

728.1
:308
F22

Davenport - Rock Island - Moline, Iowa - Ill.
1965

Analysis of the
**DAVENPORT-ROCK ISLAND-
MOLINE, IOWA-ILLINOIS
HOUSING MARKET**

as of September 1, 1965

DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT
LIBRARY
WASHINGTON, D.C. 20410
APR 7 1966

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

April 1966

ANALYSIS OF THE
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILLINOIS, HOUSING MARKET
AS OF SEPTEMBER 1, 1965

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

APR 7 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, 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.

Table of Contents

	<u>Page</u>
Summary and Conclusions	i
Housing Market Area	1
Map of the Area	2
Economy of the Area	
Character and History	3
Work Force	4
Employment	4
Principal Employers	6
Unemployment	8
Future Employment	9
Income	9
Demographic Factors	
Population	11
Households	13
Housing Market Factors	
Housing Supply	15
Residential Building Activity	18
Tenure	19
Vacancy	20
Sales Market	22
Rental Market	23
Mortgage Market	24
Urban Renewal	24
Public Housing	25
Demand for Housing	
Quantitative Demand	26
Qualitative Demand	27

ANALYSIS OF THE
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILLINOIS, HOUSING MARKET
AS OF SEPTEMBER 1, 1965

Summary and Conclusions

1. Nonagricultural wage and salary employment in the Davenport-Rock Island-Moline HMA totaled about 109,000 as of mid-May 1965. The economy of the area has demonstrated a capacity for steady growth, with wage and salary employment increasing by 12,400 (13.5 percent) between 1961 and 1964. The farm machinery industry accounts for approximately 19 percent of wage and salary employment. Diversification is provided, however, by substantial employment in the primary metals industry (aluminum rolling mill) and government (federal arsenal). Unemployment averaged 2.7 percent during 1964, and generally has been under 4 percent in recent years. It is estimated that nonagricultural wage and salary employment will increase by about 3,000 a year during the next two years, paced by moderate growth in the farm machinery industry.
2. The current median family income, after deduction of federal income taxes, is about \$7,200 a year for all families, and \$6,100 a year for renter families within the HMA. Current income is about 17 percent above the 1959 level and is expected to increase by about 5 percent during the next two years so that the median for all families in 1967 will be about \$7,500, and for renter families about \$6,300.
3. The nonfarm population of the HMA as of September 1, 1965 is about 286,400, which reflects an average annual increase of 5,250, or 2.0 percent, since 1960. It is estimated that the population will increase by about 6,300 a year between now and 1967, reaching a level of 299,000.
4. At the present time there are 87,300 nonfarm households in the HMA. The increase in households has averaged 1,625, or 2.1 percent, a year since 1960. Household formations during the next two years are expected to be a little higher, with net additions of about 2,000 annually, bringing the total to 91,300 by September 1967.
5. There are now about 90,300 nonfarm housing units in the HMA, or an increase of 8,400 since 1960. New units authorized by building permits increased significantly during 1963 (21.5 percent) and 1964 (15.8 percent). Authorizations for the first seven months of 1965 are 64 percent above the level of the corresponding period of 1964, with permits for 1,714 new units issued so far this year. The volume of multifamily housing construction

has been rising since 1963, following several years during which very few units of this type were built. About 570 multifamily units have been authorized thus far in 1965, accounting for 33 percent of all new units, compared with 370 in 1964 (25 percent) and 260 in 1963 (19 percent). As of mid-August there were about 1,600 housing units under construction in the HMA, of which about 675 were in multifamily structures.

6. There are approximately 1,400 vacant housing units available for sale or rent in the HMA as of September 1, 1965, equal to 1.6 percent of the available inventory. The 425 vacant units available for sale represent a homeowner vacancy rate of 0.7 percent, and 975 vacant units available for rent reflect a rental vacancy rate of 3.5 percent. While the number of vacant units available for sales is considered adequate, rental units in the housing market may be somewhat lower than considered desirable.
7. During the September 1, 1965 to September 1, 1967 forecast period, the demand for new housing in the Davenport-Rock Island-Moline HMA will average 2,400 units a year. The annual demand for new sales housing is projected at 1,700 units, and that for rental units will be about 700, excluding public low-rent housing and rent-supplement accommodations. About 200 units of the estimated annual rental demand are at lower rents, which are achievable only through the use of public benefits, or assistance through subsidy, tax abatement, or aid in financing or land acquisition. The demand for new sales and rental housing is distributed by price ranges on pages 27 and 29 of the text.

ANALYSIS OF THE
DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILLINOIS, HOUSING MARKET
AS OF SEPTEMBER 1, 1965

Housing Market Area

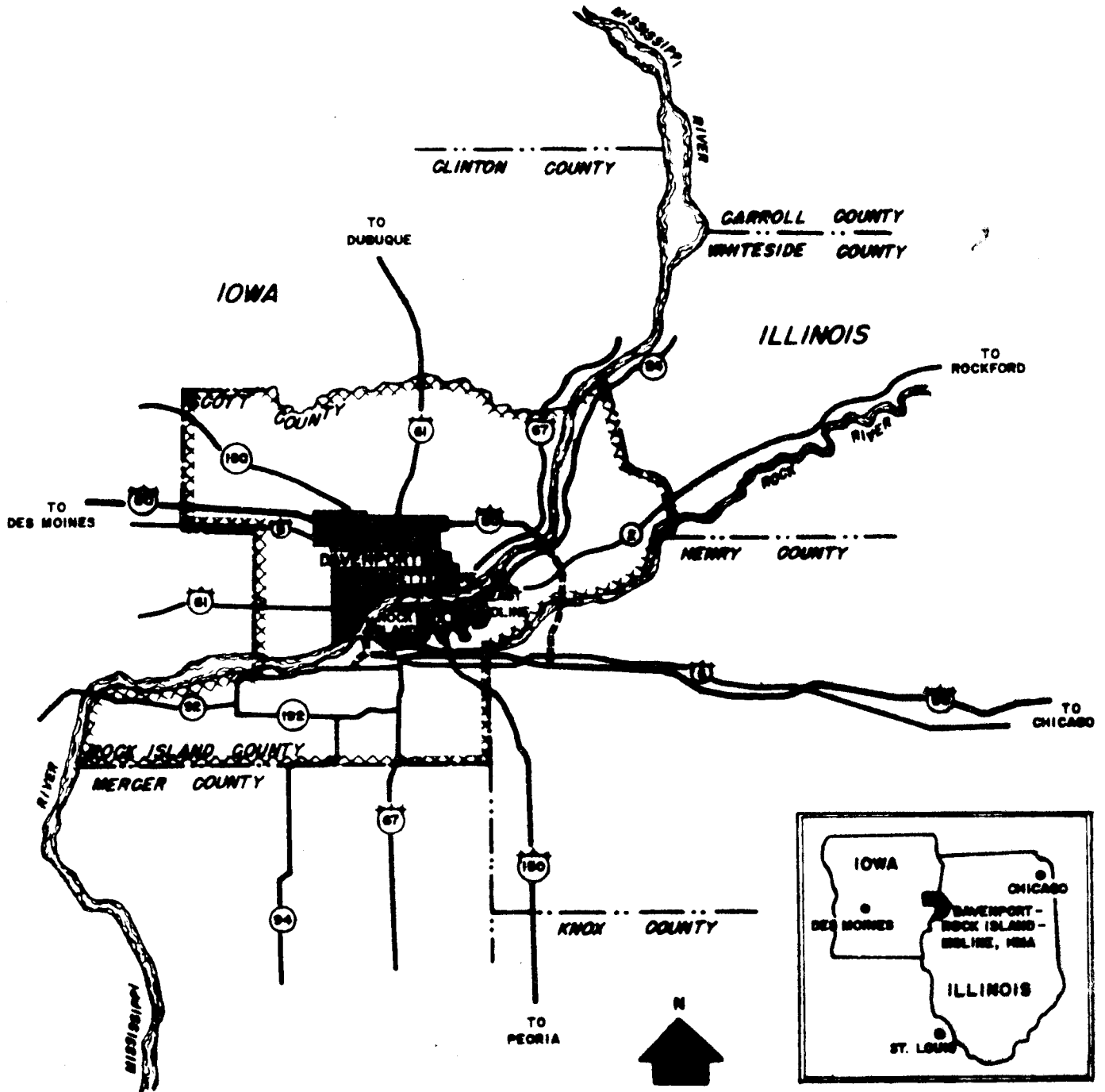
For purposes of this report, the Davenport-Rock Island-Moline, Iowa-Illinois Housing Market Area (HMA) is delineated as Scott County, Iowa and Rock Island County, Illinois. These two counties constituted the Davenport-Rock Island-Moline, Iowa-Illinois Standard Metropolitan Statistical Area (SMSA) as used in the 1960 Censuses of Population and Housing. Henry County, Illinois, was added to the SMSA by the Bureau of the Budget in October 1963, but is not included in the housing market area as defined for this report. The urban core of the HMA is composed of the three major cities of Davenport, Iowa, and Rock Island and Moline, Illinois. The area is commonly identified as the Quad-Cities (including East Moline) although the recent growth of Bettendorf has led to the use of the term Quint-Cities. The Iowa portion of the HMA is under the jurisdiction of the Des Moines FHA field office and the Illinois portion is under the jurisdiction of the Chicago FHA field office.

Since rural farm population constitutes five percent of the population of the HMA in 1960, all demographic and housing data used in this analysis exclude the rural farm component, except where specifically noted. Located in the heart of the vast midwestern farm region and the American corn belt, the housing market area is on the upper rapids of the Mississippi River about 165 miles west of Chicago, Illinois, and 175 miles east of Des Moines, Iowa (see map). It also lies midway between Minneapolis and St. Paul, Minnesota, about 300 miles north on the upper Mississippi River, and St. Louis, Missouri, about 300 miles to the south, and also on the Mississippi.

Excellent transportation facilities are available in the HMA. Four railroads, 69 motor-freight lines, five interstate bus lines, two airlines, and three barge lines provide a wide range of services. Daily rail service includes 44 freight and 12 passenger trains. Extra trains, handling overflow freight traffic to Chicago, operate almost every day. About 450 trucks are dispatched outbound each day and there are 25 scheduled bus arrivals. The two scheduled airlines operate 34 flights daily, including direct service to Chicago, Boston, Providence, New York City, Philadelphia, Omaha, Denver, St. Louis, and many smaller mid-west cities. The 16 barge docks in the area handled over 14 million tons of freight during 1964.

According to the 1960 census of population 7,334 persons who lived outside of the two-county area commuted to work in the housing market area and 1,725 residents of the housing market area traveled to places of employment outside of Scott and Rock Island Counties, indicating a net in-commutation of 5,609 workers.

DAVENPORT - ROCK ISLAND - MOLINE, IOWA - ILLINOIS HOUSING MARKET AREA



Economy of the Area

Character and History

The Davenport-Rock Island-Moline area had been the site of Indian villages for nearly eighty years before the first white settlers arrived about 1808. Early settlement was discouraged by frequent conflict with the Indians, who numbered more than 5,000. However, following the occupation of Rock Island by army troops during the War of 1812, Fort Armstrong was constructed on the western end of the island in 1816, and, with the protection provided by the fort, many settlers began to take advantage of the fertile farm land.

The Mississippi and Rock Rivers were not only important transportation arteries, they also provided good fishing and water power, which contributed to the early settlement of the area. The rapids in the Mississippi often necessitated the layover of boats for better river conditions or the transfer of cargo for overland movement. A ferry was established for crossing the Mississippi and, following the Blackhawk treaty of 1832, the terminals developed into the towns of Davenport and Rock Island. Davenport, the county seat of Scott County, was laid out in 1836 by Colonel George Davenport, who, following an Army career, settled on Rock Island; and Antoine Le Claire, who had been an interpreter for the army at Fort Armstrong. Rock Island was incorporated in 1837, although it was not known by that name until 1841, when it became the site of the Rock Island County Court House.

Construction of a crude brush and stone dam between the Illinois shore and a point near the head of Rock Island and development of a waterpower site led to the settlement of Moline, which was platted in 1843 and incorporated in 1878. The cities of East Moline and Bettendorf developed around the turn of the century. East Moline developed as an industrial suburb of Moline. The relocation of an axle shop from Davenport to Bettendorf in 1900 boosted early growth of this town, which was incorporated in 1903.

Agriculture and related trade provided the basis for the early growth of these communities. The invention of the steel plow by John Deere, who settled in the village of Moline in 1847, led to the development of the farm machinery industry in the area. The company founded by Deere, now the largest producer of farm machinery in the United States, maintains a general office and six plants in the Quad-Cities area. International Harvester and J. I. Case also have established plants in the area for the production of farm equipment. The farm machinery industry, presently, accounts for about 20 percent of all nonagricultural wage and salary employment in the HMA.

Rock Island Arsenal, one of the major arsenals operated by the Federal government, and the Davenport works of the Aluminum Company of America, which is the largest aluminum sheet and plate rolling mill in the world, provide some diversification in the economy of the area.

Work Force

Beginning with January 1965, data for Henry County, Illinois, have been included in the work force and employment figures compiled by the State affiliates of the Bureau of Employment Security for the Davenport-Rock Island-Moline labor market area. However, based on data for the entire labor market area, it is estimated that the civilian work force of the two-county housing market area was approximately 129,250 as of mid-May 1965, with 126,400 persons employed, 2,600 unemployed, and 250 involved in labor disputes. During 1964, when the labor market and housing market area definitions were the same, the civilian work force in the HMA averaged 122,600 with 119,300 persons employed and 3,300 unemployed. The work force has expanded each year since 1957 (the earliest date for which comparable data are available) with the exception of 1958 and 1961, which were periods of economic decline and adjustment, nationally as well as locally. Following the 1961 decline of 1,300, the work force increased by 500 in 1962, then jumped by 3,300 in 1963 and 4,900 in 1964. Since 1961 employment in the HMA has grown more than the work force, resulting in a corresponding decline in unemployment.

Employment

Current Estimate. It is estimated that total civilian employment in the HMA was approximately 126,400 as of mid-May 1965, including nonagricultural wage and salary employment of 109,000, other nonagricultural employment of 12,850, and agricultural employment of 4,550. Civilian employment in the two-county area as of mid-December 1964, as reported by the State employment services, totaled 121,425, which included 106,475 persons employed in nonagricultural wage and salary jobs, 11,775 in other nonagricultural jobs, and 3,175 in agricultural work.

Past Trend. Total employment in the Davenport-Rock Island-Moline area increased each year in the 1957-1964 period with the exception of 1958 and 1961, which, as noted, were periods of nationwide economic decline and adjustment. Annual average employment in the HMA increased by 4,000 during 1963 and 5,200 during 1964. A gain of 1,900 during 1962 was just enough to offset the loss of 1,800 experienced during the 1961 period of economic adjustment. Increases of 5,300 in 1960 and 5,000 in 1959 reflect a quick recovery from the 1958 recession, which had caused a decline of 3,800 in total employment in the housing market area.

Annual average nonagricultural wage and salary employment has increased somewhat more than total employment from 1961 through 1964 (the earliest date for which comparable data are available) as employment in other than wage and salary jobs declined. About half of the recent gains have been in the farm machinery industry, reflecting a recovery from the 1960 and 1961 slump experienced by this industry. About half of the 1962 gain in employment was in the government component, including job increases at the Rock Island Arsenal.

Trends in work force and employment levels since 1957 are shown in the following table.

Work Force and Employment Trends
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
Annual Averages (in thousands) 1957-1964

<u>Year</u>	<u>Civilian work force</u>	<u>Employed</u>			<u>Unemployed</u>
		<u>Total</u>	<u>Nonagricultural wage and salary</u>	<u>All other</u>	
1957	107.1	103.5	NA	NA	3.6
1958	104.4	99.7	NA	NA	4.7
1959	108.0	104.7	NA	NA	3.3
1960	115.2	110.0	NA	NA	5.2
1961	113.9	108.2	92.1	16.1	5.7
1962	114.4	110.1	94.7	15.4	4.3
1963	117.7	114.1	98.8	15.3	3.6
1964	122.6	119.3	104.5	14.8	3.3

Source: U. S. Bureau of Employment Security.
Bureau of Employment Security, Illinois State Employment Service.
Iowa Employment Security Commission, Iowa State Employment Service.

Distribution by Major Industry. Manufacturing accounted for 40.7 percent of all nonagricultural wage and salary employment in the HMA in 1964, compared with 37.9 percent in 1961. The farm machinery industry, with 19,600 employees, accounted for 18.8 percent of wage and salary employment in 1964, considerably more than any other industry. In 1961, farm machinery accounted for a smaller share of wage and salary employment, 15.5 percent with 14,250 workers. Employment in the primary metals industry increased from 5,050 in 1961 to 6,050 in 1964, representing 5.8 percent of wage and salary employment in 1964 versus 5.5 percent three years earlier. Increased employment in nonelectrical machinery also contributed to the overall rise in manufacturing employment during the period.

In the nonmanufacturing segment of wage and salary employment, 15,500 government workers represented 14.8 percent of total nonagricultural wage and salary employment in 1964. About one-third of these government workers were employed by the Rock Island Arsenal. Although the number of government workers increased by 1,925 between 1961 and 1964, employment in this category as a percentage of total wage and salary employment increased only slightly. Government employment is second only to the farm machinery industry in number of jobs provided in the HMA. Retail trade accounted for almost as many jobs as government in 1964, with 15,075 workers representing 14.4 percent of all wage and salary employment. Services also constitute a relatively large share of wage and salary employment, with 11,800 workers accounting for 11.3 percent of the total in 1964. Next in importance from the standpoint of number of employees are the 5,375 wholesale trade employees, which represented 5.1 percent of nonagricultural wage and salary employment in 1964. No other industry group represented as much as 5 percent of the 1964 wage and salary total. Year-to-year changes in nonagricultural wage and salary employment from 1961 to 1964 are shown by major industry groups in table I. The changes between 1961 and 1964 are shown separately for Scott County, Iowa, and Rock Island County, Illinois, in table II.

Participation Rate. The ratio of employment to the population of the area constitutes the employment participation rate. The participation rate in the Davenport-Rock Island-Moline HMA declined from 41.10 to 38.76 between 1950 and 1960 as measured by census reports of nonfarm population and resident employment in nonagricultural industries. The downward trend in the participation has been reversed since 1960. Calculated on the basis of nonagricultural wage and salary employment (by location of the jobs rather than the residence of the workers), the participation rate increased from 34.42 in 1959 to 37.15 at the present time. The increase in the participation rate during the past five and three-fourth years is consistent with the increase in employment and decline in unemployment in the HMA during this period.

Principal Employers

The 1963 Census of Business and the 1963 Census of Manufacturers reported 2,437 retail establishments, 504 wholesale firms, and 386 manufacturing concerns in the HMA. Local sources indicate that, at present, there are eight companies in the area that each employ 1,000 or more workers, including four that have more than 3,000 employees each. Nineteen other firms each have between 250 and 1,000 employees. The following paragraphs present the approximate employment levels of some of the principal employers in the HMA as recently published in a prospectus of the Quad City Area prepared by the Iowa-Illinois Industrial Development Group.

Deere & Company is the largest employer with a current work force in the HMA of about 9,500. Deere & Company is now the leading producer of farm machinery in the U.S., having displaced International Harvester in 1958. The company also produces light industrial equipment. Operations in the HMA account for about one-fourth of total company employment, and include the general office, Planter Works, Plow Works, and John Deere Industrial Division in Moline, and Harvester Works, Spreader Works and Malleable Works in East Moline. Based on total sales, the company ranked 71st among the largest industrial corporations in the U.S. during 1964.

International Harvester is the second largest employer with a work force in the HMA of about 7,600. With a total work force of about 110,000 in 1964, this company is one of the largest industrial enterprises in the country. Trucks and industrial equipment account for approximately two-thirds of International Harvester's business. In domestic production of farm machinery, the company ranks second, and is second only to the Canadian-based firm of Massey-Ferguson in sales outside of North America. International Harvester operations in the HMA include the Farmall Works in Rock Island for tractor production and the East Moline works, where combines are produced.

Rock Island Arsenal ranks third in total employees in the HMA, with about 4,400 employed at the present time. The Arsenal, which was established in 1862, is now the home of the Army Weapons Command, which is responsible for the design, development and procurement of 90 percent of the weapons in the army inventory. The primary operations at the Arsenal are research, engineering and prototype production, but some weapons components are produced in small quantity. The Arsenal also operates a sizeable tank and artillery rebuilding program. Other activities at the Arsenal include the Defense Surplus Sales Office, which has the mission of disposing of all surplus and scrap materials of all the services at installations in Iowa, Illinois, Minnesota, Wisconsin, and the upper Michigan Peninsula; the U.S. Army Management Engineering Training Agency, which has a curriculum of more than 50 courses in management engineering and graduates approximately 5,000 students each year; the Installations and Services Agency and the Production Equipment Agency which are subordinate commands of the Army Material Command. Rock Island is considered one of the most efficient arsenals in the army. During World War II employment at the Arsenal reached a peak of more than 18,000, and during the Korean conflict employment was about 8,000.

Aluminum Company of America currently employs about 3,400 workers in the HMA. Alcoa's Davenport Works, located east of Bettendorf, is the largest sheet and plate aluminum rolling mill in the world.

Oscar Mayer & Company, a meat packing firm with headquarters in Chicago, operates a plant in Davenport which employs about 1,500 workers. Total company sales amounted to about \$300 million in 1964, and total employment in all company plants was about 8,100 at the end of 1964.

J. I. Case, another full-line farm equipment manufacturer, employs about 1,500 workers in two plants in the HMA, one located in Bettendorf and one in Rock Island. The Rock Island plant, which was closed during 1963, currently employs about 250 workers.

Unemployment

Based on data for the three-county labor market area, it is estimated that unemployment in the Davenport-Rock Island-Moline HMA as of mid-May 1965 was 2.0 percent of the civilian work force, with 2,600 persons unemployed. During 1964, when the labor market and housing market areas were coextensive, the unemployment rate averaged 2.7 percent, with 3,300 persons unemployed. During the last two years, job opportunities in the Davenport-Rock Island-Moline area have been considered by the Bureau of Employment Security to be nearly in balance with the number of available workers. Low unemployment during this period is attributed to sizeable gains in the farm machinery industry and a general upturn in other factory employment. The unemployment rate has been below four percent since 1957 (the earliest year for which comparable data are available) with the exception of 1958 and 1960, when it averaged 4.5 percent, and 1961, when it was 5.0 percent. The unemployment trend in the HMA since 1957 is summarized in the following table.

Unemployment Trend
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
1957-1964

<u>Year</u>	<u>Number unemployed</u>	<u>Percent of civilian work force</u>
1957	3,600	3.4
1958	4,700	4.5
1959	3,300	3.1
1960	5,200	4.5
1961	5,700	5.0
1962	4,300	3.8
1963	3,600	3.1
1964	3,300	2.7

Source: U.S. Bureau of Employment Security.

Estimated Future Employment

Employment in the farm machinery industry is not expected to expand as rapidly during the next two years as it has during the past three or four, although moderate growth is anticipated as a result of sustained farm income, improved and expanded product lines, and expanding foreign markets. Considering the prospect for favorable economic conditions nationally, it is estimated that nonagricultural wage and salary employment in the HMA will increase by about 3,000 during each of the next two years.

No allowance has been made in the current projection for the possibility that employment at the Rock Island Arsenal might be increased by 800 by the transfer of the research and development mission from the Springfield Armory in Massachusetts, which has been proposed by the Department of Defense. The final decision on this transfer will not be made until a re-evaluation of all army arsenals has been completed by a private management consulting firm. The effect of this possible increase in employment is discussed separately in the demand section of this report.

Income

Manufacturing Wages. Weekly earnings of manufacturing production workers in the Davenport-Rock Island-Moline HMA averaged \$125. in May 1965 for an average work week of 40.7 hours at an average hourly wage of \$3.08. The May 1965 average weekly earnings were 10.8 percent above average weekly earnings in 1962. The rise in average weekly earnings results from a 9.6 percent gain in average hourly earnings and a slight increase in hours worked. The trend in average hours and earnings from 1962 to 1964 is shown in the following table.

Average Hours and Earnings of Production Workers
on Manufacturing Payrolls
Davenport-Rock Island-Moline, Iowa-Illinois, HMA, 1962-1964

<u>Period</u>	<u>Average hourly earnings</u>	<u>Average weekly hours worked</u>	<u>Average weekly earnings</u>
1962	\$2.81	40.3	\$113.15
1963	2.94	40.6	119.29
1964	3.06	41.3	126.35

Source: U.S. Bureau of Labor Statistics.

Nonfarm Family Income. The current median nonfarm family income, after deduction of Federal income taxes, is estimated to be \$7,200 for all nonfarm families in the HMA, and about \$6,100 for renter nonfarm families. Current nonfarm incomes are about 17 percent above the 1959 levels and are expected to increase by an additional 5 percent by 1967, at which time rental housing projects now under consideration should be completed and occupied. Estimated median after-tax nonfarm incomes for all families and for renter families in 1965 and 1967 and corresponding percentage distributions are shown in table III.

Demographic Factors

Population

Current Estimate. The nonfarm population of the Davenport-Rock Island-Moline HMA is about 286,400 as of September 1, 1965. The current population of Scott County, Iowa, is about 124,700 and that of Rock Island County, Illinois, is about 161,700. Less than three percent of the HMA population is nonwhite. The area population includes 121 military personnel assigned to the Rock Island Arsenal. The rural-farm population is excluded since it is not a factor in the urban housing market.

Past Trends. The current nonfarm population of the HMA reflects an average annual increase of 5,250, or 2.0 percent, since 1960. The rate of growth has been a little higher since 1960 than it was between 1950 and 1960, when the nonfarm population increased by an average of 3,850 persons, or 1.8 percent, annually. In 1960, rural farm totaled 12,000, or about five percent of the HMA population. The increase in nonfarm population between 1950 and 1960 was due, in part, to a conceptual change in the definition of farm population in the 1960 census. This change tends to inflate 1960 nonfarm population and household data, as compared with 1950 data.

The present population of Scott County reflects an average annual increase of 2,250, or 2.0 percent, since 1960, compared with 2,000 each year, about 2.2 percent, in the previous decade.

The nonfarm population of Rock Island County has increased by an average of 3,000 persons a year since 1960, indicating an annual rate of growth of 2.1 percent. The rate of growth in the Illinois portion of the HMA since 1960 is higher than in the 1950 to 1960 period, when the average annual increase in the population was about 1,850, or 1.4 percent.

A comparison of population trends with employment trends reveals that population growth was directly proportional to expanding employment opportunities in both the Iowa and Illinois segments of the HMA during the 1950 to 1960 decade. Since 1960, however, about two-thirds of the population growth in the Iowa portion of the HMA has been supported by the increase in employment in the Illinois segment.

Estimated Future Population. It is estimated that the population of the HMA will increase by 6,300 during each of the next two years, reaching a level of 299,000 by September 1967. The average annual

increase will be about 2,750 in Scott County, Iowa, and 3,550 in Rock Island County, Illinois, resulting in county populations of 130,200 and 168,800, respectively, by September 1967. About one-third of the population growth in the Iowa portion of the HMA will be dependent on new job opportunities expected in the Illinois portion of the HMA. Population trends and projections are summarized in table IV.

Natural Increase and Migration. From 1960 to the present time there has been an average of 6,350 births and 2,700 deaths in the Davenport-Rock Island-Moline HMA each year, resulting in a net natural increase of about 3,650. Comparison of the net natural increase with the estimate of total nonfarm population growth during the same period indicates that an average of 1,600 persons have migrated into the HMA each year since 1960. The current rate of in-migration is much higher than the rate recorded during the 1950-1960 period, when the average increase in the nonfarm population resulting from migration was only 370 a year.

In-migration is projected to continue throughout the 1965 to 1967 forecast period of this analysis at a slightly higher rate than that which was reported for the 1960 to 1965 period. During the next two years net in-migration is expected to add about 2,600 people to the population of the area each year. Net natural increase during the same period will average about 3,700 each year. The components of nonfarm population changes are summarized by county location in table V.

Age Distribution. The most significant change in the age composition of the HMA population since 1950 is the great increase in the number of persons under 20 years of age. This group has expanded by 70 percent since 1950, and now represents over 40 percent of the total nonfarm population compared with 31 percent in 1950. The elderly segment of the population also has increased more than proportionately since 1950, with the number of people age 70 and over now representing about 6.5 percent of the total population compared with 5.5 percent in 1950.

From the standpoint of housing demand, the most notable changes in the age distribution of the HMA population since 1950 have been in the 20 to 29 year age group. This group, representing the marrying and family-forming portion of the population which has a large impact on the rental segment of the housing market, decreased by an average of 350 persons a year between 1950 and 1960, but has been increasing by an average of nearly 750 a year since 1960. The 30 to 39 year old age group, which is more likely to be in the sales housing market, has grown very little since 1950, increasing by an average of about 20

APR 7 1966

a year between 1950 and 1960 and declining by an average of about 125 a year since 1960. The distribution of the population by selected age groups as of April 1950 and 1960, and September 1965 is shown in table VI.

Households

Current Estimate. The number of nonfarm households in the Davenport-Rock Island-Moline HMA as of September 1, 1965 is approximately 87,300 which is 8,775 more than reported by the census in April 1960, indicating an average increase of 1,625 households a year. There are now about 37,700 households in Scott County, Iowa, and 49,600 in Rock Island County, Illinois. The number of households in Scott County has increased by 3,700 and, in Rock Island County, by 5,075, since 1960.

Past Trend. The number of nonfarm households in the HMA increased by an average of 1,370 a year between 1950 and 1960 from 64,850 to 78,550, a gain of 21 percent, including 670 a year in Scott County and 700 a year in Rock Island County. The increase in households between 1950 and 1960 was due, in part, to a conceptual change in definition from "dwelling unit" in 1950 to "housing unit" in the 1960 census.

Estimated Future Households. Based on the population increments projected previously and on the assumption that the average household size in the HMA will decline slightly during the next two years, it is estimated that there will be 91,300 nonfarm households in the Davenport-Rock Island-Moline HMA as of September 1, 1967. Net household additions will average 2,000 a year during the two-year forecast period for a total gain of 4,000. Households are projected to increase by 850 a year in Scott County and by 1,150 a year in Rock Island County. Household trends are summarized in table VII.

Household Size. The average size of nonfarm households in the HMA is calculated at 3.19 persons at the present time, reflecting no change from the average size indicated by the 1960 census. The average household in Scott County is 3.22 persons, a little larger than the 3.17 average in Rock Island County. Average household size declined between 1950 and 1960 in the HMA and in the two component counties. Trends in average household size from 1950 to 1965 are summarized in the following table.

Average Nonfarm Household Size
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
1950, 1960, and 1965

<u>Area</u>	April 1,	April 1,	September
	<u>1950</u>	<u>1960</u>	<u>1965</u>
HMA	3.33	3.19	3.19
Scott County	3.35	3.22	3.22
Rock Island County	3.31	3.17	3.17

Source: 1950 and 1960 Censuses of Population.
1965 estimated by Housing Market Analyst.

Housing Market Factors

Housing Supply

Current Estimate. As of September 1, 1965, there are 90,300 nonfarm housing units in the Davenport-Rock Island-Moline HMA. The current inventory represents an increase of 8,400 over the April 1960 count of 81,900 units reported by the census. The current estimate is based on a gain of 9,700 new units, as reflected in authorizations by building permits and a net loss of about 1,300 units, as shown by conversion, wrecking and condemnation records.

The Scott County, Iowa housing stock now totals about 39,300 units compared with 35,400 in 1960. The net increase of 3,900 units has been achieved through the construction of 4,600 new units while a net of 700 units were being removed from the inventory by conversion, demolition, and catastrophe. In Rock Island County, Illinois the housing inventory now stands at 51,000 units compared with 46,500 in 1960. The net increase of 4,500 units in the Illinois portion of the HMA stems from the completion of 5,100 new units and the net loss of 600 units.

Past Trend. The current housing inventory reflects an average net addition of 1,550 units each year since 1960, with 720 units added annually in Scott County, and 830 in Rock Island County. The average annual net additions to the HMA housing stock since 1960 are about the same as the average during the 1950 to 1960 decade. Changes in the housing inventories of the two counties since 1960 have varied from the 1950 to 1960 pattern, however. Activity in Scott County has been slightly higher since 1960 and slightly lower in Rock Island County than in the previous decade.

Type of Structure. Single-family structures presently account for 75.6 percent of all housing units in the HMA compared with 74.9 percent in 1960. New construction since 1960 has closely followed the established pattern in relation to size of structure, although a small rise in the volume of multifamily construction during 1963 and 1964 has added to the inventory of units in 5-or-more unit structures, which now represent 7.1 percent of the total housing stock compared with 7.0 percent in 1960.

Nonfarm Housing Inventory by Units in Structure
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
April 1, 1960 and September 1, 1965

<u>Size of structure</u>	<u>April 1, 1960</u>		<u>September 1, 1965</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
1 unit	61,344	74.9	68,275	75.6
2 to 4 units	13,183	16.1	13,750	15.2
5 or more units	5,746	7.0	6,425	7.1
Trailers	<u>1,630</u>	<u>2.0</u>	<u>1,850</u>	<u>2.1</u>
Total	<u>a/ 81,903</u>	<u>100.0</u>	<u>90,300</u>	<u>100.0</u>

a/ Differs slightly from count of all nonfarm units (81,922) because units by type of structure were enumerated on a sample basis.

Source: 1960 Census of Housing, and estimates of Housing Market Analyst.

Year Built. Based on the number of building permits issued since 1960, it is estimated that 10.8 percent of the current housing inventory is less than six years old. Assuming that most of the units removed by demolition were built prior to 1930, it is estimated that 20.7 percent of the current inventory is 10 years old or less, 23.0 percent is between 10 and 25 years old, 8.5 percent is between 25 and 35 years old, and a large portion, 47.8 percent, is 35 or more years old.

Housing Inventory by Year Built
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
As of September 1, 1965 a/

<u>Year built</u>	<u>Approximate current age</u>	<u>Number of units</u>	<u>Percent of inventory</u>
Apr. 1960 - Aug. 1965	Less than 6 years	9,725	10.8
1955 - March 1960	6-10 years	8,900	9.9
1950 - 1954	10-15 years	9,225	10.2
1940 - 1949	15-25 years	11,550	12.8
1930 - 1939	25-35 years	7,650	8.5
1929 or earlier	35 years or more	<u>43,250</u>	<u>47.8</u>
Total		<u>90,300</u>	<u>100.0</u>

a/ The basic data 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.

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

Condition and Plumbing Facilities. Assuming that all of the new units added to the housing inventory since 1960 were of good quality and that most of the units removed by demolition were substandard, it is estimated that, currently, there are about 10,400 nonfarm units that are dilapidated or lack some plumbing facilities, representing about 11.5 percent of the total housing stock of the HMA. As of April 1, 1960, the census of housing indicated 11,700 units in these categories, representing 14.3 percent of the housing at that time. A total of 3,000 nonfarm units was listed as dilapidated in 1960 and 8,700 were described as lacking some or all plumbing facilities. Over 85 percent of the units classified as dilapidated in 1960 were occupied, 880 by owners and 1,680 by renters. Similarly, most units lacking some or all plumbing facilities were occupied (89 percent) 2,600 by owners and 5,100 by renters. In April 1950, the census of housing reported 2,750 nonfarm units that were dilapidated and 17,600 that lacked some or all plumbing facilities. The 20,350 units in these two categories represented 30 percent of the 1950 housing stock. Definitional changes make meaningful comparisons of the 1950 and 1960 data difficult, but there appears to have been substantial improvement of the housing stock since 1950, either by rehabilitation or replacement.

Value and Rent. The median value of owner-occupied houses in the Davenport-Rock Island-Moline HMA was reported to be \$13,100 in the 1960 Census of Housing. The median-value was a little higher in Scott County than in Rock Island County. The median price asked for vacant houses available for sale was \$15,800, with a higher price reported in Scott County than for Rock Island County. Median gross rent was reported to be \$74 a month for occupied units and \$61 a month was the median price asked for vacant units available for rent.

Median Value and Rent
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
April 1, 1960

<u>Area</u>	<u>Median value</u>		<u>Median gross rent</u>	
	<u>Owner-occupied</u>	<u>For sale</u>	<u>Renter-occupied</u>	<u>For rent</u>
HMA	\$13,100	\$15,800	\$74	\$61
Scott County	13,800	17,100	75	65
Rock Island County	12,500	14,900	73	57

Source: 1960 Census of Housing.

Residential Building Activity

Past Trend. As measured by building permits issued, the volume of new construction in the HMA increased significantly during 1963 and 1964. The 1,960 housing units authorized by permits in 1963 reflected an increase of 347 units, or 21.5 percent, over the number of units authorized in 1962 and the 2,269 units authorized during 1964 represented a gain of 309 units, or 15.8 percent, over the 1963 total. Residential building activity for the first seven months of 1965 is 64 percent above the level for the first seven months of 1964, with 1,714 units authorized so far this year compared with 1,046 for the same period in 1964. Activity has increased more in the Iowa portion of the HMA than in the Illinois portion so far this year.

The volume of multifamily housing construction has been rising since 1963 following several years during which very few units of this type were built. This activity may reflect the increase in the number of persons in the 20 to 29 year old age group. About 570 multifamily units have been authorized thus far in 1965, accounting for 33 percent of all new construction, compared with 570 units in 1964 (25 percent of the total), and 360 units in 1963 (19 percent of the total). However, current construction includes one 272-unit garden-type project in Davenport for which the concrete footings were poured in August. New housing units authorized by building permits in the Davenport-Rock Island-Moline HMA are shown in table VIII.

Seventy-eight percent of all new residential building activity in the HMA since 1960 has been in the five major cities; 28 percent in Davenport, 16 percent in Bettendorf, 14 percent in Moline, 10 percent in East Moline, and 10 percent in Rock Island. Year-to-year construction activity as measured by building permits is shown for these principal cities in table IX.

Units Currently Under Construction. There were 1,600 housing units under construction in the HMA as of mid-August as reflected by a count made by postal carriers in the conduct of a postal vacancy survey. The carriers reported 925 residences and 675 apartments under construction. The number of units under construction at this time is above normal as a result of delays in construction caused by bad weather and floods early this year.

Demolitions. Approximately 1,300 housing units have been removed from the housing stock of the area as a result of demolitions since the beginning of 1960. Demolitions in the city of Rock Island were higher than usual during 1964 as a result of highway construction and urban renewal activity. Demolition trends for the three principal cities are shown in the following table.

Demolition Trends
Davenport-Rock Island-Moline, Iowa-Illinois HMA
1960-1964

<u>Year</u>	<u>Total</u>	<u>Davenport</u> ^{a/}	<u>Rock Island</u>	<u>Moline</u>
1960	241	145	72	24
1961	219	114	77	28
1962	219	133	49	37
1963	211	136	43	32
1964	360	109	213	38

a/ Reporting year beginning in April.

Source: Local building inspection offices.

Demolitions may be expected to continue at a rate of about 250 a year during the next two years. Although a precise schedule is not available, current plans call for the removal of about 215 housing units in connection with new highway construction during the next three years. Condemnations and privately motivated demolitions will account for the rest of the anticipated losses. Urban renewal activities will not involve the removal of any housing units during the forecast period of this analysis.

Tenure

Current Estimate and Past Trend. As of September 1, 1965, about 69 percent of all occupied nonfarm housing units in the HMA are owner-occupied. Owner-occupancy at the present time is higher than it was in April 1960 when the rate was about 67 percent. The increase in owner-occupancy in recent years is a continuation of the trend shown between 1950 and 1960, although not nearly of the same magnitude. Owner-occupancy of nonfarm housing units increased from 61 percent in 1950 to 67 percent in 1960.

Tenure of Occupied Nonfarm Housing Units
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
1950, 1960, and 1965

<u>Tenure</u>	<u>April 1, 1950</u>		<u>April 1, 1960</u>		<u>September 1, 1965</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Total	64,836	100.0	78,529	100.0	87,300	100.0
Owner-occupied	39,353	60.7	52,912	67.4	60,300	69.1
Renter-occupied	25,483	39.3	25,617	32.6	27,000	30.9

Source: 1950 and 1960 Censuses of Housing.
1965 estimated by Housing Market Analyst.

Vacancy

April 1960 Census. In April 1960, the Census of Housing reported that there were 3,400 vacant nonfarm housing units in the Davenport-Rock Island-Moline HMA, of which 1,575 were listed as available for sale or rent, indicating an over-all vacancy rate of 4.1 percent. The 490 units listed as available for sale only, represent a homeowner vacancy rate of 0.9 percent, and 1,085 units available for rent, a rental vacancy rate of 4.1 percent.

The homeowner vacancy rates were almost identical in the Iowa and Illinois portions of the HMA, with 220 vacant units available for sale in Scott County reflecting a vacancy rate of 0.9 percent, and 270 vacant units in Rock Island County representing a homeowner vacancy rate of 0.8 percent. The rental vacancy rate in Scott County was a little higher than in Rock Island County in 1960. A total of 510 vacant units were available for rent in Scott County (4.1 percent), and 575 in Rock Island County (3.8 percent).

Vacant rental units were concentrated in older structures, frequently those lacking some or all plumbing facilities. Over 91 percent of all vacant units available for rent were in structures built prior to 1950, and over 41 percent lacked some or all plumbing facilities. Vacant units available for sale were newer than those for rent. Over 54 percent of the vacant units available for sale were less than 10 years old, and 90 percent were complete with all plumbing facilities. A total of 50 vacant units available for sale lacked some or all plumbing facilities.

Postal Vacancy Survey. A postal vacancy survey was conducted in the Davenport-Rock Island-Moline area in August 1965, covering 77,100 possible deliveries, or about 85 percent of the estimated housing inventory of the two-county area. The survey reveals an over-all vacancy rate of 1.5 percent with a 1.0 percent vacancy rate in residences, and a 4.1 percent vacancy rate in apartments.

Vacancies in the Iowa portion of the survey area were a little higher than in the Illinois portion. The vacancy rates in Scott County, Iowa were 1.2 percent for residences and 4.9 percent for apartments compared with rates of 0.8 percent and 3.2 percent, respectively, in Rock Island County, Illinois.

The results of the August 1965 postal vacancy survey are shown in detail in table X. 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.

Current Estimate. There are approximately 1,400 housing units available for sale or rent in the Davenport-Rock Island-Moline HMA as of September 1, 1965, equal to 1.6 percent of the available inventory. There are currently about 425 vacant units available for sale representing a homeowner vacancy rate of 0.7 percent. Vacant units available for rent total about 975 at the present time, reflecting a current rental vacancy rate of 3.5 percent. It is estimated that 50 of the vacant units available for sale lack some or all plumbing facilities. About 275 of the vacant units available for rent also lack some or all plumbing facilities.

Based on the moderate rate of population growth in the area, the current level of vacancies in the sales market is about adequate. However, vacancy in available rental units in the housing market area may be somewhat below the level desirable for balanced demand-supply relationships. Vacancy trends are summarized in table XI.

Sales Market

General Market Conditions. The volume of home sales in the Davenport-Rock Island-Moline HMA expanded significantly during 1963 and 1964, registering new highs in total number of new single-family homes built and sold. Sales for the first seven months of 1965 are running well ahead of the 1964 level for the same period. A moderate amount of speculative building is evident, but the inventory of unsold new houses has remained very low for the past two years.

Major Subdivision Activity. The most active subdivisions at present are located in the north central part of Davenport, just north of Kimberly Road (U.S. Route 6) and on either side of Harrison Street (State Route 150) and Brady Street (U.S. Route 61). The larger subdivisions in this area have a combined total of about 75 units under construction, featuring a variety of three-bedroom homes priced between \$16,500 and \$24,500. New homes are being added in many smaller subdivisions throughout the area, particularly in Bettendorf and Moline.

Unsold Inventory of New Homes. In January 1965, the Des Moines, and the Chicago insuring offices surveyed a total of 26 subdivisions in the HMA in which five or more houses had been completed in 1964. The survey revealed a total of about 430 houses completed in these subdivisions during the year, of which about 260 had been sold before construction had been started. Of the nearly 165 houses built on a speculative basis, only 8 units (5 percent) remained unsold at the time of the survey.

Over 55 percent of the houses completed in these 26 subdivisions were priced to sell between \$15,000 and \$20,000. Sixteen percent of the new units were offered at prices below \$15,000, and 29 percent were listed to sale at more than \$20,000.

A comparable survey of unsold new houses for the year 1963 reported approximately 580 completions in 36 subdivisions, of which 400 had been sold before construction had started. A higher percentage of speculatively built units remained unsold at the end of 1963 than at the end of 1964. About 26 percent of the new homes built during 1963 were priced to sale at \$20,000 or more, 58 percent were offered at \$15,000 to \$20,000, and, as in 1964, about 16 percent were priced below \$15,000. New sales housing completed in the past twelve months is shown by county location in table XII.

Foreclosures. Foreclosures of FHA-insured single-family houses have been almost negligible in the Davenport-Rock Island-Moline HMA. Since 1960, there have been 13 foreclosures in Scott County and five foreclosures in Rock Island County. Foreclosures of conventionally-financed homes have also been very few according to reports of local mortgage lenders.

Rental Market

General Condition. As previously noted, the current rental vacancy rate in the HMA is low and many of the vacancies are of poor quality. With the exception of 1963 and 1964, very few multifamily rental units have been built in recent years. New rental units built during the past two years have been readily absorbed and the market for new rental units continues to be strong.

General Marketing Experience. Over 75 percent of the rental units in the HMA were built prior to 1939 and are now at least 25 years old. As of the 1960 census, 45 percent of all occupied rental units were in single-family structures and about 35 percent were in structures of 2 to 4 units. The remaining 20 percent, in structures of 5 or more units, totaled about 5,100 units. Since 1960, about 750 new rental units in structures containing five or more units have been added to the housing stock of the area.

Typical rents for new units are now about \$125 to \$135 a month for one bedroom apartments, \$135 to \$150 a month for two bedroom units, and \$150 to \$185 a month for three bedroom units. Rents include all utilities except electricity. Most new units are air conditioned and stoves and refrigerators are provided. Several new projects offer luxury features including swimming pool, carports, disposals, and dishwashers. These projects provide a selection of two and three bedroom apartments at monthly rentals of \$200 to \$300. Rents in older rental units vary widely according to age, condition, and facilities provided.

Rental Housing Under Construction. There are currently about 675 rental units under construction in the HMA. The largest project is a 272-unit, garden-type apartment complex now under development

in Davenport. In addition to the units now under construction, a permit was issued in August for a 112-unit garden-type project in East Moline to contain 40 one bedroom apartments and 72 two bedroom apartments. The project is scheduled to be constructed in two phases with the first 56 units to be completed by the end of this year. Features of the project include a swimming pool, 100 car parking area, patio or balcony for each apartment, air conditioning, and carpeting.

Mortgage Market

Mortgage funds are readily available in the HMA from commercial banks, savings and loan associations, and insurance companies, although lenders tend to be selective. Conventional loans are available from insurance companies with loan-to-value ratios of 75 percent, 5½ percent interest, and terms up to 30 years. Savings and loan associations typically provide 80 percent loans (loan-to-value ratios) at 5 3/4 to 6 percent interest rates, with 20-year terms. A few 90 percent mortgages with terms up to 25 years are made by the savings and loan associations.

Urban Renewal

Rock Island County, Moline, and Milan have received Federal grants under the Urban Planning Assistance Program as provided by Section 701 of the National Housing Act. In addition to this planning activity, urban renewal activity in the HMA includes two renewal projects and a general neighborhood renewal plan in the city of Rock Island.

Blackhawk Heights (R-57). This relatively small project in Rock Island will displace 20 families. The cleared area will be redeveloped for residential use. The project is expected to enter the execution stage in 1966.

Garnsey Square (R-41). The Garnsey Square project borders on the Mississippi River in the western part of Rock Island. Primarily an industrial area to begin with, 135 families and 28 individuals have been relocated, and the area is to be improved for industrial use. An additional 80 families were relocated from the general area to make room for a section of Interstate Highway 199, which will border the renewal area. The area has been cleared since January of this year. Twenty-four of the families relocated by the urban renewal agency moved into low-rent public housing projects.

Public Housing

There are about 570 low-rent public housing units in the HMA at the present time with 187 units in four projects in East Moline, 184 units in one project in Moline, 147 units in two projects in Rock Island, and 50 units in one project in Milan. One project consisting of 160 units designed for senior citizens is under development in Rock Island, and an application has been submitted for 50 units of low-rent housing for the elderly in Milan.

Demand for Housing

Quantitative Demand

The demand for new housing in the Davenport-Rock Island-Moline HMA during the next two years is based on the anticipated addition of 2,000 new households each year with appropriate adjustments for expected inventory losses, changes in tenure of occupancy, the present level of available vacancies, and the current rate of construction. Based on these considerations, it is calculated that the demand for new housing units in the HMA will average about 2,400 units a year during the September 1965 to September 1967 forecast period. The demand for new sales housing is projected at 1,700 units each year and the demand for new rental units is calculated to be about 700 units a year.

Consideration has been given to the probability that part of the demand for rental units will be satisfied by single-family houses as in the past. A portion of the projected annual demand for new rental housing, about 200 units, will become effective only at the lower rents made possible through the use of public benefits, or assistance through subsidy, tax abatement, or aid in financing or land acquisition. This demand estimate does not include public low-rent housing or rent-supplement accommodations.

The annual demand for 1,700 new sales houses equals the average number of single-family units built and sold, annually, during the past two years and reflects the current balance between demand and supply in this segment of the housing market. Although, the projected demand for 700 new rental units calls for an increase of about 200 units a year over the 1964 level of multifamily construction, the increase results entirely from the additional demand which might be generated at the lower rents achievable with public assistance. The 1964 level of multifamily construction was above the average for recent years but is believed to be appropriate for the next few years as well, in view of the volume of new rental units constructed since 1960 and the current rental vacancy rate in the HMA. About 40 percent of all new multifamily housing construction since 1960 has been in two- to four-unit structures and demand for this type of rental unit is expected to continue throughout the 1965 to 1967 forecast period, although at a somewhat lower level.

New Residential construction will be about evenly divided between the Iowa and Illinois portions of the HMA. The demand for additional housing is expected to be distributed about as in the past; about 80 percent in the five major cities (30 percent, Davenport, 15 percent each in Bettendorf and Moline, 10 percent each in Rock Island and East Moline) and 20 percent in the rest of the area, mostly in the small Illinois communities.

No allowance has been made in the current projection of housing demand for the possibility that employment at the Rock Island Arsenal might be increased by 800 by the transfer of the research and development mission from the Springfield Armory in Massachusetts, which has been proposed by the Department of Defense. If the transfer is approved, the increase in the housing demand would be dependent on the number of workers from outside the HMA who would actually accept jobs at the arsenal, conceivably a maximum of 800 during the two year forecast period, since the original plan called for completion of the transfer by April 1968.

Qualitative Demand

Sales Housing. Based on the distribution of current family income after deduction of Federal income tax, on the relationship between net family income and purchase price found to be typical in the Davenport-Rock Island-Moline HMA, and on recent market experience, the annual demand for 1,700 units of new sales housing will be absorbed most readily if distributed by price as suggested in the table below. Acceptable housing cannot be produced in this area at present at prices below \$12,000.

Estimated Annual Demand for New Sales Housing Davenport-Rock Island-Moline, Iowa-Illinois, HMA September 1965 to September 1967

<u>Sales price</u>	<u>Units</u>	
	<u>Number</u>	<u>Percentage</u>
\$12,000 - \$13,999	100	6
14,000 - 15,999	125	7
16,000 - 17,999	175	10
18,000 - 19,999	225	13
20,000 - 24,999	550	33
25,000 - 29,999	375	22
30,000 - 34,999	100	6
35,000 and over	50	3
Total	1,700	100

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

Rental Housing. The monthly rental at which 700 units of privately owned net additions to the aggregate rental housing inventory might best be absorbed by the rental market are indicated for various size units in the following table. These net additions exclude public low-rent housing and rent-supplement accommodations and may be accomplished by either new construction or rehabilitation at the specified rentals with or without public benefits or assistance through subsidy, tax abatement, or aid in financing or land acquisition. The production of new units in higher rental ranges than indicated below may be justified if a competitive filtering of existing accommodations to lower ranges of rent can be anticipated as a result. It is estimated that the minimum gross rents achievable with market interest rate financing are \$105 for efficiencies, \$115 for one-bedroom units, \$125 for two-bedroom units, and \$135 for three-bedroom apartments.

Estimated Annual Demand for New Rental Housing
By Gross Monthly Rent and Size of Unit
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
September 1965 to September 1967

Monthly gross rent <u>a/</u>	Number of units			
	<u>Efficiency</u>	<u>1-bedroom</u>	<u>2-bedroom</u>	<u>3-bedroom</u>
\$ 90 and over	85	-	-	-
95 " "	80	260	-	-
100 " "	75	240	245	-
105 " "	70	220	230	110
110 " "	65	210	210	105
115 " " - - - - -	60 - - - - -	200 - - -	190 - - -	100
120 " "	55	190	180	90
125 " "	45	175	170	80
130 " "	40	150	150	70
135 " "	35	140	130	60
140 " "	20	130	120	50
150 " " - - - - -	10 - - - - -	110 - - -	100 - - -	40
160 " "	-	80	75	30
170 " "	-	60	60	20
180 " "	-	40	40	10
200 " "	-	20	20	-
220 " "	-	10	10	-

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

Note: The foregoing figures are cumulative, i.e., the columns cannot be added vertically. For example, demand for one-bedroom units at rents from \$125 to \$135 is 35 units (175 units minus 140 units).

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

APPENDIX TABLES

Table I

Nonagricultural Wage and Salary Employment
Davenport - Rock Island - Moline, Iowa - Illinois, HMA
Annual Average 1961 - 1964

<u>Industry</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
Total wage and salary employment	<u>92,100</u>	<u>94,650</u>	<u>98,750</u>	<u>104,450</u>
Manufacturing	<u>34,950</u>	<u>35,775</u>	<u>38,825</u>	<u>42,500</u>
Durable goods	<u>27,500</u>	<u>28,200</u>	<u>31,425</u>	<u>34,750</u>
Lumber, wood prod., and furniture	875	900	1,000	950
Primary metals	5,050	5,350	5,725	6,050
Fabricated metal products	1,225	1,250	1,225	1,275
Nonelectrical machinery	3,325	3,400	3,625	3,975
Transportation equipment	1,400	1,325	1,400	1,425
Farm machinery and equipment	14,250	14,425	16,875	19,600
All other durables	1,375	1,550	1,575	1,475
Nondurables	<u>7,450</u>	<u>7,575</u>	<u>7,400</u>	<u>7,750</u>
Food and kindred products	3,750	3,800	3,750	3,900
Apparel	625	675	675	675
Printing and publishing	1,275	1,250	1,225	1,200
Rubber products	1,475	1,550	1,425	1,500
All other nondurables	325	300	325	475
Nonmanufacturing	<u>57,150</u>	<u>58,875</u>	<u>59,925</u>	<u>61,950</u>
Mining	200	250	225	250
Construction	4,025	4,100	4,025	3,775
Transportation	3,975	3,975	3,875	3,975
Communications and public util.	2,300	2,225	2,225	2,250
Wholesale trade	4,950	5,050	5,325	5,375
Retail trade	13,825	13,800	14,475	15,075
Finance, ins., and real estate	3,750	3,775	3,850	3,950
Services	10,550	10,950	11,200	11,800
Government	13,575	14,750	14,725	15,500

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

Source: Bureau of Employment Security, Illinois State Employment Service;
Iowa Employment Security Commission, Iowa State Employment Service.

Table II

Nonagricultural Wage and Salary Employment
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
Annual averages by County 1961-1964

<u>Industry</u>	<u>1961</u>		<u>1964</u>		<u>Changes 1961-1964</u>	
	<u>Scott County</u>	<u>Rock Island County</u>	<u>Scott County</u>	<u>Rock Island County</u>	<u>Scott County</u>	<u>Rock Island County</u>
Total wage and salary employment	36,350	55,750	37,600	66,850	1,250	11,100
Manufacturing	<u>13,000</u>	<u>21,950</u>	<u>14,300</u>	<u>28,200</u>	<u>1,300</u>	<u>6,250</u>
Durable goods	<u>8,700</u>	<u>18,800</u>	<u>10,050</u>	<u>24,700</u>	<u>1,350</u>	<u>5,900</u>
Lumber, wood prod., & furn.	200	675	300	650	100	-25
Stone, glass & clay	300	150	450	0	150	-150
Primary metals	3,900	1,150	4,400	1,650	500	500
Nonelectrical machinery	2,550	15,025	3,150	20,425	600	5,400
Elect. mach. & other dur. goods	1,650	1,900	1,700	2,000	50	100
Nondurable goods	<u>4,300</u>	<u>3,150</u>	<u>4,250</u>	<u>3,500</u>	<u>-50</u>	<u>350</u>
Food and kindred	3,300	450	3,100	300	-200	350
Apparel	350	275	400	275	50	0
Print. & publishing	550	725	650	550	100	-175
All other nondur.	150	1,650	100	1,875	-50	225
Nonmanufacturing	<u>23,350</u>	<u>33,800</u>	<u>23,300</u>	<u>38,650</u>	<u>-50</u>	<u>4,850</u>
Construction	2,050	1,975	2,000	1,775	-50	-200
Transportation	1,100	2,875	1,025	2,950	-75	75
Comm. & public util.	1,300	1,000	1,225	1,025	-75	25
Wholesale trade	2,500	2,450	2,350	3,025	-150	575
Retail trade	6,850	6,975	6,900	8,175	50	1,200
Fin., ins., & r.e.	1,700	2,050	1,750	2,200	50	150
Services	5,000	5,550	5,100	6,700	100	1,150
Government	2,700	10,875	2,800	12,700	100	1,825
All other nonmfg.	150	50	175	75	25	25

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

Sources: Bureau of Employment Security, Illinois State Employment Service.
 Iowa Employment Security Commission, Iowa State Employment Service.

Table III

Percentage Distribution of Nonfarm Families by Annual Income
by Tenure after Deduction of Federal Income Tax
Davenport-Rock Island-Moline, Iowa-Illinois, HMA, 1965-1967

<u>Family income</u>	<u>All families</u>		<u>Renter families</u>	
	<u>1965</u>	<u>1967</u>	<u>1965</u>	<u>1967</u>
Under \$2,000	5	5	9	8
\$2,000 - 2,999	4	4	7	7
3,000 - 3,999	6	5	8	8
4,000 - 4,999	7	7	10	9
5,000 - 5,999	11	9	15	13
6,000 - 6,999	14	14	14	15
7,000 - 7,999	12	12	11	11
8,000 - 8,999	13	10	8	8
9,000 - 9,999	6	9	6	7
10,000 - 14,999	17	20	11	13
15,000 - 24,999	4	4) 1	1
25,000 and over	<u>1</u>	<u>1</u>	<u>) 1</u>	<u>1</u>
Total	100	100	100	100
Median	\$7,200	\$7,500	\$6,100	\$6,300

Source: Estimated by Housing Market Analyst.

Table IV

Population Trends
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
1950 - 1967

<u>Area</u>	<u>Nonfarm population</u>			
	<u>April</u> <u>1950</u>	<u>April</u> <u>1960</u>	<u>September</u> <u>1965</u>	<u>September</u> <u>1967</u>
HMA	219,440	258,023	286,400	299,000
Scott County	92,399	112,577	124,700	130,200
Rock Island County	127,041	145,446	161,700	168,800

<u>Area</u>	<u>Average annual changes</u>					
	<u>1950-1960</u>		<u>1960-1965</u>		<u>1965-1967</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
HMA	3,858	1.8	5,250	2.0	6,300	2.2
Scott County	2,017	2.2	2,250	2.0	2,750	2.2
Rock Island County	1,841	1.4	3,000	2.1	3,550	2.2

Sources: 1950 and 1960 Censuses of Population.
 1965 and 1967 estimated by Housing Market Analyst.

Table V

Components of Nonfarm Population Changes
Davenport-Rock Island-Moline, Iowa - Illinois, HMA
1950-1967

<u>Nonfarm population changes</u>	<u>1950-1960</u>	<u>Estimated 1960-1965</u>	<u>Projected 1965-1967</u>
HMA total	<u>33,500</u>	<u>28,400</u>	<u>12,600</u>
Net natural increase	34,800	19,750	7,400
Migration	3,700	8,650	5,200
Scott County total	<u>20,200</u>	<u>12,100</u>	<u>5,500</u>
Net natural increase	16,100	9,350	3,500
Migration	4,100	2,850	2,000
Rock Island County total	<u>18,300</u>	<u>16,300</u>	<u>7,100</u>
Net natural increase	18,700	10,500	3,900
Migration	- 400	5,800	3,200

Sources: 1950 and 1960 Censuses of Population, and estimates of Housing Market Analyst.

Table VI

Age Distribution of the Nonfarm Population
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
1950-1960-1965

Age group	Distribution					
	April 1950		April 1960		September 1965	
	Number	Percent	Number	Percent	Number	Percent
Under 10	41,011	18.6	56,805	22.0	65,100	22.7
10 - 19	27,393	12.5	40,728	15.8	51,400	17.9
20 - 29	34,129	15.5	30,667	11.9	34,800	12.2
30 - 39	33,692	15.4	33,882	13.1	33,200	11.6
40 - 49	28,939	13.2	32,522	12.6	33,500	11.7
50 - 59	24,282	11.1	26,893	10.4	29,100	10.2
60 - 69	17,895	8.2	20,115	7.8	20,600	7.2
70 and over	12,099	5.5	16,411	6.4	18,700	6.5
Total	219,440	100.0	258,023	100.0	286,400	100.0

Age group	Change					
	1950-1960		1960-1965		Average annual	
	Number	Percent	Number	Percent	1950-1960	1960-1965
Under 10	15,794	38.5	8,295	14.6	1,579	1,530
10 - 19	13,335	48.7	10,672	26.2	1,334	1,970
20 - 29	- 3,462	-10.1	4,133	13.5	- 346	760
30 - 39	190	0.6	-682	- 2.0	19	- 125
40 - 49	3,583	12.4	978	3.0	358	180
50 - 59	2,611	10.8	2,207	8.2	261	400
60 - 69	2,220	12.4	485	2.4	222	90
70 and over	4,312	35.6	2,289	13.9	431	420
Total	38,583	17.6	28,377	11.0	3,858	5,235

Sources: 1950 and 1960, U.S. Censuses of Population.
1965 estimated by Housing Market Analyst.

Table VII

Household Trends
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
1950-1967

<u>Area</u>	<u>Nonfarm households</u>			
	<u>April</u> <u>1950</u>	<u>April</u> <u>1960</u>	<u>September</u> <u>1965</u>	<u>September</u> <u>1967</u>
HMA	<u>64,836</u>	<u>78,529</u>	<u>87,300</u>	<u>91,300</u>
Scott County	<u>27,294</u>	<u>33,998</u>	<u>37,700</u>	<u>39,400</u>
Rock Island County	<u>37,542</u>	<u>44,531</u>	<u>49,600</u>	<u>51,900</u>

<u>Area</u>	<u>Average annual changes</u>					
	<u>1950-1960</u>		<u>1960-1965</u>		<u>1965-1967</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
HMA	<u>1,359</u>	<u>2.1</u>	<u>1,625</u>	<u>2.1</u>	<u>2,000</u>	<u>2.3</u>
Scott County	<u>670</u>	<u>2.5</u>	<u>685</u>	<u>2.0</u>	<u>850</u>	<u>2.3</u>
Rock Island County	<u>699</u>	<u>1.9</u>	<u>940</u>	<u>2.1</u>	<u>1,150</u>	<u>2.3</u>

Sources: 1950 and 1960 Censuses of Housing.

1965 and 1967 estimated by Housing Market Analyst.

Table VIII

New Housing Units Authorized by Building Permits
Davenport-Rock Island-Moline, Iowa - Illinois, HMA

<u>Year</u>	<u>Total units by location, 1955-1965</u>		
	<u>HMA</u> <u>total</u>	<u>Scott</u> <u>County</u>	<u>Rock Island</u> <u>County</u>
1955	1,188	643	545
1956	1,452	611	841
1957	1,022	414	608
1958	1,440	651	789
1959	1,483	654	829
1960	1,589	747	842
1961	1,546	724	822
1962	1,613	729	884
1963	1,960	909	1,051
1964	2,269	1,106	1,163
1964 (Jan.-July)	1,046	582	464
1965 (Jan.-July)	1,714	1,047	667

<u>Year</u>	<u>Total units by type of structure, 1960-1965</u>					<u>Percent</u>
	<u>Total</u> <u>units</u>	<u>One-</u> <u>family</u>	<u>Two-to-four</u> <u>family</u>	<u>5-family</u> <u>or more</u>	<u>Two-family</u> <u>or more</u>	
1960	1,589	1,306	165	118 <u>a/</u>		17.8
1961	1,546	1,456	79	11		5.8
1962	1,613	1,356	217 <u>b/</u>	40		15.9
1963	1,960	1,593	125	242		18.7
1964	2,269	1,702	203	364		25.0
1965(Jan.-July)	1,714	1,147	100	467		33.1

a/ Includes 40 units of public housing in East Moline.

b/ Includes 50 units of public housing in Milan.

Sources: Bureau of the Census, C-40 Construction Reports, and local building inspection offices.

Table IX

New Housing Units Authorized by Building Permits
Davenport-Rock Island-Moline, Iowa-Illinois HMA

<u>Total permits by major cities, 1960-1965</u>						Jan.-Jul.
<u>Area</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
HMA total	<u>1,589</u>	<u>1,546</u>	<u>1,613</u>	<u>1,960</u>	<u>2,269</u>	<u>1,714</u>
Scott County, Iowa	<u>747</u>	<u>724</u>	<u>729</u>	<u>909</u>	<u>1,106</u>	<u>1,047</u>
Bettendorf	279	204	233	289	380	311
Davenport	364	424	409	502	603	639
Rest of County	104	96	87	118	123	47
Rock Island County, Ill.	<u>842</u>	<u>822</u>	<u>884</u>	<u>1,051</u>	<u>1,163</u>	<u>667</u>
East Moline	273	158	188	179	194	109
Moline	111	159	245	410	365	220
Rock Island	195	144	172	143	190	199
Rest of County	263	361	279	319	414	139

Source: Bureau of the Census, C-40 Construction Reports.

Table X

Davenport, Iowa-Rock Island-Moline, Illinois Area Postal Vacancy Survey

August 4 - 19, 1965

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	77,122	1,157	1.5	965	192	1,592	65,529	683	1.0	514	169	922	11,593	474	4.1	451	23	670	1,579	10	0.6
Scott County, Iowa	34,448	646	1.9	542	104	1,086	28,333	349	1.2	260	89	522	6,115	297	4.9	282	15	564	527	2	0.4
Davenport	29,647	538	1.8	469	69	842	24,058	288	1.2	223	65	337	5,589	250	4.5	246	4	505	331	2	0.6
Main Office	19,276	396	2.1	390	6	133	14,268	156	1.1	150	6	58	5,008	240	4.8	240	-	75	-	-	-
Northwest Sta.	10,371	142	1.4	79	63	709	9,790	132	1.3	73	59	279	581	10	1.7	6	4	430	331	2	0.6
Bettendorf	4,801	108	2.2	73	35	244	4,275	61	1.4	37	24	185	526	47	8.9	36	11	59	196	-	-
Rock Island County, Ill.	42,674	511	1.2	423	88	506	37,196	334	0.8	254	80	400	5,478	177	3.2	169	8	106	1,052	8	0.8
East Moline	6,719	90	1.3	51	39	113	6,251	69	1.1	35	34	103	468	21	4.5	16	5	10	394	1	0.3
Milan	2,477	40	1.6	31	9	62	2,345	39	1.7	30	9	62	132	1	0.8	1	-	-	334	7	2.1
Moline	17,280	173	1.0	146	27	224	15,454	121	0.8	95	26	170	1,826	52	2.8	51	1	54	252	-	-
Rock Island	16,198	208	1.3	195	13	107	13,146	105	0.8	94	11	65	3,052	103	3.4	101	2	42	72	-	-

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 XI

Vacancy Trends
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
1950, 1960, and 1965

	April 1, <u>1950</u>	April 1, <u>1960</u>	September 1, <u>1965</u>
Total vacant units	<u>1,330</u>	<u>3,393</u>	<u>3,000</u>
Available vacant	<u>396</u>	<u>1,578</u>	<u>1,400</u>
For sale	148	491	425
Homeowner vacancy rate	.4%	.9%	.7%
For rent	248	1,087	975
Rental vacancy rate	1.0%	4.1%	3.5%
Other vacant	934	1,815	1,600

Sources: 1950 and 1960 Censuses of Housing.
 1965 estimated by Housing Market Analyst.

Table XII

New Sales Houses Completed in the Past Twelve Months
Davenport-Rock Island-Moline, Iowa-Illinois, HMA
As of January 1, 1965

<u>Housing Market Area</u>			<u>Speculative construction</u>			
<u>Sales price</u>	<u>Total completions</u>	<u>Pre-sold</u>	<u>Total</u>	<u>Number sold</u>	<u>Number unsold</u>	<u>Percent unsold</u>
Under \$12,500	10	10	0	0	0	0
\$12,500 - 14,499	58	46	12	10	2	17
15,000 - 17,499	118	83	35	34	1	3
17,500 - 19,999	120	78	42	38	4	10
20,000 - 24,999	79	18	61	61	0	0
25,000 and over	<u>42</u>	<u>29</u>	<u>13</u>	<u>12</u>	<u>1</u>	<u>.7</u>
Total	427	264	163	155	8	5

<u>Scott County, Iowa</u>			<u>Speculative construction</u>			
<u>Sales price</u>	<u>Total completions</u>	<u>Pre-sold</u>	<u>Total</u>	<u>Number sold</u>	<u>Number unsold</u>	<u>Percent unsold</u>
\$12,500 - \$14,999	46	36	10	10	0	0
15,000 - 17,499	94	69	25	24	1	4
17,500 - 19,999	115	75	40	36	4	10
20,000 - 24,999	56	7	49	49	0	0
25,000 and over	<u>8</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>0</u>	<u>0</u>
Total	319	191	128	123	5	4

<u>Rock Island County, Illinois</u>			<u>Speculative construction</u>			
<u>Sales price</u>	<u>Total completions</u>	<u>Pre-sold</u>	<u>Total</u>	<u>Number sold</u>	<u>Number unsold</u>	<u>Percent unsold</u>
Under \$12,500	10	10	0	0	0	0
\$12,500 - 14,999	12	10	2	0	2	100
15,000 - 17,499	24	14	10	10	0	0
17,500 - 19,999	5	3	2	2	0	0
20,000 - 24,999	23	11	12	12	0	0
25,000 and over	<u>34</u>	<u>25</u>	<u>9</u>	<u>8</u>	<u>1</u>	<u>11</u>
Total	108	73	35	32	3	9

Source: FHA Inventory of Unsold New Houses.