15	10	67
12,500 - 14,999	130	23	67	63	26	41
15,000 - 17,499	209	37	105	104	38	37
17,500 - 19,999	115	21	60	55	14	25
20,000 - 24,999	48	9	27	21	10	48
25,000 - 29,999	<u>5</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>2</u>	<u>100</u>
Total	555	100	294	261	101	39
<u>Burleson</u>						
\$10,000 - 12,499	28	27	18	10	1	10
12,500 - 14,999	54	52	36	18	6	33
15,000 - 17,499	19	18	12	7	2	29
17,500 - 19,999	2	2	2	0	0	0
35,000 and over						
Total	<u>103</u>	<u>99</u>	<u>68</u>	<u>35</u>	<u>9</u>	<u>26</u>
<u>Cleburne</u>						
\$10,000 - 12,499	14	29	7	7	4	57
12,500 - 14,999	25	51	16	9	4	44
15,000 - 17,499	5	10	3	2	1	50
17,500 - 19,999	3	6	3	0	0	0
25,000 - 29,999	1	2	1	0	0	0
30,000 - 34,999	<u>1</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	49	100	31	18	9	50
<u>Crowley</u>						
\$10,000 - 12,499	14	24	10	4	2	50
12,500 - 14,999	35	60	24	11	3	27
15,000 - 17,499	<u>9</u>	<u>16</u>	<u>8</u>	<u>1</u>	<u>1</u>	<u>100</u>
Total	58	100	42	16	6	38

a/ Survey includes subdivisions with five or more completions during the year.

Source: FHA, Fort Worth Insuring Office.

Table X

Vacant Rental Units by Number of Bedrooms
in the Major Segments of the Fort Worth HMA
as of January 1966

<u>Area</u>	<u>Efficiency</u>	<u>One bedroom</u>	<u>Two bedroom</u>	<u>Three bedroom</u>	<u>Four bedroom</u>	<u>Total</u>
Southwest						
Units surveyed	36	246	221	-	-	503
Vacant	3	25	11	-	-	39
Percent vacant	8.3	10.2	5.0	-	-	7.8
Southeast						
Units surveyed	88	672	741	71	4	1,576
Vacant	3	107	138	15	2	265
Percent vacant	3.4	15.9	18.6	21.1	50.0	16.8
Northwest						
Units surveyed	26	489	444	12	-	971
Vacant	1	54	65	2	-	122
Percent vacant	3.8	11.0	14.6	16.7	-	12.6
Northeast						
Units surveyed	-	140	88	6	-	234
Vacant	-	24	21	3	-	48
Percent vacant	-	17.1	23.9	50.0	-	20.5
Bedford, Euless, Hurst Area						
Units surveyed	18	286	153	6	8	471
Vacant	-	30	15	1	-	46
Percent vacant	-	10.5	9.8	16.7	-	9.8
Arlington						
Units surveyed	3	1,100	591	16	-	1,710
Vacant	-	91	66	7	-	164
Percent vacant	-	8.3	11.2	43.8	-	9.6
Fort Worth HMA						
Units surveyed	171	2,933	2,238	111	12	5,465
Vacant	7	331	316	28	2	684
Percent vacant	4.1	11.3	14.1	25.2	16.7	12.5

The boundaries of the four quadrants are: Southwest: North-South Freeway to Marys Creek, Southeast: North-South Freeway to Trinity River, Northwest: Marys Creek to North-South Freeway, Northeast: North-South Freeway to Trinity River.

Source: Summary prepared by Housing Market Analyst from survey conducted by the Fort Worth FHA Insuring Office.

Table XI

Vacant Rental Units by Year Completed
in the Major Segments of the Fort Worth HMA
as of January 1966

<u>Area</u>	<u>Year completed</u>			<u>Total</u>
	<u>1963 or earlier</u>	<u>1964</u>	<u>1965</u>	
Southwest				
Units surveyed	206	153	144	503
Vacant	22	12	5	39
Percent vacant	10.6	7.8	3.5	7.8
Southeast				
Units surveyed	449	305	822	1,576
Vacant	93	33	139	265
Percent vacant	20.7	10.8	16.9	16.8
Northwest				
Units surveyed	416	320	235	971
Vacant	35	59	28	122
Percent vacant	8.4	18.4	11.9	12.6
Northeast				
Units surveyed	160	-	74	234
Vacant	22	-	26	48
Percent vacant	13.8	-	35.1	20.5
Bedford, Euless, Hurst Area				
Units surveyed	12	277	182	471
Vacant	1	28	17	46
Percent vacant	8.3	10.1	9.3	9.8
Arlington				
Units surveyed	839	606	265	1,710
Vacant	69	44	51	164
Percent vacant	8.2	7.3	19.2	9.6
Fort Worth HMA				
Units surveyed	2,082	1,661	1,722	5,465
Vacant	242	176	266	684
Percent vacant	11.6	10.6	15.4	12.5

The boundaries of the four quadrants are: Southwest: North-South Freeway to Marys Creek, Southeast: North-South Freeway to Trinity River, Northwest: Marys Creek to North-South Freeway, Northeast: North-South Freeway to Trinity River.

Source: Summary prepared by Housing Market Analyst from survey conducted by the Fort Worth FHA Insuring Office.

DEPARTMENT OF HOUSING
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728.1 Analysis of the
308 Fort Worth Texas
F 22 Housing market
Fort Worth Texas
1966

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