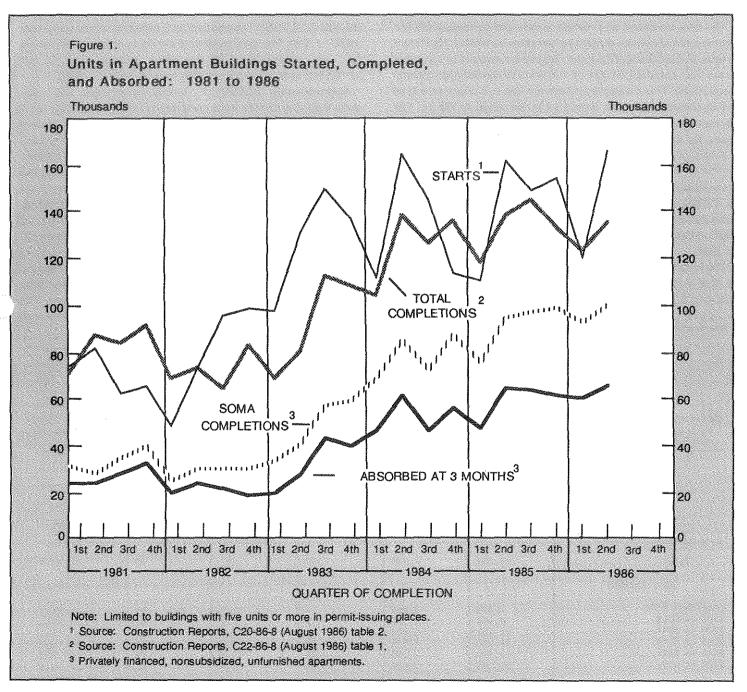
## U.S. Department of Commerce BUREAU OF THE CENSUS

U.S. Department of Housing and Urban Development

H130-86-Q3 Issued December 1986 Market Absorption of Apartments

Third Quarter 1986 – Absorptions (Completions in Second Quarter 1986)



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

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#### SUMMARY OF FINDINGS

Privately financed, nonsubsidized, unfurnished apartments completed during the April-June 1986 quarter were 63 percent absorbed (seasonally adjusted) 3 months after their completion. This is not significantly different from the 3-month seasonally adjusted rate for apartments completed during the first quarter of 1986. Apartments which have been on the market for 9 months, those completed during October-December 1985, were 93 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 63 and 93 percent figures are subject to sampling errors (i.e., standard errors) of 1.9 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 63 ( $\pm$  1.9) percentage points and 93 ( $\pm$  0.9) percentage points. Sampling errors for the figures that follow are indicated in parenthesis.<sup>1</sup>

A total of 135,500 ( $\pm$  8,300) apartments were completed during the second quarter of 1986. The number of privately financed, nonsubsidized, unfurnished apartments completed was 99,500 ( $\pm$  4,020), about 73 ( $\pm$  1.7) percent of total apartment completions during the quarter. This is not significantly different from the number of similar apartments completed in the first quarter of 1986.

The median rent asked for newly constructed units was \$450 ( $\pm$  6.0) in the second quarter of 1986. Apartments renting for less than \$300 accounted for 9 ( $\pm$  1.1) percent of total comple-

'See Reliability of Estimates on page 5.

tions. Apartments renting for \$300 to \$399, accounted for about one-fourth, 24 (± 1.7) percent, of completions and those renting for \$400 to \$499, and \$500 or more each accounted for about one-third of total completions with 31 (± 1.8) and 36 (± 1.9) percent, respectively. Approximately 50 (± 2.0) percent of the newly constructed apartments were built with two bedrooms and about the same, 48 (± 2.0) percent, had less than two bedrooms. Only 2 (± 0.5) percent were built with three or more bedrooms.

The total number of unfurnished units completed in the last 12 months reported as rented in the third quarter of 1986 was 99,300 ( $\pm$  5,730). The median rent asked for these units was \$450 ( $\pm$  5.6). The total number of similar apartments remaining for rent at the end of the third quarter was 58,100 ( $\pm$  4,590) with a median asking rent of \$451 ( $\pm$  6.4).

Approximately 23,500 (± 3,120) cooperative and condominium apartments were completed in the second guarter of 1986. This represents a decrease of about 36 (± 13.0) percent from second guarter 1985 completions. Cooperative and condominium apartments accounted for about 17 (± 5.0) percent of total second guarter 1986 completions. In contrast, during the third guarter of 1982 about 38 (± 2.4) percent of all apartment completions were cooperatives or condominiums. The 3-month absorption rate for cooperative and condominium apartments was 72 (± 5.9) percent. The majority of newly constructed condominium apartments, 65 (± 6.4) percent, had 2 bedrooms. Condominium apartments with less than two bedrooms accounted for 24  $(\pm 5.7)$  percent of the total while those with three bedrooms or more accounted for only 12 ( $\pm$  4.4) percent. The median price asked for condominium units was \$94,200  $(\pm 6,180).$ 

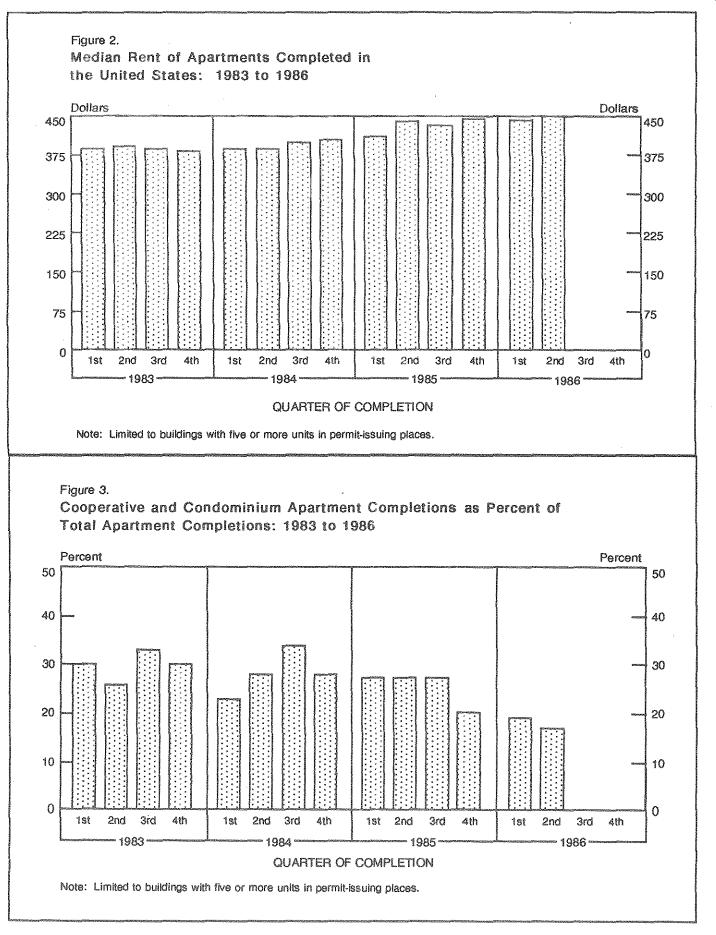
## Table 1. Characteristics of Apartments Completed During the Second Quarter of 1986 and Rented Within 3 Months

Not Seasonally Adjusted

(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 may not add to total due to rounding. Medians are computed using unrounded data.)

. Item	Total compl		Percent uni		Percent rented within 3 months		
	Number	Standard error*	Percent	Standard error* (percentage points)	Percent	Standard error* (percentage points)	
Total RENT CLASSES	99,500	4,020	100	(X)	66	1.9	
Less than \$300 \$300 to \$349 \$350 to \$399 \$400 to \$449 \$450 to \$499 \$500 or more Median rent asked NUMBER OF BEDROOMS	8,600 8,300 16,400 16,500 14,200 35,500 \$450	1,950 1,920 2,610 2,620 2,450 3,480 6.0	9 8 16 17 14 36 (X)	1.1 1.1 1.4 1.5 1.4 1.9 (X)	57 61 70 65 66 66 (X)	11.3 11.4 7.4 7.7 8.3 4.9 (X)	
Less than 2 2 3 or more	47,800 49,400 2,400	3,700 3,720 1,060	48 50	2.0 2.0 0.5	64 67 70	4.0 3.8 20.2	

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



The total number of condominium apartments completed in the last 12 months reported as sold in the third quarter of 1986 was 21,400 ( $\pm$  2,890). The median price asked for these units was \$90,200 ( $\pm$  5,090). The total number of condominium apartments remaining for sale at the end of the third quarter was 18,100 ( $\pm$  2,660) with a median asking price of \$98,900 ( $\pm$  6,860).

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 5 ( $\pm$  1.3) percent of total completions.

Furnished rental units accounted for 4 ( $\pm$  0.8) percent of apartment completions. The remaining units, 1 ( $\pm$  0.4) percent, 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 government.

### 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)<sup>2</sup>. 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.

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

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

## Table 2. Characteristics of Apartments Completed During the First Quarter of 1986 and Rented Within 3 Months (Revised)

#### Not Seasonally Adjusted

(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 may not add to total due to rounding. Medians are computed using unrounded data.)

	Total compl		Percent uni		Percent rented within 3 months		
Item	Number	Standard error*	Percent	Standard error* (percentage points)	Percent	Standard error* (percentage points)	
Total	92,700	3,430	100	(X)	65	1.7	
Less than \$300 \$300 to \$349 \$350 to \$399 \$400 to \$449 \$450 to \$499 \$500 or more Median rent asked NUMBER OF BEDROOMS	6,600 8,000 18,200 16,300 14,900 28,700 \$442	1,570 1,720 2,480 2,370 2,280 2,940 6.2	7 9 20 18 16 31 (X)	1.1 1.0 1.4 1.3 1.7 (X)	73 77 62 69 65 62 (X)	10.6 9.1 6.7 6.8 7.4 5.1 (X)	
Less than 2 2 3 or more	42,800 47,500 2,400	3,250 3,280 970	46 51 3	1.8 1.8 0.6	62 68 68	3.9 3.5 18.8	

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

(X) Not applicable.

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:

total units	in 5	+	buildings in permit-issuing areas								
as estimated by the SOC											
for that quarter											
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,<sup>3</sup> 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

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

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.

# Table 3. Absorption Rates of Privately Financed Nonsubsidized Unfurnished Apartments: 1983 to 1986

	То	tal		onally	Not seasonally adjusted - rented within								
	units completed		adjusted rented within 3 months		3 mc	onths	6 months		9 months		12 months		
Quarter of completion	Number	Standard error*	Per- cent	Standard error* (per- centage points)	Per- cent	Standard error* (per- centage points)	Per- cent	Standard error* (per- centage points)	Per- cent	Standard error* (per- centage points)	Per- cent	Standard error* (per- centage points)	
1983													
January-March April-June July-September October-December	33,100 41,600 57,200 59,500	1,780 1,940 2,310 2,270	61 65 74 71	3.4 2.9 2.3 2.3	59 69 76 68	3.4 2.8 2.2 2.4	81 87 84	2.7 2.1 1.8 1.9	90 93 93 93	2.1 1.6 1.3 1.6	94 96 96 97	1.6 1.2 1.2 1.3	
1984													
January-March April-June July-September October-December	68,900 84,800 72,200 87,400	2,620 3,790 3,700 3,730	71 68 63 66	2.6 2.5 2.2 2.0	68 72 64 64	2.7 2.4 2.2 2.0	88 88 82 81	1.9 1.7 1.9 1.6	94 93 91 90	1.4 1.3 1.4 1.0	96 96 96 94	1.1 0.9 0.8 0.8	
1985													
January-March April-June July-September October-December	74,800 94,200 97,100 98,300	3,260 4,080 3,900 3,420	67 65 64 65	1.5 2.0 1.9 1.6	64 68 65 62	2.1 2.0 1.9 1.6	84 85 83 82	1.6 1.5 1.5 1.3	91 92 91 93	1.2 1.1 1.1 0.9	94 95 96 (NA)	1.2 0.9 0.8 (NA)	
1986													
January-March <sup>r</sup> April-June July-September October-December	92,700 99,500	3,430 4,020	67 63	1.7 1.9	65 66	1.7 1.9	86 (NA)	1.3 (NA)	(NA) (NA)	(NA) (NA)	(NA) (NA)	(NA) (NA)	

Structures with five units or more.)

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

(NA) Not available.  $r_{Revised}$ .

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.
- 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.
- 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 49,400 apartments with two bedrooms in the second quarter of 1986. The standard error of this estimate is 3,720. The 68 percent confidence interval as shown by these data is from 45,680 to 53,120. 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 41,960 to 56,840 (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.

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## Table 4. Absorption Rates of Cooperative and Condominium Apartments: 1983 to 1986

			(Stru	ctures wit	h five un	its or mor	e)						
	To	tal	Percent of		Percent absorbed within								
	units c	units completed		all 5+ units		3 months		6 months		9 months		12 months	
Quarter of completion	Number	Standard error*	Per- cent	Standard error* (per- centage points)	Per- cent	Standard error* (per- centage points)	Per- cent	Standard error* (per- centage points)	Per- cent	Standard error* (per- centage points)	Per- cent	Standard error* (per- centage points)	
1983													
January-March April-June July-September October-December	20,900 20,700 37,700 32,500	1,590 1,620 2,110 2,010	30 26 33 30	2.2 1.9 1.8 1.8	55 69 73 62	4.6 4.4 3.0 3.6	69 82 84 84	4.2 3.7 2.5 2.7	78 88 91 90	3.8 3.1 1.9 2.2	81 93 94 93	3.6 2.4 1.6 1.9	
1984													
January-March April-June July-September October-December	23,600 38,500 43,200 38,400	2,150 3,290 3,360 3,280	23 28 34 28	2.0 2.0 2.1 2.0	64 72 74 64	4.4 3.8 3.4 4.1	78 82 84 81	3.7 3.2 2.8 3.3	84 86 88 88	3.3 2.9 2.5 2.2	88 90 92 91	2.9 2.5 1.7 1.9	
1985									1				
January-March April-June July-September October-December	32,700 36,600 39,000 27,400	2,850 3,570 3,510 2,870	28 26 27 21	2.0 6.0 4.0 4.2	65 69 59 69	4.1 4.3 4.4 4.8	81 78 70 81		86 82 84 85	3.0 3.7 3.3 3.7	90 87 89 (NA)	3.0 3.1 2.8 (NA)	
1986													
January-March <sup>r</sup> April-June	23,300 23,500		19 17	4.7 5.0	75 72	5.1 5.9	86 (NA)	4.2 (NA)	(NA) (NA)	(NA) (NA)	(NA) (NA)	(NA (NA	

(NA) Not available.

rRevised.

Not Seasonally Adjusted (Structures with five units or more)

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

July-September.....

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# Table 5. Characteristics of Condominium Apartments Completed During the Second Quarter of 1986 and Sold Within 3 Months (Revised)

#### Not Seasonally Adjusted

(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 may not add to total due to rounding. Medians are computed using unrounded data.)

	Total compl		Percent uni		Percent sold within 3 months		
Item	Number	Standard error*	Percent	Standard error* (percentage points)	Percent	Standard error* (percentage points)	
Total	22,700	3,070	1.00	(x)	72	6.0	
PRICE CLASSES							
Less than \$40,000 \$40,000 to \$49,999 \$50,000 to \$74,999 \$75,000 to \$79,999 \$100,000 or more	300 1,000 5,300 6,200 9,900	370 680 1,430 1,520 1,730	1 4 23 27 44	1.3 2.6 5.7 6.0 6.7	87 79 76 80 63	42.2 27.9 12.6 10.9 10.3	
Median price asked	\$94,200	6,180	(X)	(X)	(x)	(X)	
NUMBER OF BEDROOMS							
Less than 2 2 3 or more	5,400 14,700 2,700	1,440 1,720 1,080	24 65 12	5.7 6.4 4.4	75 72 60	12.6 7.7 20.4	

\*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: 1983 to 1986

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

Quarter of	Total		Unfurnished apartments		Furnished apartments		Cooperatives and condominiums		Federally subsidized		Other <sup>1</sup>	
completion	Number	Standard error*	Number	Standard error*	Number	Standard error*	Number	Standard error*	Number	Standard error*	Number	Standard error*
1983												
January-March April-June July-September October-December	69,200 80,500 112,600 108,400	3,400 3,680 4,410 4,320	33,100 41,600 57,200 59,500	1,780 1,940 2,310 2,270	300 800 1,700 1,900	220 350 520 540	20,900 20,700 37,700 32,500	1,590 1,620 2,110 2,000	12,500 13,400 8,700 13,100	1,150 1,310 1,140 1,380	2,400 4,000 7,300 1,400	930 920 1,050 470
1984 January-March April-June July-September October-December	104,400 138,100 126,900 136,600	5,110 7,260 6,940 7,220	68,900 84,800 72,200 87,400	2,620 3,790 3,700 3,730	1,700 2,700 1,700 3,700	630 970 770 1,140	23,600 38,500 43,200 38,400	2,150 3,290 3,360 3,280	6,200 9,000 9,000 4,300	1,180 1,750 1,740 1,220	4,000 3,100 800 2,800	960 1,040 530 990
1985 January-March April-June July-September October-December	117,900 138,300 144,500 132,600	6,290 8,040 7,850 7,110	74,800 94,200 97,100 98,300	3,260 4,060 3,990 3,420	1,100 1,700 2,100 2,500	590 850 890 940	32,700 36,600 39,000 27,400	2,850 3,570 3,550 2,870	2,500 3,300 2,400 3,800	880 1,190 970 1,160	6,800 2,500 3,900 600	1,430 1,030 1,010 460
1986 January-March <sup>r</sup> April-June July-September October-December	123,400 135,500	7,220 8,300	92,700 99,500	3,430 4,020	1,400 4,800	710 1,490	23,300 23,500	2,830 3,120	5,300 6,900	1,440 1,780	700 800	530 610

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

 $^{-1}$ Other includes turnkey housing (privately built and sold to local public housing authorities subsequent to completion).

Official Business Penalty for Private Use, \$300

## Table 7. Characteristics of Unfurnished Apartments Completed in the Last 4 Quarters and Reported as Rented and Remaining for Rent in the Third Quarter of 1986

Not Seasonally Adjusted

(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 may not add to total due to rounding. Medians are computed using unrounded data.)

Item	Total units completed in last 4 quarters	Standard error*	Units rented prior to 2nd quarter 1986	Standard error*	Number of units rented in 3rd quarter 1986	Standard error*	Number of units remaining for rent at end of 3rd quarter 1986	Standard error*
Total	387,600	160	230,100	6,810	99,300	5,730	58,100	4,590
Less than \$300. \$300 to \$349. \$350 to \$399. \$400 to \$449. \$450 to \$499. \$500 or more. Median asking rent.	37,500 72,500 66,000 58,500 123,900	3,340 3,760 5,030 4,830 4,590 6,140 4.5	17,200 25,000 45,200 39,200 35,200 68,300 \$435	3,110 4,100 3,840 3,650	6,600 7,600 18,300 17,200 15,000 34,600 \$450	1,630 1,740 2,680 2,600 2,430 3,230 5.6	4,900 8,900 9,600	1,460 1,410 1,890 1,960 1,820 2,860 6.4
NUMBER OF BEDROOMS								
Less then 2 2 3 or more	179,500 197,700 10,300	6,720 6,790 2,020	104,600 118,900 6,700	6,080	46,200 50,700 2,500	4,150 4,320 1,000	28,200	3,330 3,290 670

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

Note: These data are for third and fourth quarter 1985 and first and second quarter 1986 completions.

#### Table 8. Characteristics of Condominium Apartments Completed in the Last 4 Quarters and Reported as Sold and Remaining for Sale in the Third Quarter of 1986

Not Seasonally Adjusted

(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 may not add to total due to rounding. Medians are computed using unrounded data.)

Item	Total units completed in last 4 quarters	Standard error*	Units sold prior to 2nd quarter 1986	Standard error*	Number of units sold in 3rd quarter 1986	Standard error*	Number of units remaining for sale at end of 3rd quarter 1986	Standard error*
Total	110,700	5,920	71,100	5,000	21,400	2,890	18,100	2,660
PRICE CLASSES Less then \$40,000 \$40,000 to \$49,999 \$50,000 to \$74,999 \$75,000 to \$99,999 \$100,000 or more Median price asked	7,000 25,700 34,400	1,670 3,150	3,700 5,100 16,700 23,100 22,500 \$85,900	1,430 2,560 2,990 2,960	300 1,100 5,300 6,800 8,100 \$90,200	330 660 1,450 1,650 1,800 5,090	4,500	240 580 1,230 1,350 1,880 6,860
NUMBER OF BEDROOMS Less than 2 3 or more	25,100 71,800 13,800	5,010	14,800 47,200 9,100	4,180	5,400 13,900 2,100	1,480 2,340 930	10,700	

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

Note: These data are for third and fourth quarter 1985 and first and second quarter 1986 completions.