Analysis of the

BATTLE CREEK, MICHIGAN HOUSING MARKET

as of September 1, 1971

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

June 1972

Housing Market Analysis

Battle Creek, Michigan, as of September 1, 1971

Foreword

This analysis has been prepared for the assistance and guidance of the Department of Housing and Urban Development in its operations. The factual information, findings, and conclusions may be useful also to builders, mortgagees, and others concerned with local housing problems and trends. The analysis does not purport to make determinations with respect to the acceptability of any particular mortgage insurance proposals that may be under consideration in the subject locality.

The factual framework for this analysis was developed by the Economic and Market Analysis Division as thoroughly as possible on the basis of information available on the "as of" date from both local and national sources. Of course, estimates and judgments made on the basis of information available on the "as of" date may be modified considerably by subsequent market developments.

The prospective demand or occupancy potentials expressed in the analysis are based upon an evaluation of the factors available on the "as of" date. They cannot be construed as forecasts of building activity; rather, they express the prospective housing production which would maintain a reasonable balance in demand-supply relationships under conditions analyzed for the "as of" date.

Department of Housing and Urban Development Federal Housing Administration Economic and Market Analysis Division Washington, D. C.

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ANALYSIS OF THE BATTLE CREEK, MICHIGAN, HOUSING MARKET AS OF SEPTEMBER 1, 1971

Summary and Conclusions

- 1. The economy of the Battle Creek Housing Market Area (Calhoun County, Michigan) is based on the food products industry and the production of non-electrical machinery and metal products. Recent expansion of the economy, concentrated between 1965 and 1969, was the result of increased employment in machinery and metal products. Most of the decline in employment since 1969 has been concentrated in these industries. Currently, the work force in the Battle Creek HMA totals 74,600 persons, of whom 7.5 percent are unemployed. Of the 69,000 persons employed, 60,700 are nonagricultural wage and salary workers. A modest recovery is anticipated during the two-year forecast period from September 1, 1971 to September 1, 1973, with an average annual increase of 600 nonagricultural wage and salary jobs.
- 2. The current median income of all families in the HMA is estimated at \$10,050, after deduction of federal income tax, and the median after-tax income of renter households (excluding one person households) at \$8,550. This represents an increase from 1959 after-tax incomes of \$5,900 and \$5,000 for all families and renter households, respectively.
- 3. As of September 1971, the population of the Battle Creek HMA was 142,500, an average increase of approximately 380 persons a year since April 1970. During the two-year forecast period, the annual population gain in the HMA is expected to average 350 persons.
- 4. There were about 45,000 households in the Battle Creek HMA as of September 1, 1971. This total exceeds that of April 1970 by about 580 households. The anticipated increase in households over the two-year forecast period should average 375 annually.
- 5. There were 47,500 housing units in the Battle Creek HMA as of September 1971, indicating a net gain of about 640 units since April 1970. The increase resulted from construction of 970 units (300 subsidized), the addition of 100 trailers, and the loss of 430 units through demolitions and other causes. In the last several years the rate of single-family construction has declined while the rate of multifamily construction has increased.
- 6. There were an estimated 1,100 available vacant housing units in the housing inventory as of September 1971. Of the total, approximately 350 were for sale and 750 were for rent, indicating homeowner and renter vacancy rates of 1.0 percent and 6.7 percent, respectively. Both rates have remained virtually the same since April 1970, but are below the 1960 levels.
- 7. Based on an analysis of economic, demographic and housing factors in the Battle Creek HMA, there will be an annual demand for about 565 units of privately financed housing in the HMA during the September 1, 1971-September

- 1, 1973 forecast period. The total includes 320 single-family homes, 170 units in multifamily structures, and 75 trailers. These estimates depend heavily on the modest recovery of the economy earlier forecast.
- 8. The annual occupancy potential for subsidized housing in the Battle Creek HMA during the two-year forecast period includes 235 units for families: 120 of these units should be Section 235 or Section 236 housing, and 115 units should be low-rent public housing (70 of these could alternatively be rent supplement). In addition, there will be an annual occupancy potential for 170 subsidized units for the elderly; 30 units of this total should be Section 236 housing, 130 units should be rent supplement or low-rent public housing, and 10 units could be of either type.

ANALYSIS OF THE BATTLE CREEK, MICHIGAN, HOUSING MARKET AS OF SEPTEMBER 1, 1971

Housing Market Area

For the purposes of this analysis, the Battle Creek, Michigan, Housing Market Area (HMA) is defined as Calhoun County, Michigan. The population of the HMA was estimated at 142,500 as of September 1, 1971. Approximately 27 percent of the population lived in Battle Creek, 39 percent in the balance of the four townships surrounding the central city, and 14 percent in the county's two other urban areas.

Battle Creek, located in south central Michigan, is 115 miles west of Detroit and 170 miles northeast of Chicago. The city is linked to Detroit and Chicago by Interstate 94, and to Lansing and South Bend by Interstate 69. At present, Battle Creek is served by one commercial airline which is, however, planning to discontinue operations there and transfer flights to Kalamazoo (25 miles away).

There is a net commutation of the labor force from Calhoun County to neighboring counties. This, combined with the slow rate of population growth between 1960 and 1970 (310 persons annually), indicates that employment opportunities in this county have not increased sufficiently to keep households in the area.

Economy of the Area

The first major industry in the Battle Creek HMA was food products; Kellogg Company established its first plant in 1906. Before 1920, the non-electrical machinery industry was also established in the area. Currently, the major manufacturing industries are non-electrical machinery, metals, and food and related products. Between 1960 and 1970, most of the increase in manufacturing employment was in the machinery industries. In nonmanufacturing industries, where most of the employment increases were concentrated, the major sectors of growth were government, trade, and services.

Employment

Current Estimate and Past Trend. The Battle Creek Labor Market Area includes Calhoun and Barry Counties. For purposes of this analysis, data for the two-county area are used and accurately depict the pertinent trend in the HMA; an estimated 80 percent of all nonagricultural wage and salary jobs in the Labor Market Area are in Calhoun County.

Nonagricultural wage and salary employment in the Labor Market Area averaged 60,700 jobs for the twelve-month period ending July 31, 1971, reflecting a decline of 1,300 jobs from the average level attained during the comparable period ending July 31, 1970. The loss of jobs was concentrated in nonelectrical machinery and metals, where total employment declined by 1,600 jobs. The drop in employment in the metals industries is somewhat overstated, however, as it

includes a strike in February and March 1971, involving approximately 1,000 workers who were subsequently rehired. Lower levels of employment in these manufacturing industries were only partially offset by increases in jobs in other durable goods industries, primarily in the production of modular housing.

Between 1960 and 1969, nonagricultural wage and salary employment increased by 11,900 jobs, of which 3,200 were in manufacturing and 8,700 were in nonmanufacturing. Gains were concentrated in nonelectrical machinery (2,900 jobs), government (3,500 jobs), trade and services (3,600 jobs), and finance, insurance, and real estate (1,300 jobs). The only sector of the economy in which there was a major decline in employment was "other durable goods;" in 1969 there were 900 fewer jobs in these industries than in 1960, 700 of which were lost between 1966 and 1967. Between 1961 and 1964, increases in manufacturing employment were predominantly a result of the recovery of jobs lost between 1960 and 1961. Increases in employment opportunities in nonmanufacturing, except for government, were moderate. Most of the employment increases in both manufacturing and nonmanufacturing were recorded between 1964 and 1967, with 1966 the year of greatest increase. Economic expansion slowed in 1968 and accelerated again in 1969.

Between 1969 and 1970, total wage and salary employment declined by 1,200 jobs, including a loss of 1,400 jobs in manufacturing industries and an increase of 200 jobs in nonmanufacturing. As was true for the most recent twelve-month period, most of the decline was in metals and nonelectrical machinery (1,300 jobs). As the following table indicates, these are the first decreases in nonagricultural wage and salary employment since 1961. A more detailed breakdown of employment changes is presented in table I.

Nonagricultural Wage and Salary Employment Battle Creek, Michigan, Labor Market Area 1960-1971

	Manu-	Nonmanu-	Total nonagricultural	Change precedi	from ng period
<u>Year</u>	facturing	facturing	wage and salary	Number	Percent
1960	23,500	27,100	50,600	_	_
1961	22,100	27,200	49,300	-1,300	-2.6
1962	22,700	27,400	50,100	800	1.6
1963	23,100	28,400	51,500	1,400	2.8
1964	23,800	28,800	52,600	1,100	2.1
1965	24,500	30,300	54,900	2,300	4.4
1966	26,500	32,100	58,600	3,700	6.7
1967	26,500	33,700	60,200	1,600	2.7
1968	26,300	34,300	60,700	500	0.8
1969	26,700	35,800	62,500	1,800	3.0
1970	25,300	36,000	61,300	-1,200	-1.9
12 months	ending				
7/31/70	25,900	36,100	62,000	_	_
7/31/71	24,700	36,000	60,700	-1,300	-2.1

Source: Michigan Employment Security Division.

Employment by Industry. In 1970, manufacturing accounted for 41.2 percent of all wage and salary employment, compared with 46.4 percent in 1960. Annual changes in manufacturing employment have ranged from a decline of 1,400 jobs (between 1960 and 1961, and between 1969 and 1970) to an increase of 2,000 jobs (between 1965 and 1966).

Until 1969, employment in the machinery industries had increased every year since 1961, but the largest increase was between 1965 and 1967 (1,900 new jobs in the two years) as a result of increased demand for automotive parts, heavy duty valves, and material handling equipment. From the peak levels in 1969 to July 7, 1971 period, jobs in machinery industries have declined by almost 1,300. Employment in food processing increased from 6,900 jobs in 1960 to 7,800 jobs in 1967. Since then, there has been a slight decline reflecting the change to a more automated technique using fewer employees.

Changes in nonmanufacturing employment have ranged from an increase of 100 jobs (1960-1961) to an increase of 1,800 jobs (1965-1966). Government accounted for 42 percent of the increase in nonmanufacturing employment between 1960 and 1970: trade and services accounted for 43 percent; and almost all of the remainder of was in finance, real estate, and insurance.

In the last two years, two companies manufacturing modular homes have established operations in Calhoun County and currently employ over 600 workers.

Since 1960, there has been an increase in the labor force participation rate, largely resulting from secondary wage earners finding jobs in the expanding trade, finance, real estate, insurance, services, and government sectors.

Principal Employers. The employers listed in the following table each employ more than 1,000 workers:

Principal Employers Battle Creek, Michigan, HMA September 1971

Employers & Classification

Product

Metals

Albion Malleable Iron Co.

Malleable iron castings

Machinery

Clark Equipment

Material handling equipment

Eaton, Yale & Towne, Inc.

Automotive & heavy duty

engine valves

Other Durables

Corning Glass

TV picture tube envelopes

Food & Kindred Products

General Foods Corp., Post Division

Cereal & beverages

Kellogg Company

Ready-to-eat cereals

Paper & Allied Products

Carton & Container

Cartons & cases

Government

VA Hospital

Source:

Battle Creek Chamber of Commerce and Michigan Employment Security

Commission.

Unemployment

Unemployment in the Battle Creek, Michigan, Labor Market Area averaged about 5,600 persons (7.5 percent of the labor force) for the twelve month period ending July 31, 1971, and does not include workers on strike. This reflects an increase of 2,000 unemployed over the average level for the previous twelve-month period. The increased number of unemployed workers reflects an increase of 1,000 persons in the labor force in conjunction with a decline of 1,000 in total employment.

The number of workers unemployed declined steadily from a high in 1961 of 5,200 workers (8.1 percent of the labor force) to a low in 1966 of 2,200 workers (3.1 percent). From 1967 through 1969, nominal changes occurred in the number of unemployed (approximately 2,800 unemployed for each of the three years or a rate of 3.9 percent); increases in the size of the labor force were balanced by increased employment opportunities. The decline in total employment between 1969 and 1970 in conjunction with a slight increase in the labor force resulted in an increase in unemployment to 4,600 workers (6.2 percent) in 1970.

Unemployment and Work Force Trends

Battle Creek, Michigan, Labor Market Area

1960-1971

		Unemployment		
Year	Work force	Number	% of work force	
1960	64,300	4,100	6.4	
1961	64,100	5,200	8.1	
1962	64,300	4,100	6.4	
1963	64,600	3,500	5.4	
1964	65,000	3,000	4.6	
1965	66,800	2,500	3.7	
1966	69,900	2,200	3.1	
1967	71,700	2,800	3.9	
1968	72,100	2,800	3.9	
1969	73,600	2,800	3.8	
1970	73,800	4,600	6.2	
12 months ending				
7/31/70	73,600	3,600	4.9	
7/31/71	74,600	5,600	7.5	

Source: Michigan Employment Security Commission.

Anticipated Future Employment

It is anticipated that nonagricultural wage and salary employment in the Battle Creek Labor Market Area will increase by approximately 1,200 during the two-year forecast period. This forecast assumes a modest recovery in manufacturing employment, primarily in durable goods industries and including increased employment in machinery industries in the last 18 months of the forecast period. It

is anticipated that with recovery in manufacturing, nonmanufacturing industries will provide the major share of expected employment increases with gains concentrated in government, services, and trade.

It is not anticipated that the proposed industrial park at the Fort Custer Base in Battle Creek will have a significant impact on the economy within the next two years. Should new firms decide to locate there, some increases in construction employment will occur, but few if any plants would be operational within the forecast period.

Income

The median income of all families in the Battle Creek HMA in 1959 was \$5,900, after deduction of federal income tax; median after-tax income for renter households of two or more persons was \$5,000. Estimated median after-tax incomes in the HMA in 1971 are \$10,050 for all families and \$8,550 for renter households. In 1959, 23 percent of all families and 32 percent of renter families had after-tax incomes below \$4,000; as of September 1971, nine percent of all families and 14 percent of renter families have annual after-tax incomes below this level. In 1959, only three percent of all families had after-tax incomes exceeding \$15,000; currently, 19 percent of all families and nine percent of renter households have after-tax incomes above this level. Detailed distributions of all families and renter households by 1959 and 1971 after-tax incomes are presented in table II.

Demographic Factors

Population

As of September 1, 1971, the population of the Battle Creek, Michigan HMA totaled 142,500, reflecting an increase of 540 persons since April 1, 1970. Between 1960 and 1970, the population of the HMA increased by only 3,105. It is likely that out-migration was greatest from 1960 to 1964 when employment opportunities were low. Out-migration was lowest, and consequently population growth was greatest, in the middle years of the 1960-1970 decade when employment opportunities were expanding. The recent rate of population growth is comparable to the rate in the last years of the decade.

	Average Ann	nual Change in	Population		
	Battle	Creek, Michiga	n, HMA		
	April 1, 1	.960 - Septembe	r 1, 1973		
Area	April 196 April 197	-	1 1970- . 1971	Sept. Sept.	1971- 1973
	<u>No.</u> _2	No.	_%	No.	%_
HMA total	<u>310</u> 0.	2 380	0.3	<u>350</u>	0.2
Battle Creek	-524 -1.	2 -20	- .	-50	-0.1
Albion	-64 -0.	5 -110	-1.0	-100	-0.9
Remainder	898 1.	0 510	0.5	500	0.5

Battle Creek

The population of Battle Creek declined by 5,238 persons between 1960 and 1970 because of declining household size, lack of land for development within the city limits, and no annexation of land over the decade. However, private building activity within the city limits has increased in the last few years, as an increasing share of multifamily units built in the HMA are being built in the central city. This largely reflects the difficulty of obtaining adequate water and sewer facilities for multifamily development in the surrounding townships. This increase in private residential construction, combined with a substantial increase in subsidized housing construction, has improved the housing stock and slowed the out-migration.

Albion

The population of Albion declined by 637 persons between 1960 and 1970, reflecting relatively low levels of private construction within the city limits. The decline in population is continuing at a higher rate than that experienced between 1960 and 1970.

Remainder of HMA

Between 1960 and 1970, population increased by 8,980 in the remainder of the HMA. Most of the increase in population was in the four townships surrounding Battle Creek, especially south and northeast of the city. Availability of land for single-family residential construction contributed to a slight rate of population growth in these areas, while the older urban areas lost population.

Net Natural Increase and Migration. As indicated in the following table, net natural increase in the Battle Creek, Michigan, HMA was 16,200 persons between 1960 and 1970, while population only increased by 3,100. Thus, substantial outmigration occurred over the decade, indicating that employment opportunities have not been increasing fast enough to keep young people in the area. Since April 1970, out-migration has continued, but at the reduced rate of approximately 1,000 annually that has prevailed for the last few years.

<u>Battle Creek, Michigan, HMA</u> 1960 - 1971

	1	960-1970	1970-1971
Source of change	Total change	Average annual change	Average annual change
Net natural increase	16,207	1,621	1,397
Migration	- <u>13,102</u>	- <u>1,310</u>	- <u>1,017</u>
Total change	3,105	311	380

Source: U.S. Census of Population, Series P-23; Vital Statistics of the U.S.; Michigan State Health Department; estimates by Housing Market Analyst.

Future Population Growth. As of September 1973, the population of the Battle Creek HMA is expected to total 143,200, reflecting an average annual increase of 350 persons. The population of the city of Battle Creek will continue to decline, but by only about 50 persons annually. The lower rate of decline projected is a result of the increasing proportion of private residential units being built within the city limits and anticipated completion of additional units of subsidized housing. The population of Albion is expected to decline by about 100 persons annually over the next two years.

Households

Housing Market Area. Between April 1970 and September 1971, the number of households in the Battle Creek, Michigan, HMA increased by about 580 households to a total of approximately 45,000. Between 1960 and 1970 the number of households in the HMA increased by 3,412 with most of the increase occurring since 1964. The recent rate of household growth would be similar to the rate prevailing in the last year of the intercensal period.

Average Annual Changes in Households Battle Creek, Michigan, HMA April 1, 1960 - September 1, 1973

<u>Area</u>	April 1960- April 1970	April 1970- Sept. 1971	Sept. 1971- Sept. 1973
	<u>No.</u> <u>%</u>	<u>No.</u> <u>%</u>	No. %
HMA total	<u>341</u> 0.8	410 0.9	<u>375</u> 0.8
Battle Creek	-91 -0.6	95 0.7	75 0.5
Albion	- 8 -0.3	-15 -0.5	-15 -0.5
Remainder	440 1.7	330 1.2	315 1.1

Battle Creek

As of September 1971, there were approximately 13,900 households in Battle Creek; an increase of 130 households since April 1970. This increase is in contrast to the decline of 910 households in the city between 1960 and 1970, and reflects largely the completion of over 400 new rental units (300 subsidized) since April 1, 1970.

Albion

As of September 1971, there were approximately 3,275 households in Albion, a decrease of 20 households since April 1970. This continues the trend between 1960 and 1970, as the number of households decreased by 82 in that period.

Remainder of HMA

As of September 1971, there were 27,825 households in the remainder of the HMA, an annual increase of approximately 330 over the April 1970 level, a rate of increase substantially below that of the preceding ten years. This reflects decreased supplies of both new and existing homes for sale.

Household Size Trends. Average household size declined in the HMA between 1960 and 1970 from 3.28 persons to 3.10 persons. It is currently estimated at 3.07 persons. Within the city of Battle Creek, the average household size is smaller than for the HMA as a whole; it declined from 2.99 persons in 1960 to 2.79 in 1970 and is currently estimated at 2.77. The decline in average household size reflects both declining birth rates and out-migration of families.

<u>Future Household Growth</u>. Based on anticipated increases in population and employment and a continued decline in average household size, the number of households in the HMA is expected to increase by about 375 households annually for a total of 45,750 by September 1973.

Housing Market Factors

Housing Supply

Current Estimate and Past Trends. As of September 1, 1971, there were 47,500 housing units in the Battle Creek HMA, indicating an increase of about 640 housing units since April 1970, an average annual increase of 450 units. The net increase resulted from the addition of about 100 trailers, construction of about 970 new units (300 of which were subsidized), and a net loss resulting from conversions and demolitions of about 430 units.

Between April 1960 and April 1970, the number of housing units increased by about 2,850, an annual increment of 285 units. The net increase resulted from the construction of about 5,530 new units (230 subsidized), the addition of about 370 trailers, and the net loss of approximately 3,050 units through conversions and demolitions.

Type of Structure. Currently, single-family homes constitute 80.7 percent of the housing inventory of the Battle Creek, Michigan, HMA, a nominal decline since April 1960 when single-family homes were 81.8 percent of the inventory. Most of the small shift in preference has been to mobile homes which have increased from 2.0 percent to 2.9 percent over the same period.

Housing Inventory by Type of Structure Battle Creek, Michigan, HMA April 1, 1960 - September 1, 1971

Units in structure	April 1	, 1960 %	April 1	, 1970 <u>%</u>	September No.	1, 1971 <u>X</u>
1 unit	35,986	81.8	38,080	81.3	38,345	80.7
2+ units	7,118	16.2	7,503	16.0	7,785	16.4
Mobile homes Total	901 44,005	$\frac{2.0}{100.0}$	$\frac{1,273}{46,856}$	$\frac{2.7}{100.0}$	$\frac{1,370}{47,500}$	$\frac{2.9}{100.0}$

Year Built. Based on the 1960 Census of Housing and estimates derived through the use of building permits and demolition data, it is estimated that about 15 percent of the current housing stock was added since 1960. Approximately 43 percent of the units were built before 1930 and the remaining 42 percent were built between 1930 and 1960.

Housing Inventory by Year Built Battle Creek, Michigan, HMA September 1, 1971

Year built	Number of units	Percentage distribution
April 1960-Sept. 1971	6,980	14.7
1950-April 1960	10,880	22.9
1940-1949	5,140	10.8
1930-1939	3,900	8.2
1929 or earlier	20,600	43.4
Total	47,500	100.0

Condition. According to the 1970 Census, of the 46,856 housing units in the Battle Creek, Michigan, HMA, 44,812 were classified as year-round units. Of these, 1,637 (3.7 percent) were lacking one or more plumbing facilities. It is estimated that there are currently 1,550 year-round units lacking one or more plumbing facilities, or 3.4 percent of the all year-round units.

Residential Building Activity

The volume of private residential construction declined from 728 units in 1960 to 456 units in 1964, as measured by building permits issued and estimates for non-permit issuing places. In 1965, construction volume was over 600 units and remained over 500 units, except in 1966 and 1970 when adverse mortgage market conditions prevailed. However, since 1967 a larger proportion of the new units have been in multifamily structures. There has been a tendency in the immediate Battle Creek area (where most of the multifamily construction has occurred) for the larger builders of single-family homes to switch to multifamily construction. The following table gives a breakdown of residential construction since 1960 for both nonsubsidized and subsidized housing. Building permits cover almost 97 percent of all private residential building activity. More detailed information is included in table IV.

Residential Building Starts Battle Creek, Michigan, HMA 1960-1971

Date	Single-family houses	Multifamily units	Total nonsubsidized units	Subsidized housing
1960	665	63	728	_
1961	. 560	5	565	-
1962	467	15	482	-
1963	370	111	481	_
1964	416	40	456	
1965	489	117	606	84
1966	400	17	417	40
1967	484	109	593	40 ,
1968	441	115	556	60
1969	322	210	532	220
1970	287	82	369	427
	os. 185	29	214	193
1971 1st 8 mc	os. 269	268	537	15

Sources: Local building inspectors; U.S. Census Bureau, C-40 Construction Reports; and estimates by Housing Market Analyst.

As table IV indicates, most of the construction activity has occurred outside the two cities of Battle Creek and Albion. Most of the construction activity has been in subdivisions in the four townships surrounding the city of Battle Creek, especially in Battle Creek Township southwest of the city. During the eleven complete years covered, these four townships accounted for 62 percent of all private residential building activity while the city of Battle Creek itself accounted for only 10 percent.

The rate of new single-family construction has dropped from a high of 665 units in 1960 to a low of 287 units in 1970. Between 1962 and 1968 single-family construction averaged 440 units annually, the same as the rate for the shorter 1966 to 1968 period. Construction activity declined to 322 unsubsidized units in 1969 and to 287 in 1970. Between January and August 1971, construction began on 269 unsubsidized single-family homes. During the eleven complete years covered, the four townships surrounding Battle Creek accounted for 62 percent of all single-family residential construction activity; between 1966 and 1968, 64 percent of construction was located in these townships and in 1969 and 1970 only 58 percent. Land suitable for subdivision development in the townships adjacent to Battle Creek is becoming scarce. This has contributed to the decline in single-family construction in the last two years and will limit new construction in these areas during the forecast period.

Of the 884 units in multifamily structures built during the eleven complete years covered (1960 through 1970), 516 were built in the last four years, including 210 units in 1969. Between January and August 1971, construction began on 268 multifamily units. Eighty-seven percent of all multifamily construction has been in Battle Creek or the four adjacent townships. Less than half of the remaining units have been built in Albion.

Units under Construction. Based on local building permit data and on a postal vacancy survey conducted the week of August 30, there are an estimated 650 housing units presently under construction in the HMA, including 120 single-family units and 530 units in multifamily structures. Of the 530 multifamily units under construction, 260 are being constructed under the Section 221(d)(3) BMIR and Section 236 programs.

<u>Demolitions</u>. Between April 1960 and April 1970, approximately 3,050 units were removed from the housing supply through demolition and other causes. Of these only 140 are directly attributable to urban renewal activities. Since April 1970, an additional 430 units have been lost from the housing supply. An estimated 650 additional units will be removed from the housing supply over the next two years; it is anticipated that almost 60 percent of these will be in the city of Battle Creek.

Tenure of Occupancy. As of September 1, 1971, 76.9 percent (34,600 units) of the occupied housing stock in the HMA was owner-occupied. This compares with 77.0 percent as of April 1970 and 74.4 percent in April 1960. The percentage of owner-occupied units in the cities is below sixty-five percent.

Vacancy

April 1970 Census. According to the 1970 Census, there were 1,072 nonseasonal housing units available for rent or sale in the Battle Creek HMA, an available vacancy rate of 2.4 percent. Of these units, 344 were available for sale and 728 were available for rent, equivalent to homeowner and renter vacancy rates of 1.0 and 6.7 percent, respectively. There were an additional 1,362 other vacant units which were seasonal, dilapidated, held for occasional use, or held off the market for other reasons.

Postal Vacancy Survey. During the week of August 30, 1971, a postal vacancy survey was conducted in Albion, Battle Creek, Homer, and Marshall. The survey covered 44,384 possible deliveries, approximately 93 percent of the current housing inventory of the HMA. At the time of the survey, 1,064 units were vacant, including 745 residences, 297 apartments, and 22 trailers. Among the 1,042 vacancies in residences and apartments, 83 were in new units and 959 were in units which had previously been occupied. Of the 39,256 residences surveyed, 745 (1.9 percent) were vacant; of the 3,869 apartment units covered 297 (7.7 percent) were vacant. In addition, the report indicated 633 housing units in various stages of construction (154 residences and 479 apartments). The following table summarizes the results of the survey. The Postal Vacancy Survey results are presented in detail in table VII.

Postal Vacancy Survey Calhoun County, Michigan August 30, 1971

				acant uni	
Type of deliveries	Total possible deliveries	Used	New	<u>A11</u>	Percent of total deliveries
Residences	39,256	673	72	745	1.9
Apartments Total	$\frac{3,869}{43,125}$	286 959	<u>11</u> 83	$\frac{297}{1,042}$	$\frac{7.7}{2.4}$
Mobile homes	1,259	_	-	22	1.7

Current Estimate. It is estimated that there were approximately 1,100 vacant housing units available for sale or rent in the Battle Creek, Michigan HMA, as of September 1, 1971, an over-all available vacancy rate of 2.4 percent. Of this total, 350 were available for sale and 750 were available for rent, representing homeowner and renter vacancy rates of 1.0 percent and 6.7 percent, respectively. This indicates virtually no change in the market since April 1970. There were an additional 1,400 other vacant units which are dilapidated, seasonal, or not available for other reasons. These estimates are based on the postal vacancy survey, with estimates for areas not covered in the survey and adjustments to make the survey data consistent with the tenure concept used in this analysis.

Mortgage Market

Currently, there are adequate funds for mortgages on single-family homes in the Battle Creek, Michigan, HMA. A substantial amount of mortgage financing is done by one bank and one savings and loan association, both of which also make loans outside the HMA. On a conventional bank loan, the interest rate is 8 percent with 20 percent down and a 25-year term. At the savings and loan, the 8 percent rate is also available with 10 percent down and a 25-year term if MGIC or CMI insured, or 8 1/4 percent with 5 percent down and a 25-year term. There is substantial FHA activity in the area, mostly in mortgages on existing single-family homes.

Sales Market

Since 1960, the sales market for residential units in the Battle Creek, Michigan HMA has tightened. The homeowner vacancy rate declined from 1.3 percent in April 1960, to 1.0 percent in both April 1970 and September 1971. The sales market is strongest in the areas outside Battle Creek and Albion. Inside the cities, the homeowner vacancy rate is currently 1.5 percent, compared with 0.8 percent in the remainder of the HMA. Sales for the first eight months of 1971 were substantially above sales recorded for the same period in 1970, except for homes priced above \$40,000 where sales of both new and existing units are lagging. The typical price of new sales houses in the Battle Creek HMA as of September 1, 1971 was between \$26,000 and \$28,000. The average sales price of existing sales houses was between \$17,000 and \$19,000.

Major Subdivision Activity. Most of the subdivision activity in the HMA has been in the four townships surrounding Battle Creek. Currently there are no new subdivisions being developed in these townships, and building is confined to vacant lots in existing subdivisions. Development of new subdivisions in this area is inhibited by the shortage of land suitable for development.

Unsold Inventory Survey. In January 1971, the Grand Rapids, Michigan, Insuring Office conducted the Annual Unsold Inventory Survey of new single-family homes in subdivisions with five or more completions in 1970. The survey covered 68 completed homes, approximately 20 percent of the total completed that year. The survey reported 40 homes built on a speculative basis of which 18 (26 percent) were unsold at the time of the survey. Of those unsold, 13 had been completed less than one month and only one had been completed more than six months.

<u>Units under Construction</u>. On September 1, 1971, there were 120 single-family houses under construction in the Battle Creek, Michigan, HMA. Currently, between 50 and 60 percent of single-family construction is on a speculative basis.

Military Housing. The Air Force closed its training base at Fort Custer in 1965. Within the next six months, 140 single-family Capehart houses will be released for sale, but the units will not be available for occupancy without some refurnishing. Because of age and condition of these houses, they will not substantially affect the market for new sales houses.

Rental Market

Most of the rental units in the Battle Creek, Michigan, HMA are older single-family structures, rented either as single-family homes or converted into two to four separate units and rented as apartments. Most of these units rent in the \$60 to \$120 range monthly. Local sources indicate that some of the older units which have been converted to multifamily structures are now being re-converted to single-family rental units.

A significant proportion of the supply of multifamily rentals units built since 1967 are townhouses and garden-type rental units. Rents in the newer structures range from \$160 to \$200 for a one-bedroom unit and from \$180 to \$260 for two-bedroom units, and generally include all utilities. Apartment projects completed within the last three to four years currently have vacancy rates of about one percent, contrasted with an over-all rental vacancy rate of 6.7 percent for the HMA. The rate varies from almost 10 percent in Battle Creek to 4.3 percent in areas of the HMA outside both Albion and Battle Creek. Most of the vacancies are concentrated in the older single-family homes for rent or in single-family structures converted to multifamily units. The high vacancy rate in Battle Creek reflects a concentration of this type of rental units in the city.

Units under Construction. As of September 1971, there were approximately 270 privately financed multifamily units under construction in the Battle Creek, Michigan, HMA. This is more than the number of units added in any one year between 1960 and 1970.

In November 1971, construction is scheduled to begin on 124 units sponsored by the Michigan State Housing Authority. Ninety-four of these units will be unsubsidized and competitive with private rental units.

Mobile Homes

As of September 1971, mobile homes constituted less than three percent of the housing inventory of the Battle Creek HMA. Most of the mobile home parks are more than ten years old, and are comprised of small lots. In most of the older mobile home parks, there are renter-occupied as well as owner-occupied mobile homes. The four townships adjacent to the city of Battle Creek contain most of the licensed mobile home parks. In recent years, only three new parks have been developed. These new parks have larger spaces than do the older ones and rent for \$55 to \$70 per month with additional charges for children. Absorption in two cases has been good, but these new parks with their planned expansion probably will satisfy the need for new spaces at these prices in the immediate Battle Creek area in the next two years. In the new parks all mobile homes are owner occupied. About 100 mobile homes have been added to the housing inventory since April 1970.

Demand for Nonsubsidized Housing

Quantitative Demand

Demand for additional housing in the Battle Creek, Michigan HMA during the two year forecast period from September 1971 to September 1973 is a function of an anticipated annual increase of 375 households and expected annual losses of 325 units from the housing inventory. Based on these factors, and adjustments for current rates of construction and recent vacancy levels, an annual demand for 565 new unsubsidized units is anticipated for the two-year forecast period ending September 1973. The annual demand for 565 units should include 320 single-family houses, 170 units in multifamily structures, and 75 mobile homes.

The projected demand for single-family houses is slightly above the number of new single-family houses constructed in the last two years, and is substantially below construction levels in the 1962-1968 period, reflecting both a decrease in land available for subdivision development in the townships immediately surrounding Battle Creek, and some shift in preferences to modern multifamily units.

Recent market experience indicates good absorption of new multifamily units. However, there are more units presently under construction than were built in any single year between 1960 and 1970. It is therefore recommended that absorption of these new units should be carefully observed; plans for construction of additional new units should be adjusted if absorption is slow or if excessive vacancies of long duration appear in older non-obsolete apartment units. Furthermore, part of the demand for multifamily units over the next two years will be met by the unsubsidized units sponsored by the Michigan State Housing Authority. These 94 units will rent close to the minimum rents for newly constructed units.

It is anticipated that the demand for mobile homes will grow at approximately the same rate as experienced in recent years, about 75 units annually.

Qualitative Demand

Single-family Houses. The annual demand for 320 new single-family homes is expected to approximate the sales price distribution presented in the following table. The distribution takes into account recent market experience, ability to pay as reflected by current family incomes, and the ratio of purchase prices typical in the Battle Creek HMA.

Estimated Annual Demand for Single-family Houses Battle Creek, Michigan, HMA September 1, 1971 - September 1, 1973

Price range		inge	Number of units	Percent
Under		\$22,000	45	14
\$22,000	_	23,999	30	9
24,000	-	25,999	45	14
26,000	_	-	45	14
28,000	-	29,999	35	11
30,000	_	31,999	25	8
32,000	-	35,999	35	11
36,000	-	39,999	25	. 8
Over \$4	0,0	000	35	11
·	-	tal	320	100

<u>Multifamily Units</u>. The 170 units of multifamily housing demanded would best be absorbed if the majority of units were one-bedroom apartments renting for \$170 to \$220 and two-bedroom units renting for \$200 to \$260, including utilities. The following table presents the suggested distribution:

Estimated Annual Demand for Nonsubsidized Multifamily Units Battle Creek, Michigan, HMA September 1, 1971 - September 1, 1973

Monthly ,		Unit si	.ze	
rent range /	O-BR	<u>1-BR</u>	<u>2-BR</u>	<u>3-br</u>
\$140 - \$159	. 5		-	-
160 - 179	-	25	-	-
180 - 199	_	25	-	
200 - 219	, -	10	35	_
220 - 239	-	5	20	• -
240 – 259		5	10	5
260 – 279	-	_	10	5
280 and over	_	_	5	5
Total	5	70	80	<u>15</u>

a/ Includes utilities.

Occupancy Potential for Subsidized Housing

Federal assistance in financing costs for new housing for low- or moderate-income families may be provided through a number of different programs administered by FHA: monthly rent supplements in rental projects financed under Section 221(d)(3); partial payment of interest on home mortgages insured under Section 235; partial interest payment on project mortgages insured under Section 236; and federal assistance to local housing authorities for low-rent public housing.

The estimated occupancy potentials for subsidized housing are designed to determine, for each program, (1) the number of families and individuals who can be served under the program and (2) the proportion of these households that can reasonably be expected to seek new subsidized housing during the forecast period. Household eligibility for the Section 235 and Section 236 programs is determined primarily by evidence that household or family income is below established limits but sufficient to pay the minimum achievable rent or monthly payment for the specified program. Insofar as the income requirement is concerned, all families and individuals with income below the income limits are assumed to be eligible for public housing and rent supplement; there may be other requirements for eligibility, particularly the requirement that current living quarters be substandard for families to be eligible for rent supplements. Some families may be alternatively eligible for assistance under more than one of these programs or under other assistance programs using federal or state support. The total occupancy potential for federally assisted housing approximates the sum of the potentials for public housing and Section 236 housing. For the Battle Creek HMA, the total occupancy potential is estimated to be 405 units annually. Future approvals under each program should take into account any intervening approvals under other programs which serve the same families and individuals.

The annual occupancy potentials $\frac{1}{2}$ for subsidized housing discussed in the following paragraphs are based on 1971 incomes, the occupancy of substandard housing, income limits in effect as of September 1, 1971, and on available market experience. $\frac{2}{2}$

Rental Housing Under the Public Housing and Rent-Supplement Programs. These two programs serve households in essentially the same low-income group. The principal differences arise from the manner in which net income is computed for each program and from other eligibility requirements. For the Battle Creek HMA, the annual occupancy potential for public housing is estimated at 115 units for families and 140 units for the elderly. Approximately seven percent of the elderly also are eligible for housing under Section 236 (see table VI). In the case of the more restrictive rent-supplement program, the potential for families would be about 60 percent of the figure above, but the potential among the elderly would be the same (140 units).

The occupancy potentials referred to in this analysis are dependent upon the capacity of the market in view of existing vacancy strength or weakness. The successful attainment of the calculated market for subsidized housing may well depend upon construction in suitable accessible locations, as well as upon the distribution of rents and selling prices over the complete range attainable for housing under the specified programs.

^{2/} Families with incomes inadequate to purchase or rent nonsubsidized housing generally are eligible for one form or another of subsidized housing.

Currently, there are 550 units of low-rent public housing in the Battle Creek HMA, of which 190 are designated for the elderly. The Albion Housing Authority has 200 units under management; the remaining 350 units, including 100 units of scattered site Turnkey III housing (for eventual homeownership), are managed by the Battle Creek Housing Authority. All of the units in Battle Creek are occupied and there is a waiting list of 300 eligible applicants for units designated for the elderly, and 50 applicants for regular family units. No housing has been or is being built in the HMA under the rent-supplement program. It is recommended that future units designed for family occupancy be built on scattered sites; it is further recommended that some of these units be built outside the cities of Battle Creek and Albion where they are all currently concentrated.

Section 235 Sales Housing and Section 236 Rental Housing. Subsidized housing for households with low to moderate incomes may be provided under either Section 235 or Section 236. Moderately-priced, subsidized sales housing for eligible families can be made available through Section 235. Subsidized rental housing for the same families may be alternatively provided under Section 236; the Section 236 program contains additional provisions for subsidized rental units for elderly couples and individuals. In the Battle Creek HMA, it is estimated that for the September 1971-September 1973 period there is an occupancy potential for 120 subsidized family units annually using regular income limits under either Section 235 or Section 236, or a combination of the two programs. In addition, there is an annual potential for about 40 units of Section 236 rental housing for elderly couples and individuals. The potentials would be somewhat higher utilizing exception income limits. It is estimated that about 50 percent of the households which are prospective occupants of Section 235 housing are five or more person households.

As of September 1, 1971, there were about 30 complete new houses in the HMA which had been financed under the provisions of Section 235. There are no completed Section 236 projects in the HMA. Currently, 81 units of Section 236 housing are under construction in Albion. In addition, there are 134 units of Section 236(b) housing under construction in Battle Creek under the auspices of the Michigan State Housing Authority. These units serve the same families as are served by regular Section 236 units; however, the federal interest subsidy is allocated by the Michigan State Housing Authority, and the project is not FHA insured. The Michigan State Housing Authority has approved construction of an additional 130 units of Section 236(b) housing in the HMA; 100 units in Albion and 30 units in Battle Creek.

As of September 1, 1971, there were 117 units of Section 221(d)(3) BMIR cooperative housing in the HMA, all in the city of Battle Creek. The last 53 units were completed early in 1971, and currently only 91 of the 117 units are occupied. An additional 48 units will be completed late in 1971 or early in 1972. These units could serve the same families as are served by Section 235-236 housing; however, the income limits for Section 221(d)(3) BMIR housing are higher than the limits for Section 236 and these units thus may serve families who would not be eligible for Section 236 housing.

^{1/} Interest reduction payments may also be made for cooperative housing projects.
Occupancy requirements under Section 236 are identical for tenants and cooperative owner-occupants.

The number of Section 236 units already under construction or authorized by the Michigan State Housing Authority is substantially above the estimated occupancy potential for the September 1971-September 1973 forecast period under Sections 235 and 236. As these will be the first Section 236 units built in the HMA, it is possible that with a backlog of demand the units will be absorbed. It is recommended, however, that no additional Section 236 units be authorized in the Battle Creek HMA until the Section 236 units and the Section 221(d)(3) BMIR units presently under construction are completed and occupied. Any decision to proceed with additional units should take account both the experience with completed Section 236 units and vacancy rates in existing non-obsolete private rental units. Vacancy rates in older apartment units may be increased by the large number of Section 236 units that will come on the market in the near future, at a time when private construction of multifamily units is greater than at any time in the last ten years.

In spite of the large number of Section 236 units in various stages of development, a potential still exists for moderately priced subsidized sales housing for families in the same income ranges. This demand could be satisfied by approximately 20 units of Section 235 housing annually.

Table I

Work Force, Unemployment and Employment by Industry Battle Creek, Michigan, Labor Market Area^{a/} 1960-1971 (Annual averages)^{b/}

12 month average

ending July 31, July 31, 1971 1970 1970 1968 1969 1967 1963 1964 1965 1966 1960 1961 1962 Work force components 74,600 73,800 72,100 73,600 73,600 65,000 66,800 69,900 71,700 64,300 64,100 64,300 64,600 Total work force 5,600 4,600 2,800 2,800 3,600 3,000 2,500 2,200 2,800 3,500 5,200 4,100 Unemployment 4,100 6.2 4.9 7.5 3.9 3.8 3.7 3.1 3.9 4.6 6.4 8.1 6.4 5.4 Pct. of work force 69,000 70,800 69,200 70,000 67,700 68,900 69,300 62,000 64,300 58,900 60,200 61,100 60,200 Total employment 62,000 60,700 61,300 58,600 60,200 60,700 62,500 51,500 52,600 54,900 50,600 49,300 50,100 Wage & salary employ. 26,700 25,300 25,900 24,700 26,500 26,300 24,500 26,500 23,100 23,800 23,500 22,100 22,700 Manufacturing 15,100 16,300 16,300 17,000 15,700 14,900 16,400 16,300 13,400 13,600 14,400 14,300 12,500 Durable goods 4,200 5,000 4,300 4,700 4,900 4,700 4,100 4,200 4,600 4,900 4,300 4,000 4,300 Metals 8,500 9,200 9,600 8,500 9,100 9,200 9,800 6,900 7,200 6,400 6,500 6,900 5,900 Machinery 2,400 2,200 2,200 2,100 2,300 2,400 3,000 3,300 3,200 3,000 Other 3,100 2,600 2,700 9,600 9,600 9,600 $\frac{9,400}{7,200}$ 10,000 9,300 9,700 10,100 10,200 9,200 9,600 9,400 9,500 Nondurable goods 7,400 7,600 7,400 7,300 7,300 7,400 7,600 7,800 7,300 7,100 7,300 6,900 Food & kindred prods. 1,500 1,400 1,500 1,600 1,500 1,500 1,400 1,500 1,600 1,600 1,500 1,600 1,500 Paper & allied prod. 800 800 800 900 800 800 800 800 600 700 800 700 800 Other 36,000 35,800 36,000 36,100 34,300 28,400 28,800 30,300 32,100 33,700 27,100 27,200 27,400 Nonmanufacturing 1,600 1,800 1,800 1,900 2,000 1,700 1,400 1,500 1,600 1,800 1,700 1,700 1,500 Construction 2,600 2,600 2,700 2,700 2,600 2,500 2,500 2,500 2,500 2,500 2,500 Trans., comm., & pub. util. 2,600 2,400 9,500 9.500 9,500 8,900 8,900 9,400 8,600 8,800 7,900 8,200 8,300 8,300 8,100 Trade 3,500 3,600 3,400 3,500 3,100 3,300 3,600 2,500 2,700 2,700 2,800 2,300 2,400 Fin., ins., & real estate 7,900 7,800 7,600 7,700 7,800 5,800 6,100 6,800 7,500 5,700 5,500 5,500 5,600 Services 10,700 10,800 10,000 10,600 10,800 8,100 8,600 9,100 9.600 7,200 7,700 7,100 7,200 Government 5,900 6,000 6,000 6,000 5,800 6,600 6,300 6,700 6,400 6,300 6,900 6.700 6,600 All other nonag. 2,200 2,100 2,100 2,000 2,800 2,700 2,600 2,400 2,400 2,400 3,000 3,200 3,100 Agriculture Workers involved in labor-management 300 100 100 200 100 200 200 200 100 disputes

Source: Michigan State Employment Security Division.

a/ Includes Calhoun and Barry Counties.

 $[\]overline{\underline{b}}$ / Totals may not add as a result of rounding.

Table II

Percentage Distribution of All Families and Renter Households by Estimated Annual After-Tax Incomes Abattle Creek, Michigan, Housing Market Area

	19	59	19	71
Annual income	A11	Renter	A11	Renter
<u>after tax</u>	<u>families</u>	<u>households</u>	<u>families</u>	households
Under \$ 2,000	9	10	3	5
\$ 2,000 - 3,999	14	22	6	9
4,000 - 5,999	29	34	9	13
6,000 - 7,999	24	21	13	19
8,000 - 9,999	14	8	18	17
10,000 - 12,499	5	2	19	17
12,500 - 14,999	2	2	13	11
15,000 - 19,999	2	1	13	. 6
Over 20,000	1	-	6	3
Total	100	100	100	100
Median	\$5,900	\$5,000	\$10,050	\$8,550

a/ Excludes one-person renter households.

Source: Estimated by Housing Market Analyst.

Table III

Population and Household Trends

Battle Creek, Michigan, Housing Market Area

April 1, 1960 - September 1, 1973

	April 1,	April 1,	Sept. 1,	Sept. 1,	Avera	ge annual cha	nges
Population	1960	1970	1971	<u>1973</u>	1960-1970	1970-1971	1971-1973
HMA total	138,858	141,963	142,500	143,200	310	380	350
Battle Creek	44,169	38,931	38,900	38,800	-524	-20	-50
Albion	12,749	12,112	11,950	11,750	-64	-110	-100
Remainder	81,940	90,920	91,650	92,650	898	510	500
Households							
HMA total	41,010	44,422	45,000	45,750	341	410	375
Battle Creek	14,677	13,767	13,900	14,050	-91	95	75
Albion	3,378	3,296	3,275	3,250	- 8	-15	-15
Remainder	22,955	27,359	27,825	28,450	440	330	315
	.,,	,	•	•			1.00

Sources: 1960 and 1970 Censuses of Population and Housing; 1971 and 1973 estimated by Housing Market Analyst.

Table IV

Battle Creek, Michigan, Housing Market Area Annual Totals, 1960-1971

												8 mont	
	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	1968	<u>1969</u>	<u>1970</u>	1970	1971
HMA total	728	565	482	481	456	606	417	593	556	532	$\frac{369}{287} \frac{f}{g} / \frac{1}{82}$	214	537 _h /
Single-family	665	560	467	370	416	489	400	474	441	322 <u>d</u> /		185	269 ^h /
Multifamily	63	5	15	111	40	117 <u>a</u> /	17 <u>b</u> /	109	115°C/	210 <u>e</u> /		29	268
Battle Creek	79	84	45	35	24	20	19	$\frac{26}{22}$	68	82	83	30	126
Single-family	79	84	45	29	24	20	17		18	11 <u>d</u> /	11 <u>f</u> /	6	6
Multifamily	-	-	-	6	-	_a/	2		50	71 <u>e</u> /	72	24	120
Albion Single-family Multifamily	59 36 23	36 36 -	32 32	26 26	22 22 -	46 19 27	13 13 _ <u>b</u> /	12 12	3 _c/	20 16 4	6 6 _g/	<u>4</u> -	61 48 13
Remainder	590	445	405	420	410	540	385	555	485	430	280	180	350
Single-family	550	440	390	315	370	450	370	450	420	295 <u>d</u> /	270 <u>f</u> /	175	315h/
Multifamily	40	5	15	105	40	90	15	105	65	135	10	5	135

a/ Excludes 84 units of low-rent public housing in Battle Creek.

e/ Excludes 150 units of elderly low-rent public housing in Battle Creek.

g/ Excludes 81 units of Section 236 housing in Albion.

h/ Excludes 15 units of Section 235 housing.

Sources: U.S. Bureau of the Census, C-40 Construction Reports; local building inspectors, and estimates by Housing Market Analyst.

 $[\]frac{\overline{b}}{b}$ / Excludes 40 units of elderly low-rent public housing in Albion.

c/ Excludes 60 units of low-rent public housing in Albion.

 $[\]frac{\Xi}{d}$ / Excludes 64 units of Section 221(d)(3) BMIR co-operative housing in Battle Creek and 6 units of Section 235 housing in the remainder of the HMA.

Excludes 100 units of scattered site low-rent public housing, 101 units of Section 221(d)(3) BMIR co-operative housing, 134 units of Michigan State Housing Authority Section 236(B) in Battle Creek, and 11 units of Section 235 housing in the remainder of the HMA.

Table V

Housing Factors

Battle Creek, Michigan, Housing Market Area
April 1960-September 1971

Tenure and vacancy	April	April	September
	1960	1970	1971
Total housing supply	44,005	46,856	47,500
Occupied housing units Owner occupied Percent of total occupied	41,010	44,422	45,000
	30,527	34,215	34,600
	74.4%	77.0%	76.9%
Renter occupied Percent of total occupied	10,483	10,207	10,400
	25.6%	23.0%	23.1%
Vacant housing units Available For sale Homeowner vacancy rate For rent Renter vacancy rate	2,995	2,434	2,500
	1,373	1,072	1,100
	408	344	350
	1.3%	1.0%	1.0%
	965	728	750
	8.4%	6.7%	6.7%
Other vacanta/	1,622	1,362	1,400

includes seasonal units, units rented or sold and awaiting occupancy, vacant dilapidated units, and units held off the market.

Sources: 1960 and 1970 Census of Housing; 1971 estimated by Housing Market Analyst.

Table VI

Estimated Annual Occupancy Potential for Subsidized Rental Housing

Battle Creek, Michigan, Housing Market Area

September 1, 1971-September 1, 1973

	Section 236 ^a / exclusively	Eligible for both programs	Public housing exclusively	Total for both programs
A. <u>Families</u>				
<pre>bedroom bedrooms bedrooms bedrooms Total</pre>	0 50 45 <u>25</u> 120	0 0 0 0 0	10 50 40 <u>15</u> 115 <u>b</u> /	10 100 85 40 235
B. <u>Elderly</u>				
Efficiency 1 bedroom Total	20 10 30	10 - 10	100 30 130c/	130 40 170

Estimates are based upon regular income limits. These families may also be assisted with sales housing under Section 235.

b/ About 70 percent of these families are eligible under the rent supplement program.

c/ All of these elderly couples and individuals are also eligible under the rent supplement program.

Table Vir

Matile Creek, Mathinan, Ares Postal Vacancy Survey

August 31, 1971

f	Tota	Total residences and apartments	ra and a	uriments				٣	Residences			ĺ		Ϋ́	Aperiments				House teatlers	railera	
	Total possible	- 1	Vacant units				Total possible		Vacant units	•		lla jer	Tatal manitals	**	Vaceat units	iite		-	I	Vec	
Postal area	deliveries	₹	- Lacd	ı.	New	const.	deliverien	711	84	Used	New	come.	deliveries	₹	æ	% Used	N.	Const.	deliveries	ž.	pe
The Survey Area Total	43.125	1.042	5. 2	5	H	773	32,256	74.5	21	773	77	951	3,862	292	777	286	#	275	1,259	21	3
Battle Creek	32,626	657	2.0	969	19	412	30,110	202	1.7	455	20	98	2,516	152	6.0	141	11	326	90.	٥	1.3
Other Cities and Towns	10.499	385	3.7	त्र	21	777	2,146	770	377	212	2	98	1,353	591	10.7	3	•1	7	3	ជ	7.4
Albion Homer Marshall	4,892 1,338 4,269	224 54 107	4.6	206 54 103	81 - 4.	107	4,091 1,264 3,791	125 48 67	3.8	107 4:3 6:3	81 - 4	27 6 35	801 74 478	8 9 9 9 9 9	12.4 8.1 8.4	8° ° 3		90	239 129 185	r 11 3	2.9
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The survey covers dwelling units in condences, apartments, and house trailers, including military, institutional, public housing saits, and units used only necessally. The survey does not cover stores, offices, commercial houses and mutils, or	la in residences, a	partmenta	and boa	se trailer	, includie	g military	, institutional, p	ublic hous	ion soil	and way	o pass a	niv se vinc	ally. The survey	dog and		5					1

al, public housing usits, and units used only sessonally. The survey <u>does not</u> cover stores, offices, commercial hatels and matels, ar durmituries; nor doen 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. c.: a residence represents one possible atop with one possible delivery on a carrier's route; an apartment represents one possible atop with more than one possible delivery.

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

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 $\mathbf{e}_{i} = \{ (i,j) \mid i \in \mathbb{N} \mid i \in \mathbb{N} \mid i \in \mathbb{N} \}$

U.S. Federal Housing Administration Analysis of the...housing market.

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

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300 ES PAID
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US.MAIL

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT