

728.1
:308
F22
Odessa, Tex.
1966

DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT
LIBRARY
WASHINGTON, D.C. 20410

APR 21 1967

Analysis of the
ODESSA, TEXAS
HOUSING MARKET

as of August 1, 1966

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

April 1967

DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT
LIBRARY
WASHINGTON, D.C. 20410

APR 21 1967

ANALYSIS OF THE
ODESSA, TEXAS, HOUSING MARKET
AS OF AUGUST 1, 1966

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

Foreword

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

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

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

Table of Contents

	<u>Page</u>
Summary and Conclusions	i
Housing Market Area	1
Map of Area	2
Economy of the Area	
Character and History	3
Employment	3
Principal Employers	7
Unemployment	8
Estimated Future Employment	8
Income	9
Demographic Factors	
Population	10
Households	12
Housing Market Factors	
Housing Supply	14
Residential Building Activity	16
Tenure of Occupancy	17
Vacancy	18
Sales Market	20
Rental Market	23
Demand for Housing	
Quantitative Demand	24
Qualitative Demand	25

ANALYSIS OF THE
ODESSA, TEXAS, HOUSING MARKET
AS OF AUGUST 1, 1966

Summary and Conclusions

1. The Odessa, Texas, Housing Market Area (HMA) is coterminous with the Odessa Standard Metropolitan Statistical Area (Ector County, Texas). Active oil drilling campaigns began in the area around 1926. Over the years, Odessa has developed into a center for the supply and production segments of the petroleum industry. A more recent occurrence is the rise in importance of manufacturing, mostly the production of petrochemicals and petroleum products from the hydrocarbons supplied from the oil fields. Mining (petroleum) and related industries are still the most important sources of "basic" employment.
2. On the basis of the number of workers covered by unemployment compensation, jobs reached an all-time month-of-March peak in 1959, when about 22,250 covered workers were reported. Mining employment crested in 1957 (at 7,275 workers), but growth in other sectors of the economy (especially manufacturing) caused total covered jobs to continue to increase for two more years. The level of employment in the Odessa HMA has fluctuated considerably, but gains were maintained during 1963-1965 and available information indicates that the number of jobs has continued to grow. Stabilization of the Odessa oil industry and growth in the number of jobs in other sectors of the economy (especially manufacturing, trade, and services) have been responsible for the recent employment gains. Nonagricultural employment is expected to increase by about 700 jobs during each of the next two years.
3. According to data on Ector and Midland Counties combined, the average annual rates of unemployment have varied only within one percentage point since 1960, when the rate was 3.4 percent. The unemployment rate moved gradually upward to 4.4 percent in 1963, and then declined to an average of 3.8 percent in 1965.
4. The current median annual income of all families in the Odessa HMA is about \$7,350, after the deduction of federal income tax, and the median after-tax income of renter households of two-or-more persons is \$6,050. By 1968, the median after-tax income of all families will be \$7,800 annually, and the median income of renter households will be \$6,400.
5. The population of the Odessa HMA is approximately 98,300 persons, reflecting an increase of around 7,300 since April 1960, or an average of about 1,150 annually. The 1950-1960 gain amounted to an average of almost 4,900 yearly. During the next two years, the population of the HMA is expected to increase by around 2,075 annually.

6. Households now number about 28,550 up nearly 2,675 (420 annually) since April 1960. During the 1950 decade, households increased by an average of over 1,325 a year. The number of households will grow by about 1,200, or 600 annually, during the two-year forecast period.
7. The housing inventory currently totals about 32,350 units. Since 1960, some 2,950 housing units have been authorized for construction by building permits, including about 800 units in structures containing two or more units. Authorizations trended downward from almost 690 units in 1960 to only 180 units in 1964. The number of units authorized increased sharply in 1965 to a total of 440. About 390 units have been authorized during the first six months of 1966, including 250 in multifamily structures. There are now about 300 units of housing under construction in the HMA, including 100 houses and 200 units in multifamily structures.
8. There are presently some 2,550 available vacant housing units in the Odessa HMA. About 800 units are available for sale only, a sales vacancy ratio of 3.9 percent, and the remaining 1,750 units are available for rent, a rental vacancy ratio of 16.4 percent. The current sales and rental vacancy ratios are down slightly from the ratios of 4.3 percent and 16.7 percent, respectively, reported in the 1960 Census. Most of the vacant sales housing is concentrated in price ranges below \$13,500, in which practically no new housing has been built for several years because of the oversupply of such housing.
9. Based on the expected increases in the number of households during the next two years (600 annually), on adjustments in the market to establish more acceptable demand-supply relationships, and allowing for the excessive rate of housing construction, there is expected to be a demand for about 300 units of new sales housing during each of the next two years. The demand forecast for sales housing is slightly below the average number of houses authorized for construction since 1960 (330 annually). Almost all new sales housing demand should be in price ranges above \$13,500. Demand for new sales housing should approximate the pattern indicated on page 25. It is judged that there is a more than sufficient number of existing adequate vacant rental units and new units under construction to satisfy the quantitative requirements of new renter households during the next two years.

ANALYSIS OF THE
ODESSA, TEXAS, HOUSING MARKET
AS OF AUGUST 1, 1966

Housing Market Area

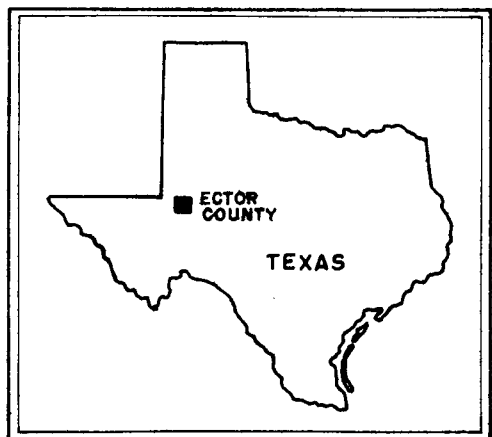
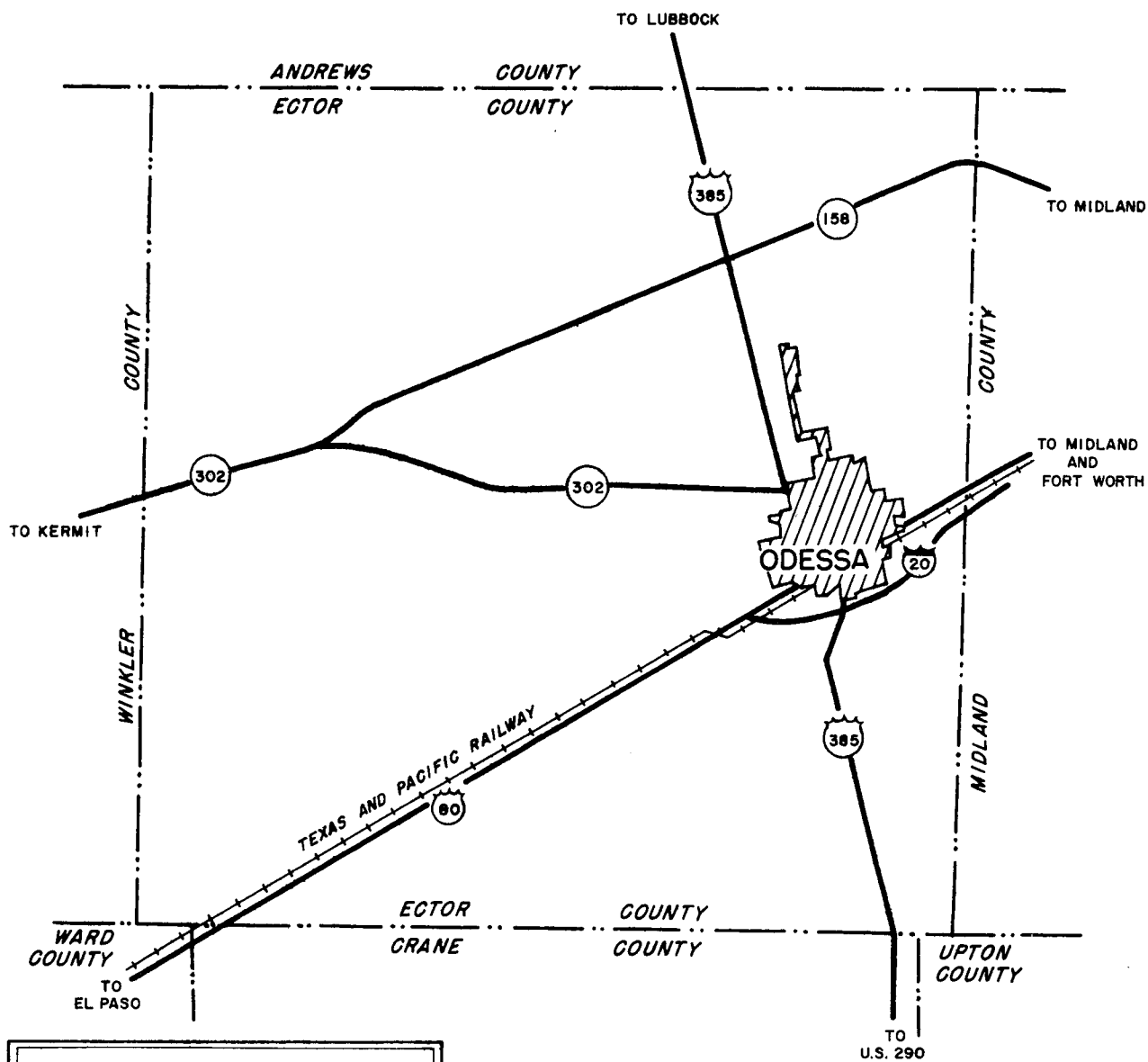
The Odessa, Texas, Housing Market Area (HMA) is defined as being co-terminous with the Odessa Standard Metropolitan Statistical Area, which consists of Ector County, Texas (see map on following page). The HMA had a population of about 91,000 persons in 1960.^{1/} Odessa is located on the West Texas plains, about 320 miles west of Fort Worth and 270 miles east of El Paso. Midland, Texas, is about 20 miles east of Odessa.

The most important highway in the HMA is east-west U.S. 80. The route of Interstate 20 parallels U.S. 80 through Ector County. I-20 is now under construction, and the by-pass portion of the road, which routes traffic around Odessa, will be completed by early 1967. North-south U.S. 385 also crosses the area, and several state roads serve the county. Rail service is provided by the Texas and Pacific Railway Company. Seven common carrier motor truck lines have terminals in Odessa. Major air transport service is provided through the Midland-Odessa Air Terminal, which is located approximately mid-way between the two cities.

According to data from the 1960 Census, there was a net commutation of about 780 workers from the Odessa HMA to contiguous counties. The number of out-commuters, at 1,540, amounted to about double the number of in-commuters (760). Most of the in-commuters and about half of the out-commuters travelled between the Odessa HMA and Midland County.

^{1/} Inasmuch as the rural farm population of the Odessa HMA constituted only 0.2 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.

ODESSA, TEXAS, HOUSING MARKET AREA



Economy of the Area

Character and History

The origin of the unusual name of Odessa is unknown, although it may relate to the city in the U.S.S.R. of the same name. The site of Odessa was established in 1881 when the Texas and Pacific Railway, which was laying tracks across the area, set up a construction camp on the location. The state designated many such camps as county seats, and Odessa was made the county seat of Ector County. The earliest economic support for the area was cattle-raising. By mid-1900, Odessa had, by virtue of the railroad, established itself as a regional trade and cattle-shipping center. Incorporation of Odessa did not occur until 1927, close on the heels of the rise of the community as an oil boomtown.

The importance of agriculture in the economy of the HMA was dwarfed by the spectacular growth of the oil industry. The first boom period of oil-field growth in the Permian basin of west Texas completely changed the character of the area. Active drilling campaigns began west and south of Odessa around 1926. The city was the nearest shipping point for the developing fields. The discovery and exploitation of other fields in east Texas and elsewhere during the 1930's helped to depress oil prices, and the booming growth of the Odessa economy was halted. The petroleum market eventually was stabilized, and the second boom period of the 1940's and 1950's resulted. Over the years, Odessa has developed into a center for the supply and production segments of the petroleum industry. A more recent occurrence is the rise of manufacturing, mostly the production of petrochemicals and petroleum products from the hydrocarbons supplied from the oil fields.

Employment

Current Estimate. According to the special estimates prepared by the Texas Employment Commission, there were 34,450 nonagricultural jobs in the Odessa HMA as of June 1966 (see table I).

Past Trend. Detailed information on trends in total employment by type of industry is not available for Ector County. Such data are obtainable only for jobs covered by the Texas Unemployment Compensation Law, which account for around two-thirds of all nonagricultural employment in the area. However, the data are an adequate indicator of trends in total employment and in the major industry categories. The Texas Employment Commission publishes data on the number of covered workers, by industry, as of March of each year (see table II). Since the data used to indicate year-to-year trends are for the single month of March of each year, extraneous factors (weather conditions, etc.) account for some fluctuation, especially in the construction category.

As of March 1965, the most recent date for which figures are available, there were about 20,950 covered workers in the Odessa HMA. This number represents an increase of about 640 jobs since the previous March, mostly caused by a gain of some 480 jobs in construction. The level of employment in the Odessa area has fluctuated considerably. From March 1956 through March 1965, there was a series of nine year-to-year changes that included five increases and four decreases. The least number of covered workers was in 1956 (18,550 jobs), and the greatest number was in 1959 (22,250 jobs). After 1959, covered employment declined to 19,950 in 1961, increased by 330 in 1962, declined by about 1,200 in 1963, and has increased since then by about 1,875 jobs. Available information indicates that the gains experienced during March 1963-March 1965 have been maintained to the present date.

Direct employment in mining (petroleum), traditionally the mainstay of the Odessa economy, has shown an over-all decrease from the 7,100 mining workers in 1956. After increasing by about 200 in 1957, covered mining jobs decreased each year until the 1963 low of about 4,650 workers was reached. Stabilization of factors governing the Odessa oil industry helped covered mining employment to increase to about 4,975 in March 1964, but mining jobs declined to 4,775 in March 1965.

The Texas Railroad Commission sets the allowable number of producing days for the petroleum industry, keeping supply from out-pacing demand. The term "producing days" originates from the former practice of setting a maximum number of days each month during which individual oil wells were allowed to produce. In more recent years, a "shut-down" factor has been adopted, establishing the proportion of the month during which the wells are allowed to produce. The degree of restrictiveness of the factors affects the number of workers engaged in oil-field production operations directly. Since Odessa has for many years received its main economic support as a center for the supply of oil field equipment and as a production center, the production factors set by the Commission in reaction to general oil market conditions have a direct bearing on the local economy.

The first economic boom period in Odessa ended when the supply of oil saturated the market during the late 1920's. The regulations enacted to prevent a recurrence of the over-supply were responsible, in large part, for the ending of the second boom late in the 1950 decade. During the post-World War II period, the shut-down factor has ranged from an average annual high of 100 percent (in 1948), to a 1962 average of 27 percent. There was an almost steady decline in the factor during the 1950's, and an especially sharp curtailment occurred in 1958 when (for several months) the proportion of producing days dropped below 30 percent

for the first time, resulting in an average of 33 percent for the year (down from 47 percent in 1957). Another curtailment came in 1960, when the proportion of producing days averaged 28 percent for the year. Note that, in table II, 1958 and 1960 show declines in mining employment which are greater than other years, indicating the close tie between the liberality of the shut-down factors and the number of workers engaged in mining. Since 1960, the annual average has remained near 28 percent but, during the first seven months of 1966, the factor has averaged a higher 34 percent. Also, in an effort to encourage lagging oil exploration, the Texas Railroad Commission recently liberalized its restrictions for newly-developed fields. These policy changes should be reflected in increases in mining employment.

The number of covered workers in manufacturing industries more than doubled between 1956 and 1965, the most rapid rate of growth of any sector during the period. During these years the petrochemical production complex at Odessa was developed, creating many jobs and causing most of the growth in manufacturing employment. From information gained locally, manufacturing employment appears to have continued to increase since March 1965.

Covered employment in construction shows a net gain of about 560 between 1956 and 1965, but with many fluctuations during the intervening years. The construction industry has been responsible for much of the erratic nature of the trend in over-all covered employment; with one exception (1962), total covered jobs increased or decreased in the same direction as construction employment. Covered employment in trade increased by almost 1,425 between 1956 and 1965, and accounted for a large part of the net gain in total covered jobs. Finance, insurance, and real estate jobs gained by a net of 410 during the 1956-1965 period. Employment in services accounted for about 680 of the net gain of jobs between 1956 and 1965.

With the exception of mining, every major employment category has shown net growth since 1956. However, in all of the categories except manufacturing, the period of greatest net increase was during 1956-1958, when mining employment was still growing; two categories (services and transportation, communication, and utilities) show net declines in covered employment since 1958.

Employment by Industry. Based on the special estimates of total employment by industry in Ector County prepared by the Texas Employment Commission, the largest single current employment source (except trade) is mining, with 5,950 jobs, or 17 percent of all nonagricultural workers (see table I). The Odessa economy was once almost completely dependent on mining for "basic" employment. During the mid-1950's, several events (noted in the following paragraph) led to the establishment of the petrochemical-production complex located southeast of the city. The development of this industry and the decline in oil production jobs

has left mining with a less important, although still dominant, role in the basic local economy. A large part of the workers in services, trade, transportation, and manufacturing, especially those in fabricated metal products and machinery manufacturing, actually are engaged in providing goods and services to the oil companies.

Manufacturing engaged some 3,840 workers in June 1966, equal to 11 percent of all nonagricultural jobs. Most of the 1,185 workers in durable goods production are engaged in the manufacture of oil-field equipment and supplies. The majority of the 2,655 jobs in nondurable goods production represent basic employment, mostly located at the petrochemical-production complex. Development of this facility got under way in 1955 with the formation of the El Paso Products Company, a subsidiary of El Paso Gas. El Paso Products Company supplies the feeder stocks (hydrocarbons) for the plants of the seven companies now located there. The General Tire and Rubber Company, whose facility produces synthetic rubber, was the first to locate a plant in the complex. Of the plants which have followed, El Paso Products Company has joint ownership of two. Chances are good for a further diversification and expansion at the complex. From the physical size of most of the plants, it would seem that many more persons would be engaged there than are indicated in table I. However, the products manufactured are adaptable to plants which are capital intensive and highly automated, so that a minimum number of employees are required for their operation.

Employment in nonmanufacturing pursuits, other than mining, amounted to 24,660 in June 1966. The two largest of these categories are trade, with 8,265 workers, and services, with 5,570. The trade area of Odessa is relatively large for a city its size, although restricted by the proximity of Midland on the east. Also, the population of the West Texas trade area is relatively sparse. Total June 1966 employment in government was estimated at 3,680 workers, of whom only 350 were employed by the federal government. According to available information, current employment in government represents a level somewhat above that of ten years ago. Although government employment is important to the Odessa economy, it is less so than in the nation as a whole. Around one-sixth of all nonagricultural workers in the United States are government employees, compared to just over one-tenth in the Odessa HMA.

Female Employment. The Odessa area has relatively few job opportunities for female workers. The 1960 Census reported that 28 percent of all nonagricultural employees in the Odessa HMA were women, compared to 34 percent for the nation as a whole. The low proportion of nonagricultural employees that are female is a reflection of the dominance of male-employing industries in the area, especially oil production and related activities. The employment diversification that has taken place since 1960 has been into industries whose work force is preponderantly male, so the current proportion of nonagricultural workers who are female is no higher than in 1960.

Principal Employers

According to a directory of manufacturers provided locally, there are presently eight manufacturing employers in the Odessa HMA with over 100 employees, including two which engage over 250 persons. The two largest firms are the El Paso Products Company, which operates seven plants in the area, and The General Tire and Rubber Company. The table below lists the largest manufacturers in the Odessa HMA.

Manufacturing Firms Employing 100 Persons or More Odessa, Texas, Housing Market Area August 1966

<u>Firm name</u>	<u>Products manufactured</u>
El Paso Products Company	Petrochemical products ^{a/}
General Tire and Rubber Company	Synthetic rubber
Meither Machine Works, Incorporated	Industrial machinery
Odessa American	Newspaper
Rexall Chemical Company	Petrochemical products
Sid Richardson Carbon and Gasoline Company	Carbon black
Shell Oil Company	Petroleum products ^{b/}
Sivalls Tanks, Incorporated	Oil producing equipment

^{a/} In seven plants.

^{b/} In two plants.

Sources: Odessa Chamber of Commerce Directory of Manufacturers.

All but six of the 15 plants operated by the firms listed above have located in the Odessa area within the past 15 years, and comprise most of the petrochemical-manufacturing complex. Except for the newspaper publisher, all of the firms listed in the table owe their location in Odessa to the proximity of the oil fields; the machinery and equipment manufacturers provide capital equipment to the oil production industry and the other manufacturers are dependent on the oil fields for raw materials.

Most of the major oil companies of the United States maintain oil production and marketing facilities in the Odessa HMA. The production side of the oil industry has been characterized by a large number of relatively small operators, in addition to the large operations of the major oil companies. In more recent years, there has been considerable "thinning of the ranks" among the independents, caused by competition and shrinking production allowables, but the number of oil production companies in the Odessa area remains high. There is a multiplicity of firms of affiliated service industries, also.

Unemployment

A series of annual average work force data is available only for Ector County and Midland County combined. However, it is judged that trends in the rate of unemployment for this combined area are valid generally for each of the counties separately. The table below shows trends in the work force and unemployment in the two-county area.

Work Force and Unemployment
Ector and Midland Counties, Texas, 1960-1965
(Annual averages)

<u>Component</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Civilian work force	<u>59,490</u>	<u>59,780</u>	<u>59,730</u>	<u>60,050</u>	<u>59,395</u>	<u>59,640</u>
Unemployed	2,000	2,300	2,570	2,635	2,405	2,265
Percent of work force	3.4	3.8	4.3	4.4	4.0	3.8
Employed	57,490	57,480	57,160	57,415	56,990	57,375

Source: Texas Employment Commission.

The average annual rate of unemployment has varied only within a range of one percentage point above the 1960 rate, when it was 3.4 percent. The unemployment rate moved gradually upward to 4.4 percent in 1963, and then declined to an average of 3.8 percent in 1965.

The most recent separate estimate of unemployment for Ector County is for the month of June 1966. According to an estimate provided by the Texas Employment Commission, there was a civilian work force of 36,590 persons in June, of which 1,725 (4.7 percent) were jobless. Part of the June unemployment level reflects the seasonal entrance into the work force of student summer workers; the TEC estimate of June unemployment for Ector and Midland Counties combined is 1.1 percentage points above the estimate for May.

Estimated Future Employment

Because the Odessa economy is based mostly on a single industry which has a history of erratic ups and downs, estimates of future employment growth are hazardous. Although the economy of the area has undergone a diversification of moderate proportions, the stabilizing influence of the new industries has not been sufficient, as yet, to curb year-to-year fluctuation in total employment. Relatively minor changes in government regulations with respect to production allowables, oil import limitations, and tax policies, as well as certain geological and technological developments, can affect significantly the expansion potential of the Odessa economy. Also a factor, as in all employment forecasts for local areas, are future trends in the national economy.

Based on expected increases in employment in the oil industry which should result from recent liberalization of production regulations, on anticipated further expansion of the petrochemical industry, and on employment increases in non-basic types of industries (trade, services, government, etc.), an annual increment of around 700 nonfarm jobs appears to be a reasonable expectation for the two-year forecast period to August 1968. This rate of annual increase is below the average gain of about 925 a year between 1963 and 1965, but is substantially above the average increase that has occurred during the past nine years.

Income

Odessa is a high income area relative to both the state and the nation. The 1960 Census reported a 1959 median family income of \$6,128 for the Odessa HMA, compared to \$4,884 for all of Texas and \$5,660 for the nation as a whole. The high 1959 income in Odessa is a reflection of the generally high wages in the oil industry.

The current median annual income, after the deduction of federal income tax, of all families in the Odessa HMA is approximately \$7,350, and the median after-tax income of all renter households of two-or-more persons is about \$6,050. Approximately 16 percent of all families and 23 percent of all renter households have an after-tax income of less than \$4,000 annually. About six percent of all families and two percent of renter households receive an annual after-tax income in excess of \$15,000.

By August 1968, the median annual after-tax income of all families is expected to increase to about \$7,800, and that of renter households to about \$6,400. Table III provides a detailed distribution of families and households by current annual after-tax income, and a forecast of the distribution in 1968.

Demographic Factors

Population

Current Estimate. The current population of the Odessa HMA is estimated at 98,300 persons, reflecting an increase of about 7,300 since April 1960, or around 1,150 (1.2 percent^{1/}) annually. Most, if not all, of the net gain in population since 1960 has taken place in the last few years, when the Odessa economy has shown growth again. Some 86,200 (87 percent) of the HMA total population resides in Odessa; except for several small communities in the county, the remainder of the population is rather sparsely distributed. Odessa usually annexes vacant land on the fringe of the city before it is developed. Since most population growth is located in the urban part of the HMA, Odessa accounts for the greatest part of population gains.

Past Trend. The modest rate of population increase since April 1960 contrasts with the rapid population gains of the previous two decades. The number of residents more than doubled during the 1940's and again in the 1950's. The booming oil industry in the area was the cause of the high rates of population gain. The boom ended late in the 1950 decade, and job losses resulted; modest employment increases have occurred in recent years, and the number of jobs is approaching the 1960 level. Although there were periods of population loss after April 1960, gains in more recent years have resulted in a net population increment. The following table summarizes trends in population since 1940, including a population forecast to 1968.

Changes in Population
Odessa, Texas, Housing Market Area
April 1940 - August 1968

<u>Date</u>	<u>Population</u>	<u>Average annual change</u> <u>from preceding date</u>	
		<u>Number</u>	<u>Percent</u>
April 1940	15,051	-	-
April 1950	42,102	2,705	10.3
April 1960	90,995	4,889	7.7
August 1966	98,300	1,150	1.2
August 1968	102,450	2,075	2.1

Sources: 1940, 1950, and 1960 Censuses of Population.
1966 and 1968 estimated by Housing Market Analyst.

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

Estimated Future Population. During the two-year forecast period, the population of the Odessa HMA is expected to increase by 4,150, or 2,075 (2.1 percent) annually. The great majority of the population gain will be inside Odessa.

Net Natural Increase and Migration. Between April 1950 and April 1960, the net natural increase (excess of resident births over resident deaths) of the Odessa HMA population amounted to an average of about 1,825 annually. Since the population increased by an annual average of about 4,900 during the decade, net in-migration amounted to 3,075 yearly. Since 1960, however, there has been a net outward movement. During the post-censal period, net natural increase has averaged 1,800 annually while the population increase has averaged about 1,150 yearly, reflecting out-migration of an average of 650 persons a year (see following table). The net outward movement since 1960 was concentrated in years prior to 1964, however, when the economic base of the area was declining.

Components of Population Change
Odessa, Texas, Housing Market Area
April 1950 - August 1966

<u>Source of</u> <u>change</u>	<u>Average annual changes^{a/}</u>	
	<u>April 1950-</u> <u>April 1960</u>	<u>April 1960-</u> <u>August 1966</u>
Net natural increase	1,825	1,800
Migration ^{b/}	<u>3,075</u>	<u>-650</u>
Net change	4,900	1,150

^{a/} Rounded.

^{b/} (-) Out-migration.

Sources: U.S. Bureau of the Census. State of Texas Department of Health. Estimates by Housing Market Analyst.

Because of the mobility of many oil company production workers, a large segment of the Odessa area population is not permanent. This characteristic, which adds an element of instability to the population, means that net migration figures actually represent the movement of a considerable number of persons both in and out of the area.

Distribution by Age. The Odessa HMA population is relatively young, with a large number of persons in the main family-formation and child-bearing age groups; as of April 1960, about 32 percent of the total population was aged 20 to 39 years, compared to 26 percent in the nation as a whole. The in-migration during the 1940's and 1950's of many young adults was the main cause of the proportionately large size of

this segment of the population in 1960. A corollary is the small proportion of persons in the HMA aged 60 years or more; only four percent of the population of Ector County fell into this category in 1960, compared to 13 percent in the nation as a whole.

These population characteristics have a bearing of considerable importance on the market for housing in the Odessa HMA, particularly with respect to unit size and the marketability of housing especially designed for the elderly. Since 1960, the reversal in migration, along with aging of the in-migrants of the boom periods, has acted to make the current age distribution of the Odessa HMA more similar to national patterns, but the differences are still great.

Households

Current Estimate. Households (occupied housing units) now number about 28,550, reflecting an increase of 2,675 since April 1960. About 25,100 (88 percent) of the current households are located in Odessa.

Past Trend. The number of households in the Odessa HMA has been increasing much more slowly since 1960 than previously. During the 1950 decade, the number of households grew by an average of over 1,325 (7.2 percent) annually, more than doubling during the ten-year period. A small part of the intercensal gain was a definitional increment caused by the census change in concept from "dwelling unit" in 1950 to "housing unit" in 1960. Household trends are summarized in the table below, including a projection to 1968.

Changes in Households
Odessa, Texas, Housing Market Area
April 1950 - August 1968

<u>Date</u>	<u>Number of households</u>	<u>Average annual change from preceding date</u>	
		<u>Number</u>	<u>Percent</u>
April 1950	12,514	-	-
April 1960	25,883	1,337	7.2
August 1966	28,550	420	1.6
August 1968	29,750	600	2.1

Sources: 1950 and 1960 Censuses of Housing.
1966 and 1968 estimated by Housing Market Analyst.

Estimated Future Households. Based on the expected increase in job opportunities, it is expected that the number of households will increase by about 600 during each of the next two years to an August 1968 total of 29,750. This rate of increase is above the average of the post-censal period, reflecting a continuation of the economic growth of the past few years. Most of the net gain in households since 1960 occurred during the expansion period of the past two to three years.

Household Size Trends. The high rate of in-migration of young, growing families during the 1950's was reflected in an increasing average number of persons per household. Households averaged 3.32 persons in 1950, and the average increased to 3.51 in 1960. Since 1960, out-migration, a declining birth rate, and a slight aging of the population (older households tend to have fewer child dependents), among other factors, have resulted in a smaller average number of persons per household. Currently, households are estimated to average around 3.42 persons. During the next two years the average number of persons per household is expected to continue to decline, but at a much slower rate than since 1960.

Housing Market Factors

Housing Supply

Current Estimate. As indicated in table IV, there are currently an estimated 32,350 housing units in the Odessa HMA, reflecting a net gain of about 2,925 since the 1960 Census enumeration, or an average of 460 a year. The net growth since April 1960 about equals the total number of new units which have been built since then; unit losses since 1960 through demolition and gains caused by houses moved into the county from elsewhere were approximately equal. At one time, the oil companies often provided housing for field crews. In recent years many of these units have been made available to the public who often transfer them to suburban or more accessible rural areas outside municipal limits. Some of these houses have been relocated into Ector County from elsewhere.

Past Trend. The modest rate of growth in the number of housing units since April 1960 contrasts with the experience of the 1950-1960 intercensal period. An average of over 1,600 units were added each year during the booming 1950's. A small portion of the apparent growth of the 1950 decade is a definitional increment attributable to the census change in concept from "dwelling unit" in 1950 to "housing unit" in 1960, which resulted in an increase in the unit count.

Units in Structure. Most of the housing units in the Odessa HMA are single-family structures, but the proportion has been decreasing (see following table). Since 1960, there has been increased construction of multifamily rental housing.

Housing Inventory by Units in Structure Odessa, Texas, Housing Market Area 1960 and 1966

<u>Units in</u> <u>structure</u>	<u>April 1960</u>		<u>August 1966</u>	
	<u>Number</u> <u>of units</u>	<u>Percent</u> <u>of total</u>	<u>Number</u> <u>of units</u>	<u>Percent</u> <u>of total</u>
1 unit ^{a/}	27,060	92.0	29,350	90.7
2 units	756	2.6	800	2.5
3 or more units	<u>1,592</u>	<u>5.4</u>	<u>2,200</u>	<u>6.8</u>
Total	29,408 ^{b/}	100.0	32,350	100.0

a/ Includes trailers.

b/ Differs slightly from count of all housing units (29,432) because units by type of structure were enumerated on a sample basis.

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

Year Built. The housing inventory of the Odessa HMA is relatively new, a large part of the units having been built during the oil boom years of the 1940's and 1950's (see table below). Less than nine percent of the current inventory was constructed prior to 1940. After 1960, the rate of construction declined so that houses built in the 1960-1966 period are equal to less than a third of the 1955-1960 additions, the period of most rapid gain in the housing inventory. By interpolating from the table below, a median age of around 13 years can be determined for the Odessa HMA housing inventory.

Distribution of the Housing Inventory by Year Built
Odessa, Texas, Housing Market Area, August 1966

<u>Year built</u> ^{a/}	<u>Percentage</u> <u>distribution</u>
April 1960 - July 1966	9.0
1955 - March 1960	31.7
1950 - 1954	23.8
1940 - 1949	26.9
1930 - 1939	7.1
1929 and earlier	<u>1.5</u>
Total	100.0

a/ The basic data in the 1960 Census of Housing from which the estimates were 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.

Source: 1960 Census of Housing adjusted by Housing Market Analyst to reflect post-censal construction and demolition of units.

Condition. The 1960 Census enumerated about 3,275 housing units which were dilapidated or lacked one or more plumbing facilities, equal to eleven percent of the housing inventory. About five percent of the owner-occupied units were substandard, compared to 20 percent of the units occupied by renters. It is judged that some proportionate improvement in the housing inventory has taken place since 1960, resulting from demolition or rehabilitation of inadequate units, as well as the construction of new units, although a few structures have become dilapidated during the interim. Currently, about ten percent of the inventory is dilapidated or lacks one-or-more plumbing facilities.

Value and Rent. The 1960 Census reported a median value of \$10,400 for all owner-occupied housing units in the Odessa HMA. Since April 1960, as a result of a continuing surplus supply of sales housing, much of the sales inventory in Odessa has depreciated somewhat in value, especially those units priced below the 1960 median. Most of the reduction in value occurred in the early 1960's, when the market reacted to the exodus of many families who had been supported by the oil industry. Since most new sales housing built since 1960 has been priced in higher ranges, the declining value of the existing 1960 inventory has not resulted in a lower median value of the over-all current inventory. The median value of sales units is now similar to the 1960 median.

The median gross rent (includes utilities) of the occupied renter inventory in April 1960 was \$68. Similar to the experience in sales housing, the interruption in growth in the number of households during the early 1960's depressed rents somewhat, especially in single-family rental units. The construction of multifamily units with relatively high rents since 1960 and the resurgence of Odessa as an area of growth have offset the decline, however, and the current median gross rent is somewhat higher than in 1960.

Residential Building Activity

Trends. Building permit systems cover all housing constructed in the city of Odessa. Undeveloped fringe areas contiguous to the incorporated area of the city are usually annexed prior to subdivision and development. According to data obtained from the Odessa Planning Department, over 550 acres of land with a negligible number of inhabitants at the time of annexation have been annexed to the city since April 1960; since household growth is concentrated in these areas, building permits are required for most of the housing built in Ector County. About 92 percent of the HMA total housing starts since 1960 are estimated to have been built with permits in Odessa.

On the basis of the number of housing units authorized by building permits, it appears that construction activity declined every year from 690 units authorized in 1960 to just 180 units in 1964. Authorizations increased sharply to about 440 units in 1965. During the first six months of 1966, 390 units have been authorized for construction, compared to almost 220 during the same period in 1965. The following table summarizes building permit activity since 1960.

Private Housing Units Authorized by Building Permits
By Units in Structure
Odessa, Texas, 1960-1966

<u>Year</u>	<u>Units in structure</u>		<u>Total</u>
	<u>Single unit</u>	<u>Two or more units</u>	
1960	647	42	689
1961	551	30	581
1962	259	170	429
1963	128	108	236
1964	151	30	181
1965	273	166	439

First six months

1965	151	65	216
1966	140	249	389

Sources: U.S. Bureau of the Census, C-40 Construction Reports; local building records.

Single-family authorizations since 1960 have shown the same trends as total authorizations, except that the lowest point was reached a year earlier (in 1963). Multifamily unit authorizations have been more erratic from year to year. There has been a substantial increase in apartment construction activity more recently; the number of units authorized in multifamily structures during the first six months of 1966 is substantially above the total for any other entire year of the 1960's.

Units Under Construction. Based on building permit data, on average construction time for single-family and multifamily structures, on a postal vacancy survey conducted in July 1966, and on other information obtained locally, there are currently an estimated 300 housing units under construction in the HMA, including 100 houses and 200 units in multifamily structures. All of the multifamily units and almost all of the houses under construction are located in Odessa.

Tenure of Occupancy

As shown in table IV, the proportion of the occupied housing inventory that is occupied by owners has been increasing since 1950, although at a much slower rate in recent years. Currently, about 69 percent of the 28,550 occupied housing units are owner-occupied, compared to 52 percent in 1950 and 68 percent in 1960. The slowing in the trend toward owner occupancy was caused by an increased interest in rental accommodations, which is reflected in an accelerated rate of apartment construction.

Vacancy

Last Census. As of April 1960, there were 3,550 vacant housing units in the Odessa HMA, of which over 2,450 were available for sale or rent, an over-all available vacancy rate of 8.7 percent. As shown in table IV, about 800 were available for sale only, a homeowner vacancy rate of 4.3 percent, and the remainder were available for rent, a renter vacancy rate of 16.7 percent. A large number of the available sales vacancies were unsold new speculatively-built houses. Of the available vacancies, 23 sales units lacked plumbing facilities, and 177 of the rental units were deficient in plumbing.

Postal Vacancy Survey. The results of a postal vacancy survey conducted during July 1966 are summarized in table V. The survey covered about 27,750 possible deliveries (excluding trailers), equal to around 86 percent of the estimated current total housing inventory. About 1,775 vacancies in residences and apartments were enumerated by the survey, or an over-all vacancy rate of 6.4 percent. Vacancies in residences, as reported by the survey, numbered about 1,550, or 5.9 percent of the total residences surveyed. Vacancies in apartments equaled 13.3 percent of the total number of apartments enumerated. An analysis of the results of the postal vacancy survey suggests that the letter carriers did not enumerate many vacant units of unacceptable quality in areas with an especially-high incidence of vacancy or units which were unavailable for rent or sale.

An earlier postal vacancy survey was conducted in the Odessa HMA as of August 1964. The survey enumerated some 27,100 apartments and residences, of which about 2,400 were vacant, an over-all vacancy rate of 8.8 percent. The 1964 survey counted about 26,075 residences, of which 8.3 percent were vacant, and 1,025 apartments, 21.7 percent of which were vacant. According to local sources, vacancies in the deteriorating local housing market reached a peak in 1963-1964, yet the number of vacant units enumerated by the survey only about equaled the available vacancies reported by the 1960 Census. Apparently, the 1964 vacancy count did not include all unoccupied units, probably for the same reasons that the number of vacancies was understated in the more recent postal vacancy survey.

Assuming the under count in the two surveys was a constant factor, a comparison of the results of the two surveys suggests a current housing market which has firmed considerably over the conditions of two years ago, and which is now much more active; according to the 1966 survey, 240 housing units were under construction, three times as many as in 1964 (80 units).

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. Postal surveys omit vacancies in limited areas served by post office boxes and tend to omit units in subdivisions under construction. Although the postal vacancy survey has obvious limitations, when used in conjunction with other vacancy indicators, the survey serves a valuable function in the derivation of estimates of local market conditions.

Current Estimate. Although there has been an apparent improvement in the vacancy situation over conditions prevailing two years ago, an over supply of housing still exists in the Odessa HMA. It is judged that there are now about 3,800 vacant housing units in the Odessa HMA, of which some 2,550 are available for rent or sale. Of the available vacancies, 800 are for sale only, or a homeowner vacancy rate of 3.9 percent, and the remaining 1,750 are available for rent, a renter vacancy rate of 16.4 percent. As shown in table IV, the number of available rental vacancies is up since April 1960, while available sales vacancies are almost unchanged. Both the sales and rental vacancy rates are slightly lower now than in 1960.

Approximately 25 of the available sales vacancies and 150 of the vacant available rental units are substandard in that they do not contain all plumbing facilities.

The great majority of the vacant available sales units are priced below \$13,500, mostly government-owned properties acquired through mortgagor default on FHA-insured and VA-guaranteed mortgages. Most of the surplus housing was built during the oil boom years when there was a rapid influx of moderate-income families. The rapid growth of Odessa attracted builders to the area, many of whom constructed minimal housing which was marketed at premium prices (considering the quality), usually with a minimum down payment. When the oil boom ended, large numbers of families, who had little or no equity in their houses, left the area. Odessa was left with a large surplus of low-priced sales housing, most of which became government property. Because of the quality and price ranges the units represented, they were not competitive with new sales housing for the most part. Construction and absorption of units in higher price ranges provided housing for increases

in the number of owner-occupant households, and the vacancy situation in inexpensive sales housing worsened during the early 1960's. In recent years, the stabilization of the Odessa petroleum industry has slowed the out-migration of oil-industry workers, and there have been gains in other industries which employ workers in income classes which will utilize low-cost housing, so that some of the surplus of inexpensive sales houses has been absorbed. The current level of vacant sales and rental housing is still somewhat above that which is considered reasonable for an area with the growth characteristics of Odessa, however.

Sales Market

General Market Conditions. Although the current surplus of houses has a depressing effect on the market for new sales units, the effect is minimized because the great majority of all vacant available sales units are priced in the lowest price ranges and are not directly competitive with new houses. The current market for new sales units priced above \$13,500 is sound. This observation is substantiated by the ready marketability of the speculative sales units which have been built in recent years. Most houses constructed in the Odessa area are speculatively built, rather than sold before the start of construction.

Except for the past few months, few houses have been built in price ranges below \$17,500 in recent years, mostly reflecting certain government-established regulations. Local builders recognized the poor marketability of lower priced units in 1964-1965, and few such houses were built speculatively.

Subdivision Activity. According to the Lubbock FHA Insuring Office, there were 17 subdivisions in the Odessa HMA in which five or more houses were built during 1965. Most subdivision activity in the Odessa area is located in the far northeastern part of the city. Odessa is now building schools in the northeastern fringe, outside the built-up urban area, which will encourage further development in this direction.

Unsold Inventory of New Houses. The FHA surveys of houses completed during 1963, 1964, and 1965, in subdivisions in which five or more units had been completed during the year, provide some information on the absorption experience of new sales housing. Because the majority of new sales housing in the Odessa HMA is built speculatively in relatively-large subdivision operations, a large proportion of new houses built are in subdivisions with the minimum number of completions to qualify for inclusion in the FHA surveys. The total number of house completions enumerated in the last three annual surveys equaled 93 percent of the number of single-family units which were authorized for construction by building permits during the three-year period.

The most recent survey, covering houses built during 1965, included 280 units. Fewer than 50 of these houses were sold before the start of construction, so that 83 percent of the units were speculatively built. Of the speculatively-built units, all but 17 percent were sold as of the date of the survey. This most recent survey counted more than double the number of units than the previous one (of 1964 completions), which enumerated 120 units. Fewer than half of the 1964 completions were speculatively built, of which 31 percent were unsold as of the date of the survey. Table VI is a summary of the results of the last three FHA unsold inventory surveys.

Judging from the results of the surveys, the market for new sales housing in the Odessa HMA was depressed during late 1964; the unsold ratio of 1964 completions was somewhat higher (31 percent) than the unsold ratio of 1963 completions (25 percent), despite a lower volume of speculative completions during 1964 than in 1963. The market appears to have strengthened somewhat during 1965, resulting in a lower unsold ratio as of the end of the year in a much more active market.

As of the date of the earliest survey, there were 22 new units on hand which had been completed for more than one year (during 1962 or earlier). Builders held only three such units as of the dates of the most recent two subdivision surveys.

Of the new unsold units counted in the FHA unsold inventory survey which were over one year old as of January 1964, fourteen (64 percent) were priced below \$12,500. These units represented an "overhang" of houses built in the lower price ranges typical of the 1950's and early 1960's. No units in these low ranges were enumerated in the more recent subdivision surveys as builders ceased to produce such houses in recognition of the poor market for low-priced sales units.

The median value of houses built during 1965 and included in the FHA enumeration was \$24,000. Since the FHA surveys of Odessa area house completions is relatively comprehensive, the price concentrations shown in table VI should be representative of all houses built during the year. However, since many houses priced in the upper ranges, as well as a few of the lower-value homes, are built on scattered lots, the median derived from the table may be somewhat below that of all completed units.

Price Trends. A large proportion of the units built during the oil boom years were priced in the lowest achievable ranges. From the number of units authorized by building permits, 1958 was the peak year of residential construction in the HMA. The arithmetic mean of the declared values of the 2,200 units authorized during the year was only \$9,675. After 1958, there was a substantial year-to-year

increase in the mean value of single-family units authorized in Odessa, to \$21,750 in 1964. The average slipped in 1965 (to \$20,450) on an increased volume of construction; during the first six months of 1966 the mean value of houses authorized was \$19,600. (Note that these values do not include land cost, etc.) The most recent experience seems to indicate a firming of the market for lower-value homes. Local sources indicate that subdivisions are beginning to market a limited number of houses in the neighborhood of \$13,000-\$14,000 for the first time in several years.

Foreclosures. As measured by the number of home mortgages foreclosed and tendered to the FHA, there was a rapid increase in the rate of mortgagor default in the early 1960's. During 1960 the FHA acquired 90 single-family properties through foreclosure. The annual number of acquisitions increased each year until the peak was reached (at 460 units) in 1963. Since 1963, the rate of foreclosure has declined; 416 units were acquired in 1964 and 342 in 1965. The number of properties acquired during 1965 was equal to around six percent of the number of single-family mortgages which are now insured by the FHA in the Odessa HMA, still a very high rate.

The large number of property foreclosures during the early 1960's (without an equal number of sales) resulted in an increasing number of properties in the FHA-acquired inventory. During the first week of October 1960, properties on hand numbered 49 units. An upward trend resulted in an increase in the inventory as of July of each year, culminating in 1964 with 671 units on hand. A small decrease was noted in 1965 (to 642 units), and the inventory is down to 457 units as of July 1966. The recent reductions in the number of acquired units on hand is a reflection of an increased sales volume as well as a decrease in the rate of foreclosure.

There is some indication that the recently-developed "tight" money situation has aided absorption of the government-held properties somewhat. Most builders cannot find an adequate supply of funds for interim financing of new units, so some prospective buyers are forced to resort to the existing inventory of available sales housing, whatever its quality.

The preponderance of the FHA- and VA-acquired properties for sale, which comprise the majority of the currently available sales houses, are in the lower price ranges. Of the FHA houses repaired and offered for sale as of July 1966, only 17 percent are priced above \$10,000, and almost none are above \$13,500. According to the local property managers, the paucity of units in the more easily marketable, higher

price ranges is a recent development. About 41 percent of the FHA properties offered for sale as of July 1966 contain only one or two bedrooms, and 33 percent of the VA inventory is so classified.

Outlook. Barring an excessively-high rate of speculative new housing construction which could stimulate upgrading from inexpensive units, the prognosis for the Odessa sales market is a continued tightening of moderate proportions and a slow decline in the surplus of low-priced houses.

Rental Market

General Market Conditions. The market for rental housing has firmed somewhat in recent months in response to the quickened pace of economic growth and resulting in-migration of workers. However, the over-all rate of rental vacancy remains high, and the accelerated rate of planning and construction of rental housing gives cause for concern. Although many recently-opened projects have experienced market acceptance, at least one new project is in difficulty, and the high over-all vacancy rates in single-family rental units and some older multifamily projects raise the over-all rate of rental vacancy to an unacceptable level. The market for rental housing in the Odessa HMA is characterized by a degree of volatility associated with ups and downs in the oil industry. Many employees of the production side of the oil industry must be quite mobile, willing to migrate in response to the ebb and flow of job opportunities. This characteristic is reflected in a relatively large number of furnished rental accommodations in the area, which facilitates the movement of these workers. Given the possibility of erratic year-to-year performance of the Odessa HMA rental market, an evaluation of its condition at any given time is valid for a brief period only.

Rental Housing Under Construction or Planned. Most of the 200 units of rental housing under construction in the Odessa HMA are "luxury" accommodations, with rentals considerably above the minimums achievable in an area with the cost structure of Odessa. The largest project, located in the west suburbs of Odessa, contains 60 units; there are several other projects of moderate size which are located at various sites throughout the city. Given the expectations of the next two years and the present condition of the Odessa rental market, the current rate of apartment construction is considerably above that which would be desirable for an area with the growth characteristics of Odessa.

According to the Odessa Planning Department, in addition to the units which are now being built, there are three known projects in the planning stage which are scheduled to come on the market by mid-1967. Rents in these projects, which contain a total of over 160 units, will be in the upper ranges.

Demand for Housing

Quantitative Demand

Based on the expected increase in households during each of the next two years (600), on adjustments in the number of marketable vacancies to create a balanced market in the HMA, and allowing for the current excess rate of sales and rental housing construction in the area, demand for new housing will total around 300 single-family houses for sale during each of the next two years.

The forecast demand for new single-family houses is slightly below the average annual number of single-family units authorized in Odessa since January 1, 1960 (330 units), but considerably above the annual average of about 200 a year from 1963 through June 1966. During the January 1965-June 1966 period, single-family unit authorizations have averaged 275 annually, only slightly below the forecast demand.

The over-all rate of addition to the sales housing inventory since the 1960 Census has about kept pace with the rate of addition of new owner households, as reflected in the almost unchanged number of sales vacancies. However, this rate of single-family construction has maintained the surplus of sales housing which existed in 1960. While most new additions to the sales inventory have been absorbed readily, especially in recent years, there has been almost a steady increase in the surplus of low-cost houses; in 1960, much of the surplus was in new, never-occupied structures built speculatively in moderate price ranges. This demand forecast is predicated on the assumption that a decline in the surplus number of low-priced units, begun in the past year or so, will continue and that market equilibrium will be obtained in the number of vacancies in sales units priced above \$13,500. Given the expected increment in the number of owner households, it is judged that construction at a rate higher than that forecast will prolong the present surplus condition in low-cost housing.

It is judged that there is a more than sufficient number of adequate existing vacant rental units and new units under construction to satisfy the quantitative requirements of new renter households during the next two years. Completions may even preclude a reduction of the current 16.4 percent rental vacancy ratio to a level that more nearly represents the long-term vacancy requirement in the area. It is recognized that additional private rental housing will be built during the next two years; it is apparent, however, that the more rental housing that is built, the longer will be the time required to bring the demand-supply relationship in the market into balance.

Qualitative Demand

Based on recent market experience and on information obtained locally, the annual demand for 300 new sales units is expected to be distributed by price as shown in the following table. Given the present surplus of low-priced sales housing, new construction should be restricted to units priced above \$13,500.

Estimated Annual Demand for New Sales Housing
Odessa, Texas, Housing Market Area
August 1966-August 1968

<u>Sales price</u>	<u>Housing units</u>	
	<u>Number</u>	<u>Percent^{a/}</u>
Under \$15,000	15	5
\$15,000 - 17,499	25	8
17,500 - 19,999	110	37
20,000 - 24,999	100	33
25,000 - 29,999	25	8
30,000 - 34,999	10	3
35,000 and over	<u>15</u>	<u>5</u>
Total	300	100

^{a/} Does not add to total because of rounding.

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

Table I

Estimated Work Force and Employment by Industry
Odessa, Texas, Housing Market Area
June 1966

<u>Component</u>	<u>Persons</u>
Civilian Work Force	<u>36,590</u>
Unemployed	1,725
Percent of Work Force	4.7
Employment	<u>34,865</u>
Agricultural	415
Nonagricultural	<u>34,450</u>
Manufacturing	<u>3,840</u>
Durable goods	<u>1,185</u>
Stone, clay, and glass	335
Fabricated metal products	380
Machinery	395
Other durable goods	75
Nondurable goods	<u>2,655</u>
Food and kindred	175
Printing and publishing	210
Chemicals and allied	1,865
Petroleum products	405
Nonmanufacturing	<u>30,610</u>
Mining	5,950
Contract construction	4,170
Transportation, comm., and utilities	1,445
Trade	<u>8,265</u>
Wholesale	2,190
Retail	6,075
Fin., insurance, and real estate	1,530
Services	5,570
Government	<u>3,680</u>
Federal	350
State and local	3,330

Source: Texas Employment Commission, San Angelo.

Table II

Workers Covered by Texas Unemployment Compensation Law
Odessa, Texas, Housing Market Area
1956-1965

<u>Component</u>	<u>As of March of each year</u>									
	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Total workers	<u>18,543</u>	<u>21,495</u>	<u>21,359</u>	<u>22,228</u>	<u>20,888</u>	<u>19,947</u>	<u>20,279</u>	<u>19,082</u>	<u>20,306</u>	<u>20,948</u>
Mining	7,090	7,285	6,011	5,933	5,377	5,340	5,178	4,661	4,964	4,777
Construction	1,848	3,288	2,255	3,388	2,445	2,142	1,881	1,729	1,930	2,411
Manufacturing	1,147	1,214	1,894	2,103	2,051	2,030	2,219	2,150	2,543	2,642
Trans., comm., and util.	1,756	2,189	2,355	2,237	2,181	2,097	2,188	1,952	1,914	1,912
Trade	4,847	5,316	5,677	6,074	6,099	5,536	5,898	5,826	6,026	6,262
Fin., ins., and real est.	473	582	705	758	834	833	849	872	851	885
Services and other	1,382	1,621	2,462	1,735	1,901	1,969	2,066	1,892	2,078	2,059

Source: Texas Employment Commission.

Table III

Estimated Percentage Distribution of All Families
and Renter Households^{a/} by Annual Income
After the Deduction of Federal Income Tax
Odessa, Texas, Housing Market Area, 1966 and 1968

<u>Family income</u>	<u>1966</u>		<u>1968</u>	
	<u>All families</u>	<u>Renter households^{a/}</u>	<u>All families</u>	<u>Renter households^{a/}</u>
Under \$2,000	7	9	7	9
\$2,000 - 2,999	3	5	3	4
3,000 - 3,999	6	9	5	8
4,000 - 4,999	8	10	7	9
5,000 - 5,999	10	15	9	14
6,000 - 6,999	12	16	11	14
7,000 - 7,999	12	11	11	11
8,000 - 8,999	10	9	10	10
9,000 - 9,999	9	5	9	7
10,000 -11,999	9	7	11	8
12,000 -14,999	8	2	10	3
15,000 and over	<u>6</u>	<u>2</u>	<u>7</u>	<u>3</u>
Total	100	100	100	100
Median income	\$7,350	\$6,050	\$7,800	\$6,400

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

Source: Estimated by Housing Market Analyst.

Table IV

Components of the Housing Inventory
Odessa, Texas, Housing Market Area
April 1950 - August 1966

<u>Component</u>	<u>April 1950</u>	<u>April 1960</u>	<u>August 1966</u>	<u>Average annual changes</u>			
				<u>1950-1960</u>		<u>1960-1966</u>	
				<u>Number^{a/}</u>	<u>Percent^{b/}</u>	<u>Number^{a/}</u>	<u>Percent^{b/}</u>
Total housing inventory	<u>13,358</u>	<u>29,432</u>	<u>32,350</u>	<u>1,607</u>	7.9	<u>460</u>	1.5
Occupied housing units	<u>12,514</u>	<u>25,883</u>	<u>28,550</u>	<u>1,337</u>	7.2	<u>420</u>	1.6
Owner occupied	<u>6,477</u>	<u>17,603</u>	<u>19,600</u>	<u>1,113</u>	10.0	<u>320</u>	1.7
Percent of all occupied	51.8%	68.0%	68.7%				
Renter occupied	<u>6,037</u>	<u>8,280</u>	<u>8,950</u>	224	3.1	110	1.2
Vacant housing units	<u>844</u>	<u>3,549</u>	<u>3,800</u>	<u>271</u>	14.4	<u>40</u>	1.0
Available vacant	<u>412</u>	<u>2,458</u>	<u>2,550</u>	<u>205</u>	17.9	<u>15</u>	.5
For sale only	<u>122</u>	<u>795</u>	<u>800</u>	<u>67</u>	18.8	-	
Homeowner vacancy rate	1.8%	4.3%	3.9%				
For rent	<u>290</u>	<u>1,663</u>	<u>1,750</u>	137	17.5	15	.8
Renter vacancy rate	4.6%	16.7%	16.4%				
Other vacant	432	1,091	1,250	66	9.3	25	2.2

^{a/} Average annual changes are rounded and 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: 1950 and 1960 Censuses of Housing.
1966 estimated by Housing Market Analyst.

Table V

Odessa, Texas, Area Postal Vacancy Survey

July 13-15, 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.	%
Odessa	27,759	1,784	6.4	1,695	89	241	25,947	1,543	5.9	1,506	37	94	1,812	241	13.3	189	52	147	898	145	16.1
Stations:																					
Crestwood	15,251	742	4.9	665	77	114	14,608	660	4.5	627	33	90	643	82	12.8	38	44	24	535	136	25.4
Hancock	12,508	1,042	8.3	1,030	12	127	11,339	883	7.8	879	4	4	1,169	159	13.6	151	8	123	363	9	2.5

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 VI

Status of New House Completions in Selected Subdivisions^{a/}Odessa, Texas, Housing Market AreaAs of January 1964, January 1965, and January 1966

<u>Sales price</u>	<u>Total completions</u>	<u>Pre-sold</u>	<u>Speculative construction</u>				
			<u>Total</u>	<u>Sold</u>	<u>Unsold</u>		
		<u>Number</u>			<u>Percent</u>		
<u>(Houses completed in 1963, as of January 1, 1964)</u>							
Under \$12,500	10	1	9	7	2	22	
\$12,500 - 14,999	19	5	14	13	1	7	
15,000 - 17,499	16	5	11	10	1	9	
17,500 - 19,999	31	8	23	17	6	26	
20,000 - 24,999	24	5	19	11	8	42	
25,000 - 29,999	7	2	5	3	2	40	
30,000 - 34,999	7	1	6	4	2	33	
35,000 and over	-	-	-	-	-	-	
Total	114	27	87	65	22	25	
<u>(Houses completed in 1964, as of January 1, 1965)</u>							
Under \$12,500	-	-	-	-	-	-	
\$12,500 - 14,999	2	1	1	1	-	-	
15,000 - 17,499	18	7	11	8	3	27	
17,500 - 19,999	17	4	13	9	4	31	
20,000 - 24,999	37	17	20	13	7	35	
25,000 - 29,999	33	27	6	5	1	17	
30,000 - 34,999	8	3	5	3	2	40	
35,000 and over	3	1	2	1	1	50	
Total	118	60	58	40	18	31	
<u>(Houses completed in 1965, as of January 1, 1966)</u>							
Under \$12,500	-	-	-	-	-	-	
\$12,500 - 14,999	-	-	-	-	-	-	
15,000 - 17,499	21	2	19	16	3	16	
17,500 - 19,999	110	16	94	80	14	15	
20,000 - 24,999	113	23	90	70	20	22	
25,000 - 29,999	24	4	20	18	2	10	
30,000 - 34,999	6	1	5	5	-	-	
35,000 and over	7	1	6	5	1	17	
Total	281	47	234	194	40	17	

^{a/} Selected subdivisions are those with five or more completions during the year.

Sources: Unsold Inventory Surveys conducted by the Lubbock, Texas, FHA Insuring Office.