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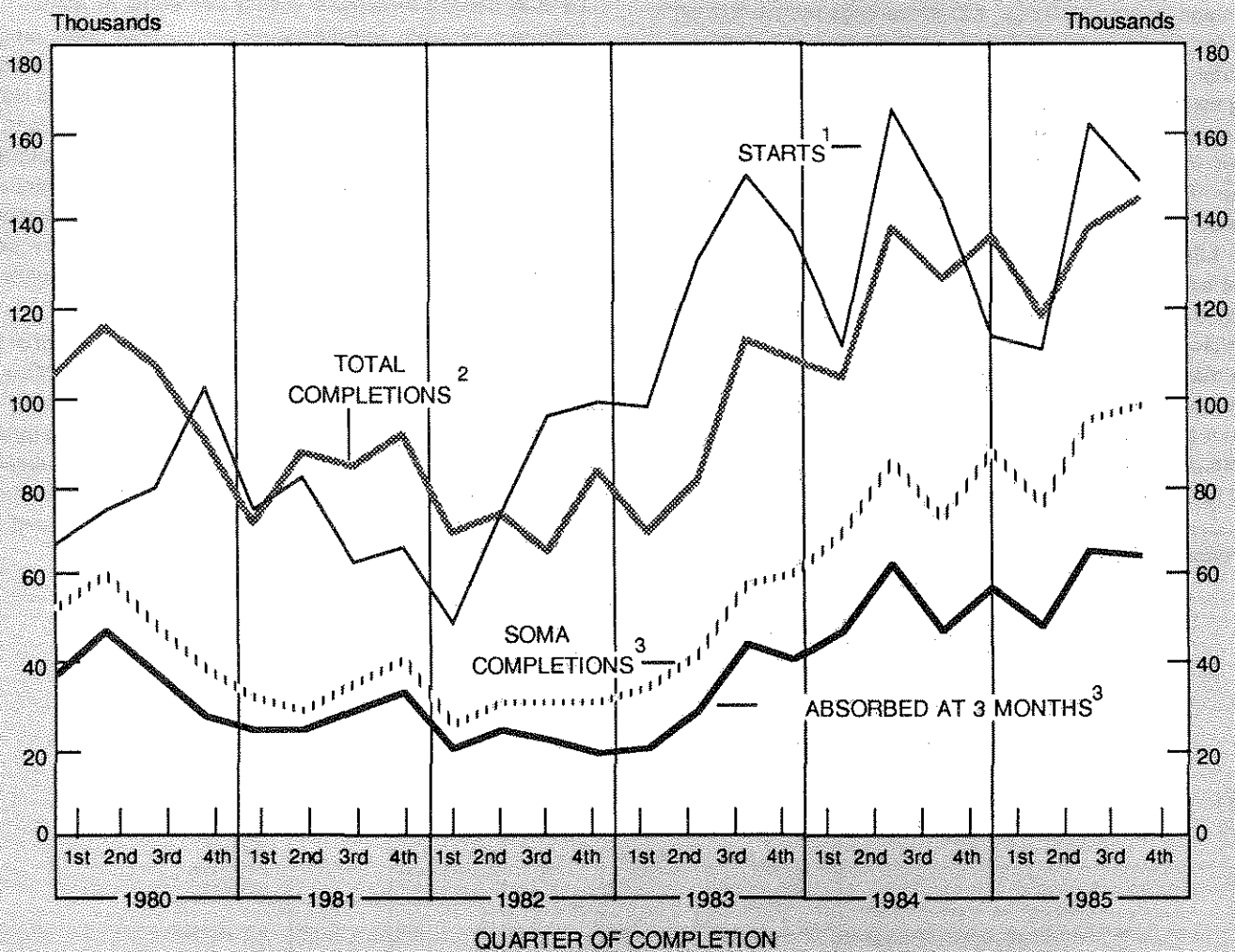
U.S. Department of Housing
and Urban Development

H130 – 85 – Q4
Issued March 1986

Market Absorption of Apartments

Fourth Quarter 1985 – Absorptions (Completions in Third Quarter 1985)

Figure 1.
Units in Apartment Buildings Started, Completed, and Absorbed: 1980 to 1985

Note: Limited to buildings with five units or more in permit – issuing places.
[1] Source: Construction Reports, C20 – 85 – 11 (November 1985) table 2.
[2] Source: Construction Reports, C22 – 85 – 11 (November 1985) table 1.
[3] Privately financed, nonsubsidized, unfurnished apartments.

Questions regarding these data may be directed to **Charles Clark,** Housing Division, Telephone 301-763-2866.

SUMMARY OF FINDINGS

Privately financed, nonsubsidized, unfurnished apartments completed during the July-September 1985 quarter were 64 percent absorbed (seasonally adjusted) 3 months after their completion. This is about the same as the 3-month seasonally adjusted rate of 65 percent for apartments completed during the second quarter of 1985. Apartments which have been on the market for 9 months, those completed during January-March 1985, were 91 percent absorbed.

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 64 and 91 percent figures are subject to sampling errors (i.e., standard errors) of 1.9 and 1.2 percentage points, respectively. This means that there are about 2 chances out of 3 that a complete count would be in the range of 64 (± 1.9) percentage points and 91 (± 1.2) percentage points. Sampling errors for the figures that follow are indicated in parenthesis.[1]

A total of 144,500 (± 7,850) apartments were completed during the third quarter of 1985. This is not significantly different from second quarter 1985 completions but is a 14 (± 8.3) percent increase over third quarter 1984 completions. The number of privately financed, nonsubsidized, unfurnished apartments completed ws 97,300 (± 3,990). This represents about 67 (± 1.9) percent of total apartment completions and is about the same number of apartments as were completed in the second quarter. It is an increase of 35 (± 7.5) percent over completions of similar apartments in the third quarter of 1984.

The median asking rent for newly constructed units was $430 (± 6.0) in the third quarter of 1985. This was not significantly different from the $433 (± 6.0) median for the second quarter of 1985. Apartments renting for less than $300 accounted for only 9 (± 1.1) percent of total completions while those renting for

$300 to $399 and those renting for $400 to $499 accounted for 31 (± 1.8) and 32 (± 1.9) percent, respectively. Apartments renting for $500 or more accounted for 28 (± 1.8) percent. A majority of newly constructed apartments, 54 (± 2.0) percent, were built with two bedrooms, while 42 (± 2.0) percent had less than two. Only 3 (± 0.7) percent had three bedrooms or more.

Approximately 40,200 (± 3,550) cooperative and condominium apartments were completed in the third quarter of 1985. Cooperative and condominium apartments accounted for about 28 (± 3.9) percent of total third quarter 1985 completions. The 3-month absorption rate for cooperative and condominium apartments during the third quarter was 59 (± 4.3) percent. The median asking price for condominium units was $92,800 (± 4,100). Like rental units, the majority of newly constructed condominium apartments—58 (± 4.3) percent—had 2 bedrooms. Unlike their rental counterparts, a relatively high proportion, 17 (± 3.3) percent were built with 3 bedrooms or more.

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 only 2 (± 0.7) percent of total completions. This continues the decrease in the proportion of federally subsidized apartments being built, and can be contrasted with data from the second quarter of 1981, when 28 percent of all newly built apartments were in federally subsidized buildings.

Furnished rental units accounted for 1 (± 0.5) percent of apartment completions. The remaining 2 (± 0.7) percent of the units are not in scope of the survey and include time-sharing units, continuing care retirement units, and turnkey housing (privately built for 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.


[1]See Reliability of Estimates on page 5.

Table 1. Characteristics of Apartments Completed During the Third Quarter of 1985 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 are 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...............	97,300	3,990	100	(X)	66	1.9
RENT CLASSES						
Less than $300............	8,800	1,830	9	1.1	58	10.0
$300 to $349..............	11,100	2,040	11	1.2	66	8.5
$350 to $399..............	19,300	2,630	20	1.6	73	5.8
$400 to $449..............	16,200	2,430	17	1.5	62	7.1
$450 to $499..............	15,100	2,350	16	1.5	60	7.4
$500 or more.............	26,900	3,040	28	1.8	68	5.0
Median asking rent........	$430	6.0	(X)	(X)	(X)	(X)
NUMBER OF BEDROOMS						
Less than 2..............	41,100	3,580	42	2.0	67	3.7
2........................	52,900	3,880	54	2.0	65	3.0
3 or more................	3,300	1,130	3	0.7	63	16.5

*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: 1982 to 1985**

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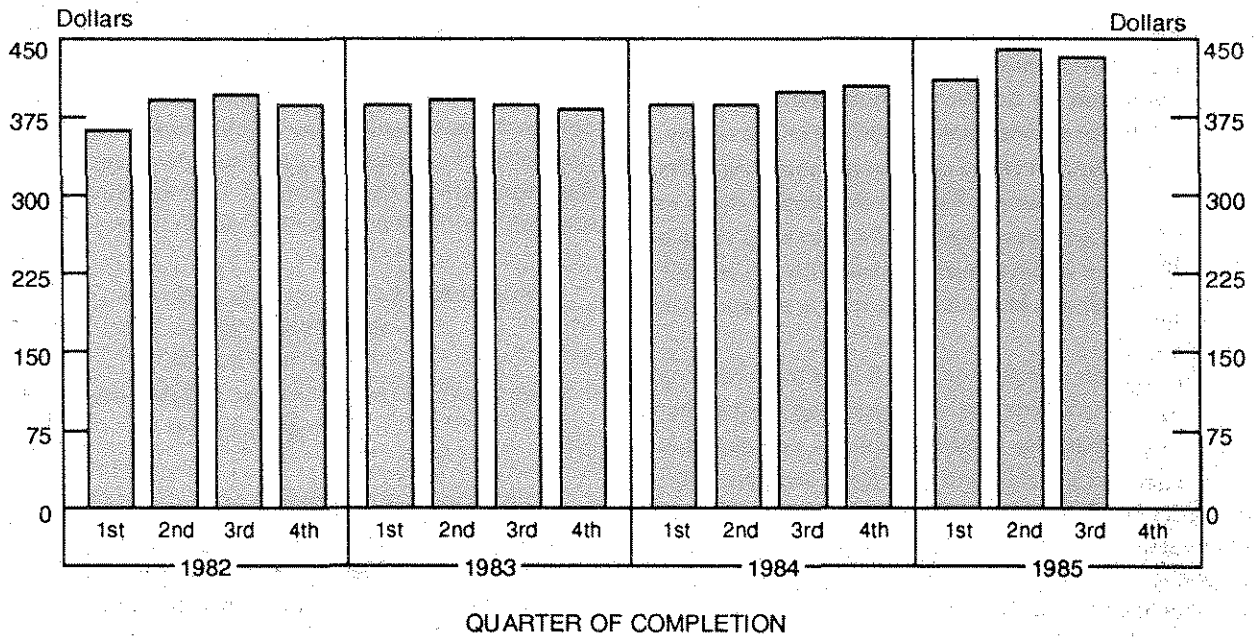
Note: Limited to buildings with five or more units in permit – issuing places.

Figure 3.
**Cooperative and Condominium Apartment Completions as Percent of
Total Apartment Completions 1982 to 1985**

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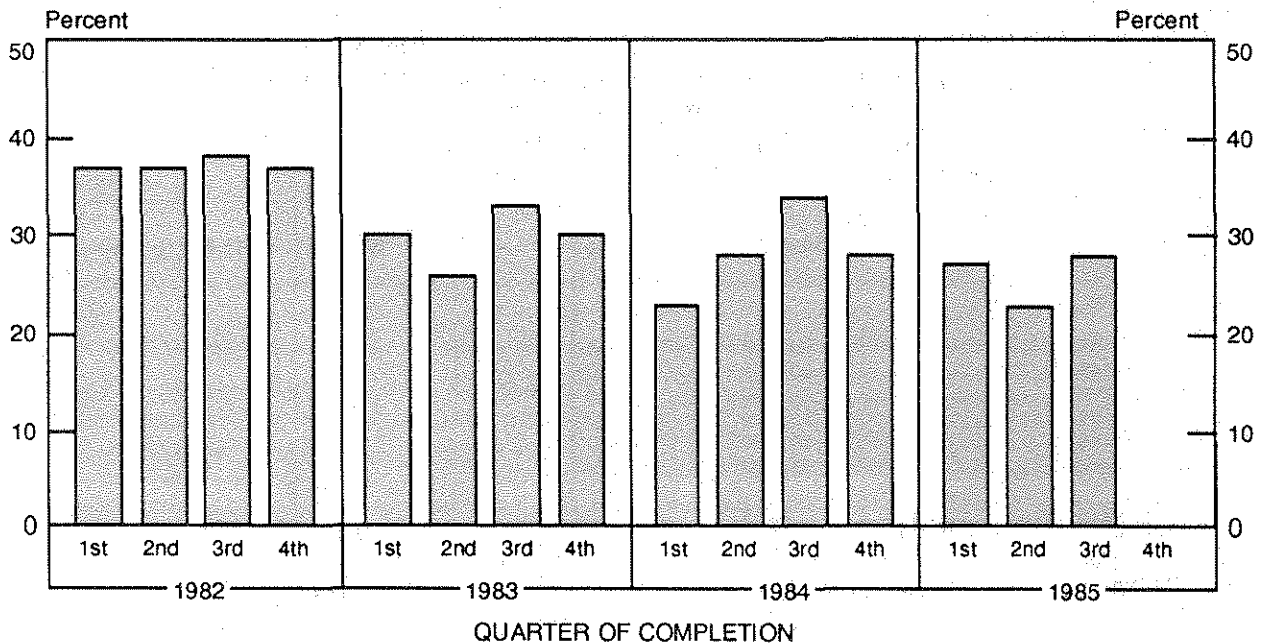
Note: Limited to buildings with five or more units in permit – issuing places.

SAMPLE DESIGN

The Survey of Market Absorption (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, a sample of 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:

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

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

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

Table 2. Characteristics of Apartments Completed During the Second Quarter of 1985 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 errors*	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)
Total................	94,200	4,060	100	(X)	68	2.0
RENT CLASSES						
Less than $300............	9,700	2,000	10	1.3	80	8.1
$300 to $349..............	10,100	2,040	11	1.3	75	8.6
$350 to $399..............	16,700	2,570	18	1.6	77	6.3
$400 to $449..............	15,900	2,520	17	1.6	65	7.3
$450 to $499..............	16,700	2,570	18	1.6	57	7.4
$500 or more..............	25,000	3,070	27	1.9	64	5.6
Median asking rent........	$433	6.0	(X)	(X)	(X)	(X)
NUMBER OF BEDROOMS						
Less than 2...............	43,400	3,790	46	2.1	70	3.6
2.........................	48,000	3,910	51	2.1	66	3.4
3 or more.................	2,800	1,090	3	0.7	74	17.1

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

Table 3. Absorption Rates of Privately Financed Nonsubsidized Unfurnished Apartments: 1982 to 1985

(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)
1982												
January-March.........	25,400	1,680	78	3.2	76	3.4	90	2.4	96	1.5	97	1.3
April-June............	30,900	1,800	76	3.1	79	2.9	92	1.9	95	1.6	97	1.2
July-September........	29,900	1,710	72	3.2	73	3.2	85	2.6	92	2.0	96	1.4
October-December......	30,800	1,860	63	3.5	61	3.5	80	2.9	90	2.1	95	1.6
1983												
January-March.........	33,100	1,780	61	3.4	59	3.4	81	2.7	90	2.1	94	1.6
April-June............	41,600	1,940	65	2.9	69	2.8	87	2.1	93	1.6	96	1.2
July-September........	57,200	2,310	74	2.3	76	2.2	87	1.8	93	1.3	96	1.2
October-December......	59,500	2,270	71	2.3	68	2.4	84	1.9	93	1.6	97	1.3
1984												
January-March.........	68,900	2,620	71	2.6	68	2.7	88	1.9	94	1.4	96	1.1
April-June............	84,800	3,790	68	2.5	72	2.4	88	1.7	93	1.3	96	0.9
July-September........	72,200	3,700	63	2.2	64	2.2	82	1.9	91	1.4	96	0.8
October-December	87,400	3,730	66	2.0	64	2.0	81	1.6	90	1.0	94	0.8
1985												
January-March[r].......	74,800	3,260	67	1.5	64	2.1	84	1.6	91	1.2	(NA)	(NA)
April-June[r]..........	94,200	4,060	65	1.9	68	2.0	85	1.5	(NA)	(NA)	(NA)	(NA)
July-September........	97,300	3,990	64	1.9	66	1.9	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
October-December......												

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

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 of 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 errors 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 52,900 apartment with two bedrooms in the third quarter of 1985. The standard error of this estimate is 3,880. The 68 percent confidence interval as shown by these data is from 49,020 to 56,780. 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 45,140 to 60,660 (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. Absorption Rates of Cooperative and Condominium Apartments: 1982 to 1985

(Structures with five units or more)

| Quarter of completion | Total units completed | | Percent of all 5+ units | | Percent absorbed 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)
1982												
January-March...............	25,600	1,690	37	2.3	57	4.0	69	3.7	76	3.4	81	3.1
April-June..................	27,200	1,740	37	2.2	52	3.9	66	3.7	77	3.3	86	2.7
July-September..............	24,600	1,640	38	2.4	52	4.1	67	3.8	77	3.4	83	3.0
October-December............	30,400	1,850	37	2.1	55	3.7	73	3.3	82	2.8	87	2.5
1983												
January-March...............	20,900	1,590	30	2.2	55	4.6	69	4.2	78	3.8	81	3.6
April-June..................	20,700	1,620	26	1.9	69	4.4	82	3.7	88	3.1	93	2.4
July-September..............	37,700	2,110	33	1.8	73	3.0	84	2.5	91	1.9	94	1.6
October-December............	32,500	2,010	30	1.8	62	3.6	84	2.7	90	2.2	93	1.9
1984												
January-March...............	23,600	2,150	23	2.0	64	4.4	78	3.7	84	3.3	88	2.9
April-June..................	38,500	3,290	28	2.0	72	3.8	82	3.2	86	2.9	90	2.5
July-September..............	43,200	3,360	34	2.1	74	3.4	84	2.8	88	2.5	92	1.7
October-December............	38,400	3,280	28	2.0	64	4.1	81	3.3	88	2.2	91	1.9
1985												
January-March[r]...............	32,700	2,850	28	2.0	65	4.1	81	3.4	86	3.0	(NA)	(NA)
April-June[r].................	36,700	3,570	27	4.3	69	4.5	78	4.0	(NA)	(NA)	(NA)	(NA)
July-September..............	40,200	3,550	28	3.9	59	4.3	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
October-December............												

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

Table 5. Characteristics of Condominium Apartments Completed During the Third Quarter of 1985 and Sold Within 3 Months

(Privately financed, nonsubsidized, apartments. Data regarding number of bedrooms and asking price are collected at the initial interview, i.e., 3 months following completion. Data are 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 sold within 3 months	
	Number	Sampling error*	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)
Total..............................	40,000	3,540	100	(X)	59	4.3
PRICE CLASSES						
Less than $40,000.....................	1,600	790	4	1.7	79	19.9
$40,000 to $49,999....................	3,200	1,120	8	2.4	59	16.7
$50,000 to $74,999....................	7,600	1,700	19	3.4	69	9.7
$75,000 to $99,999....................	10,700	2,000	27	3.9	76	7.3
$100,000 or more......................	16,900	2,480	42	4.3	41	6.0
Median asking price...................	$92,800	4,100	(X)	(X)	(X)	(X)
NUMBER OF BEDROOMS						
Less than 2...........................	9,900	1,930	25	3.7	59	8.8
2.....................................	23,100	2,840	58	4.3	55	4.6
3 or more.............................	6,900	1,620	17	3.3	69	10.3

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

Table 6. Housing Units Completed in Buildings With Five Units or More: 1982 to 1985

(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*
1982												
January-March.....	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	3,500	30,900	1,800	1,000	400	27,200	1,740	11,900	1,290	2,000	560
July-September....	64,100	3,260	29,900	1,710	1,800	530	24,600	1,640	5,500	900	2,400	610
October-December..	82,600	3,730	30,800	1,860	800	350	30,500	1,850	17,700	1,530	2,800	660
1983												
January-March.....	69,200	3,400	33,100	1,780	300	220	20,900	1,590	12,500	1,150	2,400	930
April-June........	80,500	3,680	41,600	1,940	800	350	20,700	1,620	13,400	1,310	4,000	920
July-September....	112,600	4,410	57,200	2,310	1,700	520	37,700	2,110	8,700	1,140	7,300	1,050
October-December..	108,400	4,320	59,500	2,270	1,900	540	32,500	2,000	13,100	1,380	1,400	470
1984												
January-March.....	104,400	5,110	68,900	2,620	1,700	630	23,600	2,150	6,200	1,180	4,000	960
April-June........	138,100	7,260	84,800	3,790	2,700	970	38,500	3,290	9,000	1,750	3,100	1,040
July-September....	126,900	6,940	72,200	3,700	1,700	770	43,200	3,360	9,000	1,740	800	530
October-December..	136,600	7,220	87,400	3,730	3,700	1,140	38,400	3,280	4,300	1,220	2,800	990
1985												
January-March[r]....	117,900	6,290	74,800	3,260	1,100	590	32,700	2,850	2,500	880	6,800	1,430
April-June[r].......	138,300	8,040	94,200	4,060	1,700	850	36,700	3,570	3,300	1,190	2,400	1,010
July-September....	144,500	7,850	97,300	3,990	2,000	890	40,200	3,550	2,400	970	2,600	1,010
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).

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