Survey of Market Absorption of New Multifamily Units

ANNUAL 2015 –ABSORPTIONS

(Apartments Completed in 2014)

THIS REPORT CONTAINS HISTORICAL DATA FROM 1970 THROUGH 2014

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and Urban Development

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INTRODUCTION

This report presents data on how soon privately financed, nonsubsidized, unfurnished units in buildings with five or more units were rented (absorbed) after completion in 2014.[1] It is based on information collected in the Survey of Market Absorption of Multifamily Units (SOMA), which has been measuring market absorption for over forty years. Also included in this annual report are supplemental tables issued once every five years. Additional reports produced during the year include the Annual Characteristics report and four quarterly absorption reports.

The estimates in this report are based on a sample of 6,600 buildings with 5 or more housing units. As with all surveys, estimates vary from actual value because of sampling variations or other factors. See the section on the *Accuracy of the Estimates,* at the end of this report, for more details.

HIGHLIGHTS

- *NEW CONSTRUCTION:* The 255,700 apartments of all types constructed in buildings of five or more units in 2014 is the highest number reported by SOMA since 2009 when there were 259,700 reported (Table 9; Chart F).

- *TOTAL CONSTRUCTION DISTRIBUTION:* Eighty-two percent of all 2014 completions were offered as nonsubsidized, unfurnished rental apartments; ten percent were subsidized and/or tax credit units; three percent were condominiums and cooperatives; three percent were furnished rental units; and the remaining one percent were not in the scope of the survey (Table 9).[2]

[1] Most of the estimates presented in this report are based on unfurnished rental units. Some estimates of absorption rates include both rented and sold units and are clearly labeled.
2 Examples of Out of Scope units include group quarters, dormitories, retirement homes, nursing homes.

- *NEW CONSTRUCTION –UNFURNISHED APARTMENTS:* In 2014, there were approximately 210,800 privately financed, nonsubsidized, unfurnished, rental apartments in buildings of five units or more completed in permit-issuing areas in the United States.[3] This is approximately 76,600 more completed than in 2013, and represents the largest number of completions reported since 2002 (Tables 1 and 9; Chart G).

- *ABSORPTION RATES:* Sixty-one percent of the 210,800 privately financed, nonsubsidized, unfurnished, rental apartments in buildings of five units or more constructed in the United States in 2014 were absorbed (rented) within the first three months of completion, 82 percent absorbed within six months, 91 percent absorbed within nine months, and 96 percent absorbed within a year (Table 1; Chart H).

  For absorptions by cost of rent ranges, the 3-month absorption rates varied from 54 percent for those units renting for $2,450 or more to 66 percent for those renting from $1,250 to $1,449 (54 percent). The 6-month absorption rates ranged from 71 percent for those renting from $2,450 or more to 91 percent for those renting for less than $850. The 9-month absorption rates ranged from 83 percent for renting from $2,450 or more to 96 percent for those renting for $850 or less. Twelve-month absorption rates were all at 92 percent or higher (Tables 2 and 3).

- *REGIONS:* The South had a majority of the new rental completions with 44 percent. The West was second with 25 percent, followed by the Midwest with 17 percent. The Northeast reported the least amount of new construction in 2014 with 13 percent of the new rental completions. With the exception of the 3-month absorption rates of the Northeast (54 percent) and the South (60 percent), none of the other regional absorption rates within the 3-, 6-, 9-, and 12-month absorption periods were statistically different from each other (Table 1; Chart A).

[3] About 98 percent of new construction occurs in permit issuing areas. See Sample Design for more information.

- *METROPOLITAN AREAS:* The majority (95 percent) of new unfurnished rental apartments built in 2014 were built inside Core Based Statistical Areas (CBSA's), of which 61 percent were built inside principal cities of CBSA's, and 39 percent were built outside principal cities (suburbs).[4] Of the 210,800 privately financed, nonsubsidized, unfurnished, rental apartments in buildings of five units or more, approximately five percent were built outside CBSA's. No significant differences were detected between absorption rates within each of the 3-, 6-, 9-, or 12-month absorption periods (Table 1).

- *RENT:* The median asking rent for privately financed, nonsubsidized, unfurnished, rental apartments in buildings of five units or more completed in 2014, was $1,384 (Chart B). This did not differ not differ significantly from the $1,307 median in 2013 (Tables 2 and 3).[5]

- *RENT BY REGIONS:* The highest median asking rent for units constructed in 2014 was in the Northeast at $2,308 per month while the lowest was in the Midwest at $1,038 per month. The median asking rent in the West was $1,650 per month and the South had a median asking rent of $1,332 per month (Table 2; Chart B).

- *NUMBER OF BEDROOMS:* Of the 210,800 units constructed in 2014, one-bedroom units accounted for 45 percent of the total, and two-bedroom units accounted for 41 percent (the 41 percent and the 45 percent were not statistically different from each other) (Table 3; Chart C). Both efficiencies and units with three or more bedrooms accounted for seven percent of new construction. No significant differences were detected between absorption rates by region within each of the 3-, 6-, 9-, or 12-month absorption periods.

[4] The term "core based statistical area" (CBSA) became effective in 2000 and refers collectively to metropolitan and micropolitan statistical areas.

[5] The figure shown for the 2013 median has been adjusted to reflect inflation using calculations from the Bureau of Labor Statistics (C.P.I.). The Median Asking Rent, as reported in the 2013 publication, was $1,286.

- *RENT BY NUMBER OF BEDROOMS:* The median asking rent for all privately financed, nonsubsidized, unfurnished, rental apartments in buildings of five units or more was $1,384. Median asking rents ranged from $1,284 for units with no bedrooms to $1,562 for units with 3 bedrooms or more (Table 3).

- *NUMBER OF FLOORS:* Thirty-nine percent of the 210,800 new rental apartment units constructed in 2014 consisted of three floors. Buildings with four or five floors accounted for 32 percent of all rental apartment units. The next highest percentage were those with six or more floors (18 percent) followed by buildings with one or two floors (11 percent). There were no significant differences in the 3-, 6-, or 9-month absorption rates detected by number of floors. After twelve months 96 percent of all of the units were absorbed (Table 4).

- *UTILITIES:* In 2014, SOMA began asking additional questions about utilities and amenities. Of the 210,800 newly built unfurnished rental apartments, 28 percent had water and 35 percent had sewer included with their rent, while the cost for electricity was included in seven percent of the units. Gas was available in 43 percent of the units but only nine percent had it included in their rent. Approximately 82 percent of all the units had laundry connections, 13 percent had shared facilities, and four percent provided both in-unit and shared facilities. Of the units with laundry connections, 85 percent came with a washer and dryer in the unit (Table 5a Chart D).

- *AMENITIES:* Wi-Fi (or Internet) was available in 98 percent of the units with nine percent having it included in their monthly rent. Two percent reported not having Wi-Fi or internet available. Cable or Satellite was available in 99 percent of the units with eight percent having it included it in their rent. Parking was available to 79 percent of the units and was included with rent in 71 percent of those units. Of the 173,900 units with swimming pools, about 85 percent had access at no additional cost (Table 5b; Chart E).

- *CONDOMINIUMS AND COOPERATIVE UNITS:* There were no cooperative units constructed in 2014 compared to the approximately 500 constructed in 2013. Approximately 7,000 privately financed, nonsubsidized, unfurnished, condominium units in buildings of five units or more apartments were constructed. This figure did not differ significantly from the approximately 6,900 condominiums completed in 2013. Of the 7,000 units, 73 percent were sold (absorbed) within three months. By the end of 12 months, 97 percent of the units were absorbed (Tables 6 and 7; Chart I).

- *CONDOMINIUM SELLING PRICE:* The median selling price for all condominium apartments built in 2014 was $389,100 and did not differ significantly from the median selling price in 2013, $336,900.[6] Eighty-one percent of all new condominiums built in 2014 had two or more bedrooms. Approximately three percent of the new condominiums were efficiencies with no bedroom (Table 7).

- *CONDOMINIUMS BY REGIONS:* Of the 7,000 condominiums completed in 2014, the South (37 percent) accounted for the largest percentage of new construction while the Midwest (13 percent) accounted for the fewest. The percentage of new condominium construction in Northeast (22 percent) did not differ significantly from the percent of construction in the West (21 percent). Three-month absorption rates ranged from 57 percent in the Northeast to 86 percent in the West. Six-month absorption rates ranged from 81 percent in the Northeast to 93 percent in the West. Nine-month and 12-month absorption rates were all at 93 percent or higher (Table 7; Chart A).

- *CONDOMINIUMS BY GEOGRAPHICAL AREA:* Ninety-five percent of the new condominium units built in 2014 were completed inside CBSAs. Of those units inside CBSA's, 67 percent were built inside principal cities and 33 percent were built outside principal cities. The difference between 3-month absorption rate for

[6] The figure shown for the 2013 median has been adjusted to reflect inflation using calculations from the Bureau of Labor Statistics (C.P.I). The Median Selling Price, as reported in the 2013 publication, was $331,500

condominiums built inside principal cities of CBSA's (72 percent) and those built outside principal cities of CBSA's (84 percent) was not statistically different. However, the 3-month absorption rate for condominiums built inside CBSA's (76 percent) exceeded that of the 3-month absorption rate of 28 percent reported for units outside CBSA's. Six-month, 9-month, and 12-month absorption rates were all at 85 percent or higher (Table 7; Chart J).

- *FURNISHED APARTMENT UNITS:* In 2014, there were approximately 7,900 furnished rental units in privately financed, nonsubsidized, rental apartments in buildings of five units or more constructed. Three-or-more bedroom units accounted for 4,600 of the rentals. The median asking rent for a furnished unit was $1,498. This figure did not differ significantly from the median asking rent of $1,384 for an unfurnished unit in 2014. After three months, 76 percent of the units were absorbed. The 6-, 9-, and 12-month absorption rates were at 93 percent or higher (Table 8).

- *HOUSING UNITS FOR THOSE 55 YEARS AND OLDER:* In 2014 approximately 13,600 (five percent of the total construction in buildings of five or more units) were designated for persons 55 or older. Of those units, 83 percent provided meals and transportation to their residents and 80 percent offered housekeeping, assistance with finances, and personal care. Thirty-eight percent included meals and also 38 percent included housekeeping in the monthly rent. Thirty-nine percent included transportation in the monthly rent and 22 percent provided personal care in the monthly rent. Two percent included any type of assistance with finances with their rent (Table 10).

- *SUBSIDIZED UNITS:* There were approximately 26,400 units reporting some form of Federal Government Housing Subsidy in 2014.[7] This represents ten percent of the total units in buildings constructed with five or more units. Of the 26,400 units, 76 percent reported receiving assistance from the Low Income Housing

[7] Residents were instructed to select **all** subsidies that applied to the building.

Tax Credit (LHITC) program. Forty-two percent participated in the Section 8 program, while each of the other programs accounted for 16 percent or less of the available housing subsidy programs (Table 11; Chart K).

CHARACTERISTICS OF THE DATA

All statistics from the SOMA refer to apartments in newly constructed buildings with five units or more. Absorption rates reflect the first time an apartment is rented or the first time a condominium or cooperative apartment is sold after completion. If apartments initially intended to be sold as condominium or cooperative units are, instead, offered by the builder or building owner for rent, they are counted as rental apartments. Units categorized as subsidized and tax credit are those built under two Department of Housing and Urban Development programs (Section 8, Low Income Housing Assistance and Section 202, Senior Citizens Housing Direct Loans) and all units in buildings containing apartments in the Federal Housing Administration (FHA) rent supplement program. The data on privately financed units include privately owned housing subsidized by state and local governments. Time-share units, continuing-care retirement units, and turnkey units (privately built for and sold to local public housing authorities after completion) are outside the scope of the survey.

Tables 1 through 5b are restricted to privately financed, nonsubsidized, unfurnished rental apartments. Table 6 is restricted to privately financed, nonsubsidized condominium and cooperative apartments, while Table 7 is limited to privately financed, nonsubsidized condominium apartments only. Table 8 covers privately financed, nonsubsidized, furnished rental apartments. Table 9 is a historical summary of the totals for all types of newly constructed apartments in buildings with five units or more. Table 10 reports on senior housing units and Table 11 covers subsidized housing and other FHA programs Tables 12 through 19a provide historical data restricted to privately financed, nonsubsidized, unfurnished rental apartments. Tables 20 and 21 provide historical data restricted to privately financed, nonsubsidized condominium and cooperative apartments.

In April of 2014, the Survey of Market Absorption of New Multifamily Units (SOMA) began using interviewing software on laptop computers to collect data for January 2014 completions. At the same time, we revised the Asking Rent and Selling cost ranges for residential buildings containing five or more units, and modified items associated with the utilities and building amenities. Two supplemental tables (Tables 18A and 19A), report data based on the current cost range changes. These tables will also be updates and published every five years.

NOTE TO DATA USERS

The SOMA adopted new ratio estimation procedures in 1990 to derive more accurate estimates of completions.[8] This new procedure was used for the first time in processing annual data for 1990. Please use caution when comparing the number of completions in 1990 and following years with those in earlier years.

SAMPLE DESIGN

The U.S. Census Bureau designed the survey to provide data concerning the rate at which privately financed, nonsubsidized, unfurnished units in buildings with five or more units are rented or sold (absorbed). In addition, the survey collects data on characteristics such as number of bedrooms, asking rent, and asking price.

Buildings for the survey came from those included in the Census Bureau's Survey of Construction (SOC).[9] For the SOC, the United States is first divided into primary sampling units (PSUs), which are stratified based on population and building permits. The PSUs to be used for the survey are then randomly selected from each stratum. Next, a sample of geographic locations that issue permits is chosen within each of the selected PSUs. Finally, all newly constructed buildings with five units or more within sampled places and a subsample of buildings with one to four units are included in the SOC.

[8] See ESTIMATION section below.
[9] See http://www.census.gov/const/www/newresconstdoc.html#sample for further details on the SOC sample design.

For the SOMA, the Census Bureau selects, each quarter, a sample of buildings with five or more units that have been reported in the SOC sample as having been completed during that quarter. The SOMA does not include buildings in areas that do not issue permits. In each of the subsequent four quarters, the proportion of units in the quarterly sample that were sold or rented ("absorbed") are recorded, providing data for absorption rates 3, 6, 9, and 12 months after completion.

ESTIMATION

Beginning with data on completions in the fourth quarter of 1990 (which formed the basis for absorptions in the first quarter of 1991), the Census Bureau modified the estimation procedure and applied the new estimation procedure to data for the other three quarters of 1990 so that annual estimates using the same methodology for four quarters could be derived. The Census Bureau did not perform any additional re-estimation of past data.

Using the original estimation procedure, the Census Bureau created design-unbiased quarterly estimates by multiplying the counts for each building by its base weight (the inverse of its probability of selection) and then summing over all buildings. Multiplying the design-unbiased estimate by the following ratio-estimate factor for the country as a whole provides the final estimate:

> *"total units in buildings with five units or more in permit-issuing areas as estimated by the SOC for that quarter* ***divided by*** *total units in buildings with five units or more as estimated by the SOMA for that quarter."*[10]

In the modified estimation procedure, instead of applying a single ratio-estimate factor for the entire country, the Census Bureau computes separate ratio-estimate factors for each of the four census regions. Multiplying the unbiased regional estimates by the corresponding ratio-estimate factors provides the final estimates for regions. The Census Bureau obtains the final estimate for the country by summing the final regional estimates.

[10] Beginning with January 2001 completions, the SOC revised its methodology for estimating the number of units completed for 5+ multi-unit structures. See http://www.census.gov/const/www/new_methodology_const.html for these changes. Thus, caution is advised when comparing data from 2001 and forward to any estimates prior to 2001

This procedure produces estimates of the units completed in a given quarter that are consistent with published figures from the SOC and reduces, to some extent, the sampling variability of the estimates of totals. Annual absorption rates are obtained by computing a weighted average of the four quarterly estimates.

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

ACCURACY OF THE ESTIMATES

The SOMA is a sample survey and consequently all statistics in this report are subject to sampling variability. Estimates derived from different samples would differ from one another. The standard error of a survey estimate is a measure of the variation among the estimates from all possible samples. The methodology for calculating standard errors is explained in the section on sampling errors.

Two types of possible errors are associated with data from sample surveys: nonsampling and sampling errors.

Nonsampling Errors

In general, nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample, difficulties with definitions, differences in interpretation of questions, inability or unwillingness of the respondents to provide correct information, and errors made in processing the data. Although no direct measurements of the biases have been obtained, the Census Bureau thinks that most of the important response and operational errors were detected during review of the data for reasonableness and consistency.

Sampling Errors

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

As calculated for this survey, the standard error also partially measures the variation in the estimates due to errors in responses and by the interviewers (nonsampling errors), but it does not measure, as such, any systematic biases in the data. Therefore, the accuracy of the estimates depends on the standard error, biases, and some additional nonsampling errors not measured by the standard error. As a result, confidence intervals around estimates based on this sample reflect only a portion of the uncertainty that actually exists. Nonetheless, such intervals are extremely useful because they capture all of the effect of sampling error and, in this case, some nonsampling error as well.

If all possible samples were selected, if each of them was surveyed under the same general conditions, if there were no systematic biases, and if an estimate and its estimated standard error were calculated from each sample, then:

Approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate (i.e., the 68-percent confidence interval) would include the average result from all possible samples.

Approximately 90 percent of the intervals from 1.645 standard errors below the estimate to 1.645 standard errors above the estimate (i.e., the 90-percent confidence interval) would include the average result from all possible samples.

Approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate (i.e., the 95-percent confidence interval) would include the average result from all possible samples.

This report uses a 90-percent confidence level as its standard for statistical significance.

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 reliability of an estimated absorption rate (i.e., a percentage) computed by using sample data for both the numerator and denominator depends on both the size of the rate and the size of the total on which the rate is based. Estimated rates of this kind are relatively more reliable than the corresponding estimates of the numerators of the rates, particularly if the rates are 50 percent or more.

Tables A and B present approximations to the standard errors of various estimates shown in the report. Table A presents standard errors for estimated totals, and Table B presents standard errors of estimated percents. To derive standard errors that would be applicable to a wide variety of items and could be prepared at moderate cost, a number of approximations were required. As a result, the tables of standard errors provide an indication of the order of magnitude of the standard errors rather than the precise standard error for any specific item. Standard errors for values not shown in Tables A or B can be obtained by linear interpolation.

ILLUSTRATIVE USE OF THE STANDARD ERROR TABLES

Table 3 of this report shows that there were 94,500 1-bedroom apartments constructed in 2014. Table A shows the standard error of an estimate of this size to be approximately 4,633. To obtain a 90-percent confidence interval, multiply 4,633 by 1.645 (yielding 7,622), and add and subtract the result from 94,500, yielding limits of 86,878 and 102,122 (See Test A-1). The true number of units may or may not be included in this computed interval, but one can say that through repeated sampling, 90 percent the constructed intervals contain the true number of units.

Table 3 also shows that the rate of absorption after 3 months for those 94,500 1-bedroom units was 61 percent. Table B shows the standard error on a 61 percent rate on a base of 94,500 to be approximately 3.06 percent. Multiply 3.06 by 1.645 (yielding 5.04), and add and subtract the result from 61 (See Test B-1). The 90-percent confidence interval for the absorption rate of 61 percent is from 56.0 percent to 66.0 percent.

The median asking rent for these 94,500 unfurnished 1-bedroom rental apartments built in the 2014 was $1,315. The standard error of this median is about $45.

Several statistics are needed to calculate the standard error of a median.

- The base of the median--the estimated number of units for which the median has been calculated–-in this example, **BASE = 94,500**.
- The estimated standard error from Table B of a 50-percent characteristic on the base of the median (σ50%). In this example (See Test B-2), the estimated standard error of a 50-percent characteristic with the base of 94,500 is about 3.1 percent **(σ50% = 0.031).**
- The length of the interval that contains the median. In this example, the median lies between $1,250 and $1,449. **LENGTH = $200**.
- The estimated number of units falling in the interval that contains the median--in this example, **UNITS = 13,100**.

The standard error of the median is obtained by using the following approximation:

Standard error of median = (σ50% x LENGTH) / (UNITS / BASE)

For this example, the standard error of the median of $1,315 is:

(0.031 x $200)/(13,100/94,500) = $45

Therefore, 1.645 standard errors equal $74. Consequently, an approximate 90-percent confidence interval for the median asking rent of $1,315 is between $1,241 and $1,389 ($1,315 plus or minus $74).