Market Absorption of Apartments
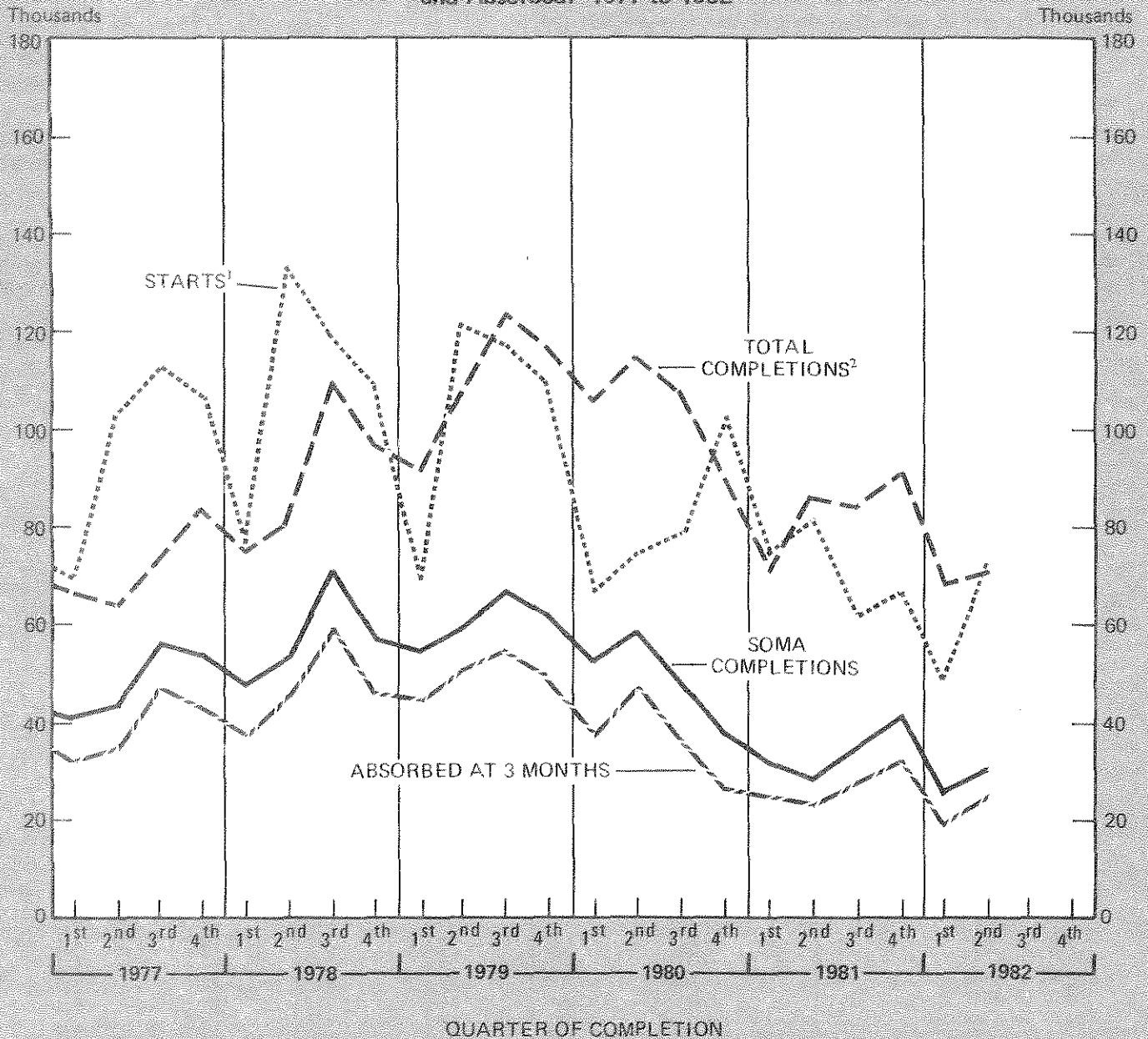
Third Quarter 1982 — Absorptions
(Completions in Second Quarter 1982)

FIGURE 1. Units in Apartment Buildings Started, Completed, and Absorbed: 1977 to 1982

QUARTER OF COMPLETION

Note: Limited to buildings with five units or more in permit-issuing places.
1. Source: Construction Reports, C20-82-8 (August 1982) table 2.
2. Source: Construction Reports, C22-82-8 (August 1982) table 1.

SUMMARY OF FINDINGS

Privately financed, nonsubsidized, unfurnished apartments completed during the April-June 1982 quarter were 76 percent absorbed (seasonally adjusted) 3 months after their completion. This is about the same as both the revised seasonally adjusted 3-month rate of 78 percent for apartments completed during the first quarter of 1982 and the seasonally adjusted rate of 81 percent for second quarter 1981 completions. The non-seasonally adjusted 3-month rate was 79 percent. Apartments which have been on the market for 9 months, those completed during October-December 1981, were 98 percent absorbed.

The median asking rent for newly constructed units was $391 in the second quarter, an eight percent increase over the revised $361 median for the first quarter of 1982. Apartments renting for less than $350 accounted for 31 percent of the total, while those renting for $350 or more accounted for 69 percent.

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 76 and 98 percent figures are subject to sampling errors (i.e., standard errors) of 3.1 and 0.9 percentage points, respectively. This means that there are about 2 chances out of 3 that a complete count would be in the range of 76 (±3.1) percentage points, and 98 (±0.9) percentage points. Sampling errors for the figures that follow are indicated in parenthesis.[1]

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[1] See reliability of estimates on page 5.

A total of 73,000 (±3,490) apartments were completed during the second quarter of 1982. Of the total 31,000 (±1,800) or 42 percent (±2.3) were privately financed, unfurnished rental units built without federal subsidy in buildings with five or more apartments. This represents an increase of 22 percent over first quarter completions for this type apartment.

Cooperative and condominium apartment completions accounted for 37 percent (±2.2) of all apartments completed during the second quarter, about the same as the first quarter percentage for such units. The 3-month absorption rate for cooperatives and condominums during the first quarter was 52 percent (±3.8).

Units in federally subsidized properties built under programs of the Department of Housing and Urban Development (Low Income Housing Assistance (Section 8), Senior Citizens Housing direct loans (Section 202) and all units in buildings containing apartments in the FHA rent supplement program) accounted for 16 percent (±1.7) of completions.

Furnished rental units accounted for 1 percent (±0.5) of apartment completions. The remaining 3 percent (±0.8) include turnkey housing (privately built and sold to local public housing authorities subsequent to completion). The data on privately financed units include privately owned housing subsidized by State and local governments.

Table 1. CHARACTERISTICS OF APARTMENTS COMPLETED DURING THE SECOND QUARTER OF 1982 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. Data may not add to total due to rounding. Medians are computed using unrounded data.)

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...............	31,000	1,800	100	(X)	79	2.9
RENT CLASSES						
Less than $200...........	200	180	1	0.7	87	29.9
$200 to $249.............	1,800	530	6	1.7	100	8.1
$250 to $299.............	3,300	710	11	2.2	82	8.4
$300 to $349.............	4,200	800	14	2.5	82	7.5
$350 to $399.............	7,400	1,040	24	3.0	77	6.1
$400 or more.............	14,100	1,380	45	3.5	76	4.5
Median asking rent.......	$391	7.5	(X)	(X)	(X)	(X)
NUMBER OF BEDROOMS						
Less than 2..............	14,300	1,390	46	3.6	77	4.4
2........................	15,000	1,420	48	3.6	81	4.0
3 or more................	1,800	530	6	1.7	84	10.9

*Standard error within range of about 2 chances out of 3.　　(X) Not applicable.

FIGURE 2.

Median Rent of Apartments Completed in the United States: 1979 to 1982

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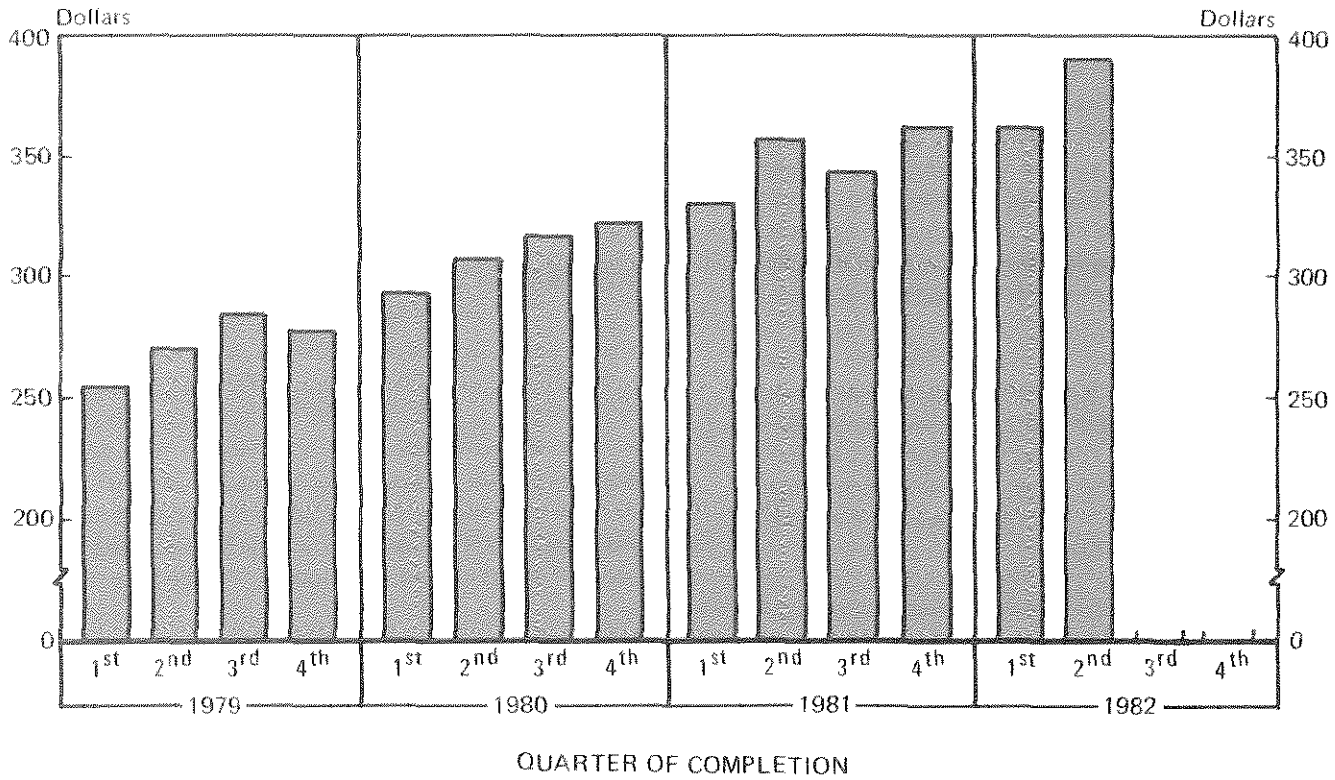
Note: Limited to buildings with five or more units in permit-issuing places.

FIGURE 3.

Cooperative and Condominium Apartment Completions as Percent of
Total Apartment Completions 1978-1982

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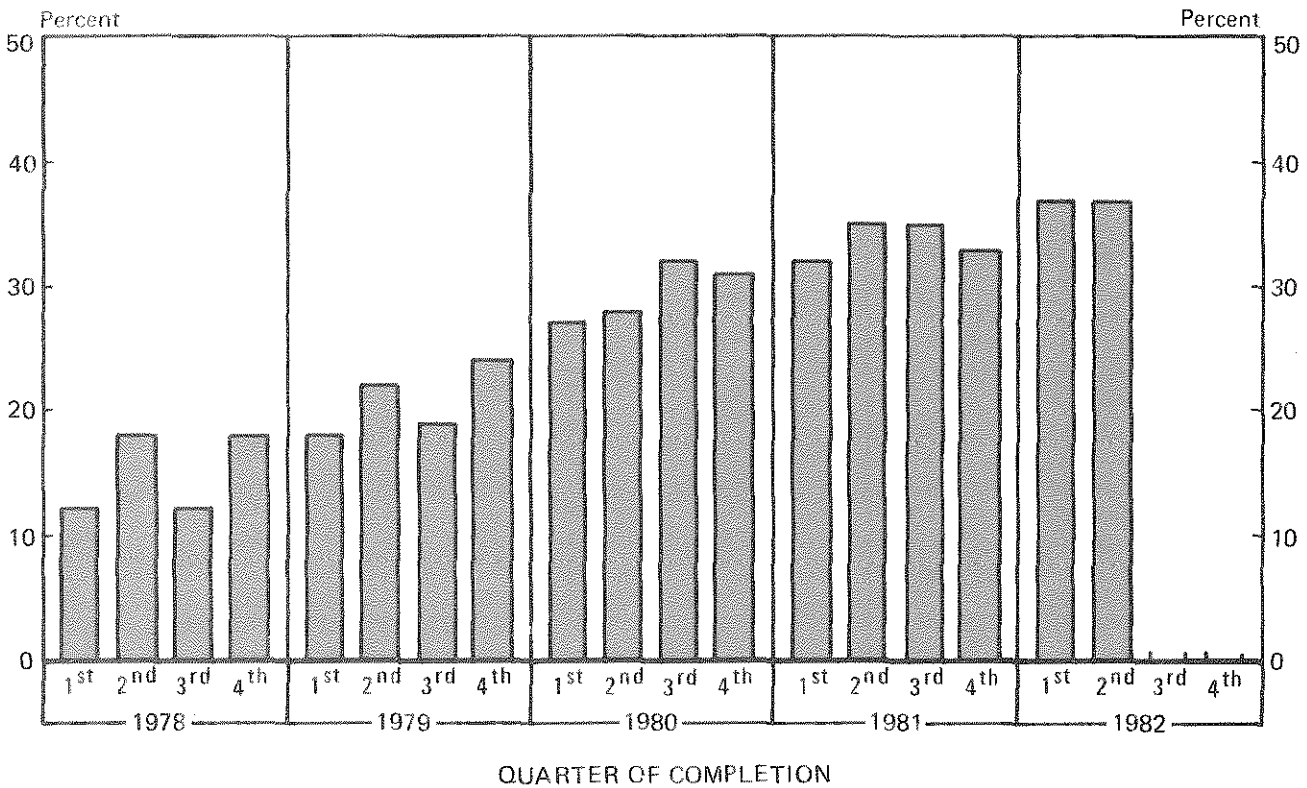
Note: Limited to buildings with five or more units in permit-issuing places.

SAMPLE DESIGN

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

The buildings selected for SOMA are those included in the Census Bureau's Survey of Construction (SOC)[2]. For this survey, the United States is first divided into primary sampling units (PSU's) which are sampled on the basis of population. Next, a sample of permit-issuing places is selected within each sample PSU. Finally, all buildings within sampled places with five or more units as well as a subsample of buildings with one to four units are selected.

Each quarter, all buildings with five or more housing units in the SOC sample reported as completed during that quarter come into sample for SOMA. Buildings completed in nonpermit-issuing areas are excluded from consideration. Information on the proportion of units absorbed 3, 6, 9, and 12 months after completion is obtained for units in buildings selected in a given quarter in each of the next four quarters.

[2] See "Housing Starts," Construction Reports, Series C20, for 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

Unbiased quarterly estimates are formed by multiplying the counts for each building by its base weight (the inverse of its probability of selection) and then summing over all buildings. The final estimate is then obtained by multiplying the unbiased estimate by the following ratio estimate factor:

$$\frac{\text{total units in 5 + buildings in permit-issuing areas as estimated by the SOC for that quarter}}{\text{total units in 5 + buildings as estimated by SOMA for that quarter}}$$

When all the completed 5+ buildings in the SOC are designated for SOMA, as is currently the case, this ratio estimate factor will be close to 1. This procedure produces estimates of the units completed in a given quarter which are consistent with the published figures from the Housing Completions Series,[3]

[3] See "Housing Completions," Construction Reports, Series C22.

Table 2. CHARACTERISTICS OF APARTMENTS COMPLETED DURING THE FIRST QUARTER OF 1982 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. Data may not add to total due to rounding. Medians are computed using unrounded data.)

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.................	25,400	1,690	100	(X)	76	3.4
RENT CLASSES						
Less than $200.............	700	330	3	1.3	97	8.1
$200 to $249...............	2,100	570	8	2.1	82	10.5
$250 to $299...............	2,700	640	11	2.5	75	10.5
$300 to $349...............	6,100	950	24	3.4	84	5.9
$350 to $399...............	4,900	860	19	3.1	74	7.9
$400 or more..............	8,900	1,130	35	3.8	69	6.2
Median asking rent.........	$361	9.3	(X)	(X)	(X)	(X)
NUMBER OF BEDROOMS						
Less than 2................	11,600	1,270	46	3.9	79	4.8
2..........................	12,400	1,300	49	3.9	75	4.9
3 or more..................	1,400	470	6	1.9	55	16.7

*Standard error within range of about 2 chances out of 3.   (X) Not applicable.

Table 3. ABSORPTION RATES OF PRIVATELY FINANCED NONSUBSIDIZED UNFURNISHED APARTMENTS: 1979 TO 1982

(Structures with five units or more).

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*	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)
1979												
January-March........	53,900	2,060	86	1.9	83	2.0	95	1.2	99	0.5	99	0.5
April-June...........	59,900	2,360	80	2.1	84	1.9	94	1.2	97	0.9	98	0.7
July-September.......	66,700	2,430	81	1.9	82	1.9	91	1.4	97	0.8	99	0.5
October-December.....	60,600	2,360	84	1.9	81	2.0	93	1.3	97	0.9	99	0.5
1980												
January-March........	51,900	2,220	74	2.4	72	2.5	89	1.7	95	1.2	97	0.9
April-June...........	58,800	2,340	76	2.2	79	2.1	93	1.3	96	1.0	98	0.7
July-September.......	47,400	2,210	76	2.5	77	2.4	90	1.7	96	1.1	98	0.8
October-December.....	37,900	2,000	74	2.8	71	2.9	86	2.2	94	1.5	97	1.1
1981												
January-March........	31,600	1,780	78	2.9	77	3.0	94	1.7	98	1.0	99	0.7
April-June...........	28,300	1,830	81	2.9	84	2.7	94	1.6	97	1.3	98	1.0
July-September.......	35,100	1,930	78	2.8	79	2.7	87	2.3	91	1.9	93	1.7
October-December.....	40,400	2,030	82	2.4	81	2.5	95	1.4	98	0.9	(NA)	(NA)
1982												
January-March[r].......	25,400	1,680	78	3.2	76	3.4	90	2.4	(NA)	(NA)	(NA)	(NA)
April-June...........	31,000	1,800	76	3.0	79	2.9						
July-September.......												
October-December.....												

*Standard error within range of about 2 chances out of 3.   (NA) Not available.   [r]Revised.

and also reduces, to some extent, the sampling variability of the estimates of totals.

It is assumed that the absorption rates and other characteristics of units not included in the interviewed group or not accounted for are identical to rates for units where data were obtained. The noninterviewed and not-accounted-for cases constitute less than 2 percent of the sample housing units in this survey.

RELIABILITY OF THE ESTIMATES

There are two types of possible errors associated with data from sample surveys: sampling and nonsampling errors. The following is a description of the sampling and nonsampling errors associated with SOMA.

Nonsampling Errors

In general, nonsampling errors can be attributed to many sources: inability to obtain information about all cases, definitional difficulties, differences in the interpretation of questions, inability or unwillingness to provide correct information on the part of respondents, mistakes in recording or coding the data, and other errors of collection, response, processing, coverage, and estimation for missing data.

Sampling Errors

The particular sample used for this survey is one of a large number of possible samples of the same size that could have been selected using the same sample design. Even if the same questionnaires, instructions, and interviewers were used, estimates from each of the different samples would differ from each other. The deviation of a sample estimate from the average of all possible samples is defined as the sampling error. The standard error of a survey estimate attempts to provide a measure of this variation among the estimates from the possible samples and, thus, is a measure of the precision with which an estimate from a sample approximates the average result of all possible samples.

As calculated for this survey, the standard error also partially measures the variation in the estimates due to response and interviewer errors (nonsampling errors), but it does not measure, as such, any systematic biases in the data. Therefore, the accuracy of the estimates depends on both the sampling and nonsampling error measured by the standard error, biases, and some additional nonsampling errors not measured by the standard error.

The sample estimate and its estimated standard error enable the user to construct confidence intervals, ranges that would include the average result of all possible samples with a known

probability. For example, if all possible samples were selected, each of these were surveyed under essentially the same general conditions, and an estimate and its estimated standard error were calculated from each sample, then—

1. Approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average result of all possible samples.
2. Approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the average result of all possible samples.
3. Approximately 95 percent of the intervals from two standard errors below the estimate to two standard error above the estimate would include the average result of all possible samples.

For very small estimates, the lower limit of the confidence interval may be negative. In this case, a better approximation to the true interval estimate can be achieved by restricting the interval estimate to positive values, that is, by changing the lower limit of the interval estimate to zero.

The average result of all possible samples either is or is not contained in any particular computed interval. However, for a particular sample, one can say with specified confidence that the average result of all possible samples is included in the constructed interval.

The conclusions stated in this report are considered significant at the 95 percent confidence level.

For example, table 1 of this report shows that there were 15,000 apartments with two bedrooms in the second quarter of 1982. The standard error of this estimate is 1,420. The 68 percent confidence interval as shown by these data is from 13,580 to 16,420. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. Similarly, we could conclude that the average estimate derived from all possible samples lies within the interval from 12,160 to 17,840 (using twice the standard error) with 95 percent confidence.

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: 1979 TO 1982

(Privately financed, nonsubsidized apartments in buildings with five units or more. 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)
1979						
January-March.....................	16,700	1,510	18	1.6	80	3.9
April-June.....................	23,200	1,760	22	1.6	73	3.6
July-September.....................	23,300	1,790	19	1.4	76	3.4
October-December.....................	28,600	1,930	24	1.6	72	3.3
1980						
January-March.....................	28,400	1,900	27	1.7	73	3.3
April-June.....................	32,600	2,020	28	1.7	72	3.1
July-September.....................	34,200	2,030	32	1.8	72	3.1
October-December.....................	27,700	1,830	31	1.9	70	3.5
1981						
January-March.....................	22,400	1,630	32	2.2	68	3.9
April-June.....................	30,700	1,880	35	2.0	67	3.3
July-September.....................	29,500	1,840	35	2.1	60	3.6
October-December.....................	30,000	1,880	33	2.0	55	3.6
1982						
January-March[r].....................	25,600	1,690	37	2.3	57	3.9
April-June.....................	27,300	1,740	37	2.2	52	3.8
July-September.....................						
October-December.....................						

*Standard error within range of about 2 chances out of 3.   [r]Revised.

Table 5. HOUSING UNITS COMPLETED IN BUILDINGS WITH FIVE UNITS OR MORE: 1979 TO 1982

(Limited to buildings in permit-issuing places. Data may not add to total due to rounding.)

Quarter of completion	Total		Unfurnished apartments		Furnished apartments		Cooperatives and condominiums		Federally subsidized		Other[1]	
	Number	Sampling error*	Number	Sampling error*	Number	Sampling error*	Number	Sampling error*	Number	Sampling error*	Number	Sampling error*
1979												
January-March......	91,000	3,930	53,900	2,060	3,500	730	16,700	1,510	14,800	1,440	2,800	560
April-June.........	107,600	4,300	59,900	2,260	1,900	540	23,200	1,760	21,700	1,710	900	380
July-September.....	123,400	4,630	66,700	2,430	3,700	760	23,300	1,790	27,100	1,900	2,600	640
October-December...	117,300	4,510	60,600	2,360	3,000	680	28,600	1,930	23,900	1,800	1,200	430
1980												
January-March......	105,200	4,250	51,900	2,220	3,200	700	28,400	1,900	20,300	1,660	1,400	470
April-June.........	115,600	4,470	58,800	2,340	2,800	660	32,600	2,020	20,200	1,670	1,200	430
July-September.....	107,700	4,300	47,400	2,210	1,400	470	34,200	2,030	19,500	1,640	5,200	890
October-December...	90,500	3,920	37,900	2,000	2,300	600	27,700	1,830	19,900	1,620	2,700	650
1981												
January-March......	70,600	3,430	31,600	1,780	1,400	470	22,400	1,630	10,400	1,210	4,900	860
April-June.........	86,700	3,830	28,300	1,830	1,200	430	30,700	1,880	24,000	1,730	2,500	620
July-September.....	84,200	3,770	35,100	1,930	1,100	410	29,500	1,840	16,800	1,500	1,700	510
October-December...	91,000	3,930	40,400	2,030	2,300	600	30,000	1,880	14,900	1,440	3,400	720
1982												
January-March[r].....	68,500	3,380	25,400	1,680	1,800	530	25,600	1,690	12,900	1,320	2,800	660
April-June.........	73,000	3,490	31,000	1,800	1,000	400	27,300	1,740	11,700	1,280	2,000	560
July-September.....												
October-December...												

*Standard error within range of about 2 chances out of 3. [r]Revised.

[1]Other includes turnkey housing (privately built and sold to local public housing authorities subsequent to completion).