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Bureau of the Census

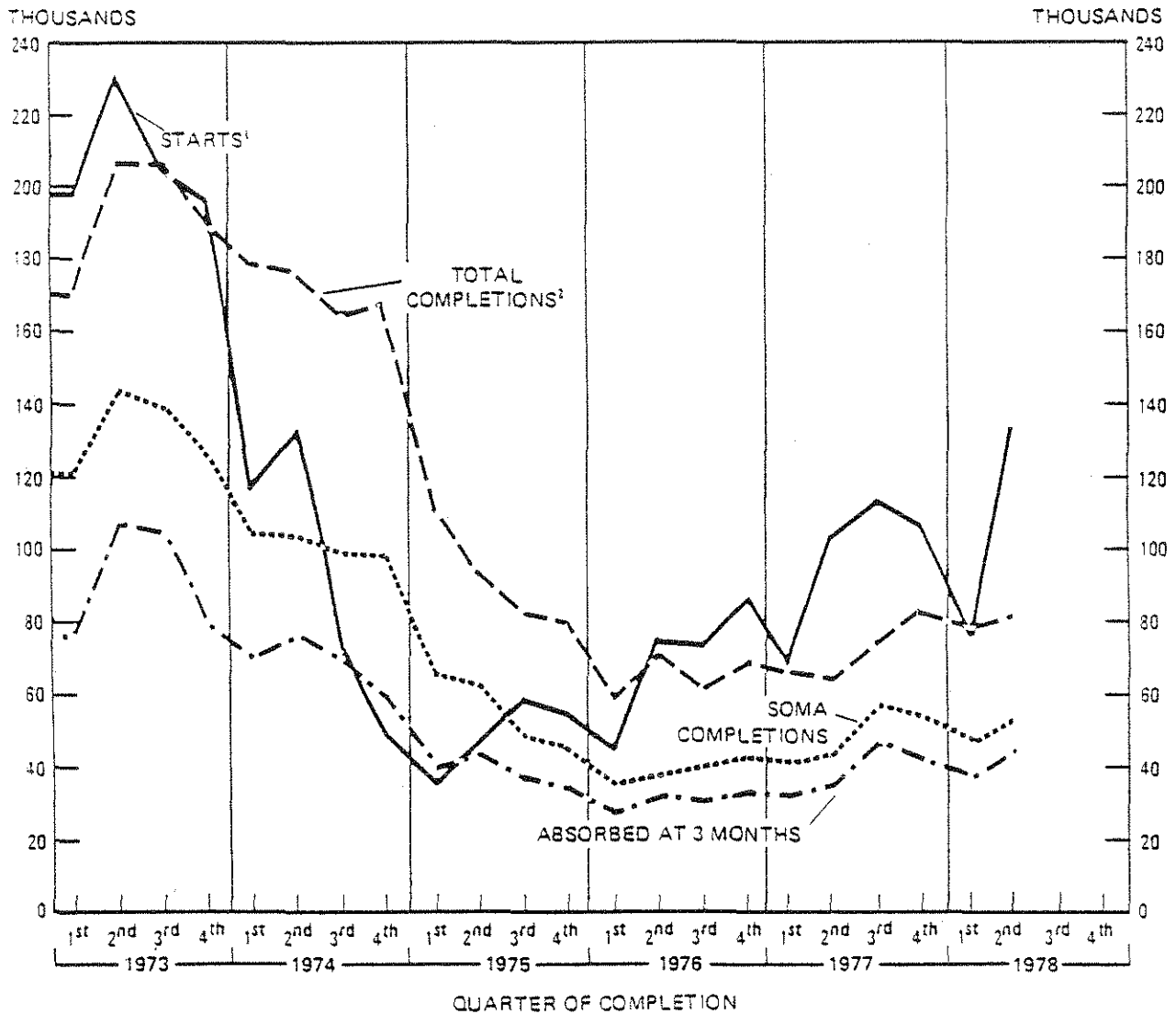
# Market Absorption of Apartments

U.S. DEPARTMENT OF HOUSING  
and URBAN DEVELOPMENT

Third Quarter 1978 Absorptions  
(Completions in Second Quarter 1978)

H-130-78-C3  
Issued December 1978

Figure 1. Units in Apartment Buildings Started, Completed, and Absorbed: 1973 to 1978



Note: Limited to building with five units or more in permit-issuing places

1. Source: Construction Report, C-20-78-9 (September 1978) Table 2.

2. Source: Construction Report, C-22-78-8 (August 1978) Table 1.

Privately financed apartments completed during the April-June 1978 quarter were absorbed after 3 months following completion at an estimated seasonally adjusted rate of 79 percent. This is about the same as the seasonally adjusted rate of 82 percent for apartments completed during the first quarter of 1978 (see table 3). The nonseasonally adjusted rate of 83 percent does not significantly differ from the seasonally adjusted rate. The median asking rent for these units was \$251. Apartments which have been on the market for 9 months (those completed during October-December 1977) were 98 percent rented.

The proportion of apartments renting for less than \$150 was negligible, while those renting for \$150 to \$199 accounted for 18 percent. In comparison, 31 percent rented for \$200 to \$249 and 51 percent rented for \$250 or more.

The data are based on a sample survey and consequently the figures cited above are subject to sampling variability. As shown in table 3, the 79 and 98 percent figures are subject to sampling errors (i.e., standard errors) of 2.2 and 0.8 percentage points, respectively. This means that there are about 2 chances out of 3 that a complete count would be in the range of 79 ( $\pm 2.2$ )

percentage points and 98 ( $\pm 0.8$ ) percentage points. Sampling errors for the figures that follow are indicated in parentheses.<sup>1</sup>

A total of 80,900 ( $\pm 2,020$ ) apartments were completed during the second quarter of 1978. Of this total, some 53,300 ( $\pm 1,890$ ) or 66 percent ( $\pm 2.1$ ) were the type covered by the Survey of Market Absorption (SOMA), i.e., privately financed, unfurnished rental units built without Federal subsidy in buildings with five or more apartments.

Of the remaining 34 percent ( $\pm 2.1$ ), cooperatives and condominiums account for 18 percent ( $\pm 1.7$ ) of the total with a 3-month absorption rate of 75 percent ( $\pm 4.5$ )—see table 4. Furnished rental units account for 3 percent ( $\pm 0.8$ ). Also excluded from the survey are units in federally subsidized properties built under these programs of the Department of Housing and Urban Development: Senior Citizens Housing direct loans (Section 202), FHA below market interest rate mortgages (Section 236), and all units in buildings containing apartments in the FHA rent supplement program, which together account for 9 percent ( $\pm 1.3$ ). The remainder are

<sup>1</sup> See Reliability of Estimates on page 5.

**Table 1. CHARACTERISTICS OF APARTMENTS COMPLETED DURING THE SECOND QUARTER OF 1978 AND RENTED WITHIN 3 MONTHS**

(Privately financed, nonsubsidized, unfurnished apartments. Data regarding number of bedrooms and asking rent are collected at the initial interview, i.e., 3 months following completion. Data not seasonally adjusted)

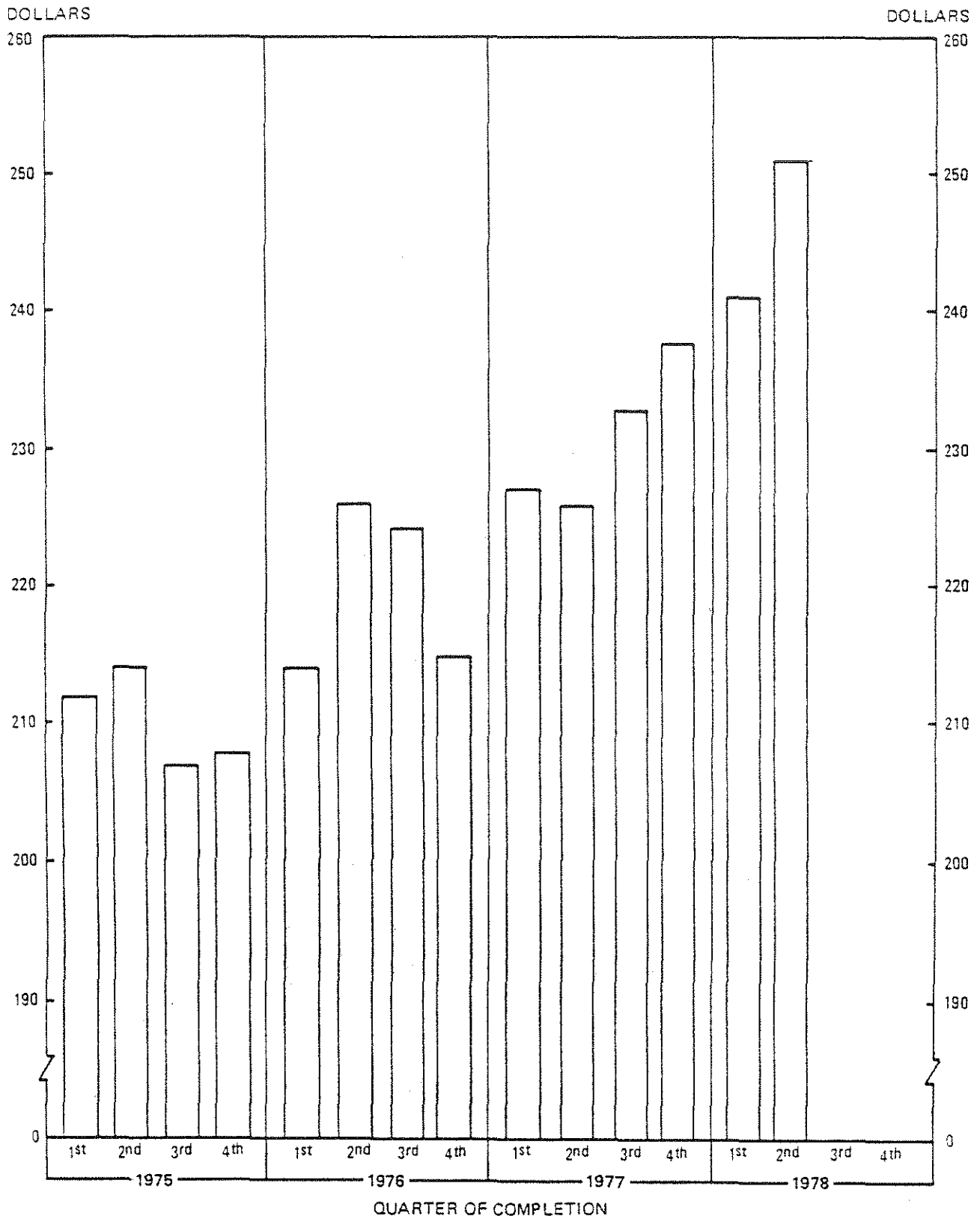
Item	Total units completed		Percent of total units		Percent rented within 3 months	
	Number	Sampling error*	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)
Total.....	53,300	1,890	100	(X)	83	2.0
RENT CLASSES						
Less than \$150.....	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
\$150 to \$174.....	2,400	610	5	1.2	80	10.3
\$175 to \$199.....	7,300	1,040	14	1.9	78	6.1
\$200 to \$249.....	16,500	1,490	31	2.5	87	3.3
\$250 to \$299.....	16,500	1,490	31	2.5	84	3.6
\$300 or more.....	10,500	1,230	20	2.2	81	4.8
Median asking rent.....	\$251	4.4	(X)	(X)	(X)	(X)
NUMBER OF BEDROOMS						
Less than 2.....	26,300	1,760	49	2.7	83	2.9
2.....	25,000	1,740	47	2.7	84	2.9
3 or more.....	2,000	560	4	1.1	83	10.6

\*Standard error within range of about 2 chances out of 3.

(X) Not applicable.

(Z) Indicates less than 50 and less than one-half percents.

Figure 2. Median Rent of Apartments Completed in the United States: 1975 to 1978



Note: Limited to buildings with five units or more in permit-issuing places.

excluded for other reasons, including turnkey housing (privately built and sold to local public housing authorities subsequent to completion). The data, however, include privately owned housing subsidized by State and local governments.

### SAMPLE DESIGN

SOMA is designed to provide data concerning the rate at which nonsubsidized and unfurnished privately financed units in buildings with 5 or more units are rented (or absorbed). In addition, data on characteristics of the units, such as rent and number of bedrooms, are collected.

In each quarter, a sample of about 2,000 buildings with 5 or more units completed during that quarter, is selected. The sample is selected from buildings reported as completed in a sample of building permits in the Census Bureau's Housing Starts Survey.<sup>2</sup> Buildings completed in nonpermit-issuing areas are excluded from consideration in this survey.

Information is obtained for the units in the buildings selected in a given quarter in each of the next four quarters on the proportion of units occupied 3, 6, 9, and 12 months after completion.

<sup>2</sup>See "Housing Starts," Construction Reports Series C20, for the details of this survey.

Each quarter the absorption data for some buildings are received too late for inclusion in the report. These late data will be included in a revised table in the next quarterly report. See table 2.

### ESTIMATION

The estimation procedure used in the survey involves, as a final step, the inflation of the weighted sample results to the quarterly estimates of housing completions obtained from the Housing Completions Survey. As the Housing Completions Survey is based on a larger sample than SOMA, it provides a more stable set of controls for estimates which can be obtained from both surveys. In addition to reducing the sampling variability of the estimates of totals from SOMA, the ratio estimation procedure, as a useful byproduct, produces estimates of the units completed in a given quarter which are consistent with the published figures from the Housing Completions series.<sup>3</sup>

The absorption rates assume that the absorption rates of units not included in the interviewed group or not accounted for are identical to rates for units where data were obtained.

<sup>3</sup>See "Housing Completions," Construction Reports, Series C22.

**Table 2. CHARACTERISTICS OF APARTMENTS COMPLETED DURING THE FIRST QUARTER OF 1978 AND RENTED WITHIN 3 MONTHS (REVISED)**

(Privately financed, nonsubsidized, unfurnished apartments. Data regarding number of bedrooms and asking rent are collected at the initial interview, i.e., 3 months following completion. Data not seasonally adjusted)

Item	Total units completed		Percent of total units		Percent rented within 3 months	
	Number	Sampling error*	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)
Total.....	47,200	1,880	100	(X)	79	2.4
<b>RENT CLASSES</b>						
Less than \$150.....	400	250	1	0.6	100	28.3
\$150 to \$174.....	3,200	700	7	1.5	73	9.9
\$175 to \$199.....	6,000	950	13	1.9	82	6.2
\$200 to \$249.....	17,200	1,510	36	2.8	79	3.9
\$250 to \$299.....	12,300	1,310	26	2.5	81	4.4
\$300 or more.....	8,100	1,090	17	2.2	78	5.8
Median asking rent.....	\$241	4.0	(X)	(X)	(X)	(X)
<b>NUMBER OF BEDROOMS</b>						
Less than 2.....	22,500	1,660	48	2.9	80	3.4
2.....	22,600	1,670	48	2.9	79	3.4
3 or more.....	2,100	570	4	1.1	72	12.3

\*Standard error within range of about 2 chances out of 3.

(X) Not applicable.

Table 3. ABSORPTION RATES OF PRIVATELY FINANCED NONSUBSIDIZED UNFURNISHED APARTMENTS: 1975 TO 1978

(Structures with five or more units)

Quarter of completion	Total units completed		Seasonally adjusted rented within 3 months		Not seasonally adjusted - rented within--							
					3 months		6 months		9 months		12 months	
	Number	Sampling error*	Per-cent	Sampling error* (per-centage points)	Per-cent	Sampling error* (per-centage points)	Per-cent	Sampling error* (per-centage points)	Per-cent	Sampling error* (per-centage points)	Per-cent	Sampling error* (per-centage points)
1975												
January-March.....	65,600	2,320	66	2.8	61	2.6	80	2.3	90	1.7	93	1.5
April-June.....	62,100	1,930	68	2.8	72	2.7	86	2.1	91	1.7	94	1.2
July-September.....	49,800	1,910	69	3.1	75	2.8	86	2.3	92	1.5	97	1.0
October-December...	45,600	1,900	81	2.3	75	2.5	91	1.7	96	1.1	98	0.8
1976												
January-March.....	35,300	1,660	85	2.4	79	2.7	92	1.8	96	1.3	97	1.1
April-June.....	38,300	1,730	81	2.6	86	2.3	96	1.3	98	0.9	99	0.6
July-September.....	40,300	1,610	75	2.7	79	2.6	92	1.7	96	1.2	99	0.6
October-December...	43,200	1,750	84	2.2	78	2.5	92	1.7	98	0.9	99	0.6
1977												
January-March.....	41,700	1,730	81	2.4	77	2.6	92	1.7	97	1.1	97	1.0
April-June.....	43,100	1,670	78	2.5	83	2.3	97	1.0	98	0.8	99	0.6
July-September.....	56,000	1,680	79	2.2	83	2.0	93	1.4	97	0.9	99	0.5
October-December...	54,800	1,940	82	2.1	78	2.2	94	1.3	98	0.8	(NA)	(NA)
1978												
January-March <sup>F</sup> .....	47,200	1,880	82	2.2	79	2.4	94	1.4	(NA)	(NA)	(NA)	(NA)
April-June.....	53,300	1,890	79	2.2	83	2.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
July-September.....												
October-December...												

(NA) Not available. <sup>F</sup>Revised.

\*Standard error within range of about 2 chances out of 3.

The noninterviewed and not accounted for cases comprise less than 2 percent of the sample housing units in this survey.

### RELIABILITY OF ESTIMATES

The sample used for this survey is only one of a large number of possible samples of the same size that could have been selected using the same sample design, sample selection, and measurement procedures. Estimates derived from these samples would differ from each other.

The standard error of a survey estimate is a measure of the variation among the estimates from all possible samples and is, therefore, a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. As calculated for this report, the standard error also partially measures the effect of certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples, between the estimate and the desired value. The accuracy of a survey result depends upon the sampling and nonsampling errors, measured by the standard error, and the bias and other types of nonsampling error, not measured by the standard error.

The estimate and its associated standard error may be used to construct a confidence interval, that is, if all possible samples

were selected, each of these surveyed under essentially the same general conditions and an estimate and its estimated standard error were calculated from each sample, then approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average value of all possible samples.

The average value of all possible samples may or may not be contained in any particular computed interval. But for a particular sample, one can say with specified confidence that the average of all possible samples is included in the constructed interval. Similarly, the chances are about two out of three that the survey estimate will differ from the average result of all possible samples by less than one standard error, and 99 out of 100 that the survey estimate will differ from the average result by less than 2 1/2 times the standard error. For example, the chances are 95 out of 100 that the number of two-bedroom apartments (25,000) would be no lower than 21,520 or no higher than 28,480 if the data were collected in a complete census. The conclusions stated in this report are considered significant at the 95 percent confidence level.

In addition to sampling error, sample surveys are subject to response and processing errors similar to those experienced in censuses. The data in this report are preliminary and subject to slight changes in the annual report.

Table 4. COOPERATIVE AND CONDOMINIUM APARTMENTS: TOTAL COMPLETED, PERCENT OF ALL 5+ UNITS AND ABSORBED WITHIN 3 MONTHS: 1975 TO 1978

(Privately financed, nonsubsidized apartments in buildings with five or more units.  
Data not seasonally adjusted)

Quarter of completion	Total units completed		Percent of all 5+ units		Absorbed within 3 months--	
	Number	Sampling error*	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)
1975						
January-March.....	30,300	1,960	26	1.9	40	4.2
April-June.....	17,200	1,530	19	1.9	46	5.6
July-September.....	22,300	1,670	26	2.3	49	5.1
October-December.....	14,900	1,420	19	2.1	41	6.0
1976						
January-March.....	13,700	1,340	23	2.1	56	5.2
April-June.....	11,000	1,230	17	1.8	53	6.0
July-September.....	9,500	1,150	15	1.8	48	6.6
October-December.....	12,000	1,280	17	1.8	54	5.8
1977						
January-March.....	10,200	1,200	15	1.7	74	5.5
April-June.....	9,200	1,140	15	1.8	77	5.5
July-September.....	9,700	1,180	13	1.5	59	6.2
October-December.....	13,900	1,390	17	1.6	76	4.6
1978						
January-March <sup>r</sup> .....	8,900	1,140	12	1.9	74	5.8
April-June.....	14,300	1,400	18	1.7	75	4.5
July-September.....						
October-December.....						

\*Standard error within range of about 2 chances out of 3.

<sup>r</sup>Revised.



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**"MARKET ABSORPTION OF APARTMENTS"**  
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Because of the continuing interest in apartment construction throughout the Nation, both private industry and Government have a need for information on the nature of the demand for rental housing. This report is designed to provide data concerning the rate at which non-subsidized and unfurnished privately financed units in buildings with 5 or more units are rented (or absorbed). The "Market Absorption of Apartments" quarterly report provides data on the time it takes to rent new apartment units by showing percents absorbed at 3, 6, 9, and 12-month intervals following completion of the units. Three-month absorption rates are also presented for some characteristics of the units, such as asking rent classes and number of bedrooms. Beginning with the First Quarter 1976 report, data for cooperative and condominium apartment units, such as the total completed and the 3-month absorption rate, are also provided.

The annual report provides similar data for the geographic areas of regions of the U.S. and for inside and outside SMSA's of the U.S. In addition, data are presented on facilities and services offered in new rental units, such as air conditioning and swimming pools.

**"CHARACTERISTICS OF APARTMENTS COMPLETED"**  
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This report provides data on the characteristics of non-subsidized and privately financed apartment units in buildings with 5 or more units completed during a calendar year. For unfurnished units, the characteristics include number of bedrooms, asking rent classes, and the three-month absorption rate. Geographically, the data are presented by regions of the U.S. and by inside and outside SMSA's for the U.S.

For furnished units, data are presented for the U.S. by asking rent classes and number of bedrooms. For cooperative and condominium units, data are given for the U.S. by number of bedrooms, regions, and percent absorbed after 3 months.

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The statistics of these reports are based on a survey conducted by the Bureau of the Census, U.S. Department of Commerce, for the Department of Housing and Urban Development.

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