

## **Builders Satisfy Demand for Large, Open Home Designs**

January 2017 Special Study for HousingEconomics.com Paul Emrath, Ph.D.

Recent data from several sources show that home buyers' desire for large homes (of at least 2,000 square feet) is easier to satisfy in the new housing stock than among existing homes. To be more precise, 51 percent of home buyers want homes with more than 2,000 square feet of living space. Only 41 percent of existing—but 70 percent of new—single-family homes are of this size.

Similarly, 44 percent of buyers want homes with more than two bathrooms. Again, this falls between the 31 percent of existing—and 68 percent of new—single-family homes that have more than two full baths. In other words, new construction is addressing a substantial demand for homes with over 2,000 square feet of space and more than two bathrooms, which tend to be under-represented in the stock of existing homes.

And while open floor plans are popular among home buyers, the design of a new home tends to be even more open. NAHB surveys shows that 32 percent of buyers want a home with a completely open kitchen-family room arrangement, compared to 54 percent of builders who say their typical single-family home is built this way. The same surveys show that 45 percent of buyers want a completely open kitchendining area, and 51 percent of builders report building their typical home this way.

There is no hard data on how various areas of existing homes are (or are not) separated, but remodeling projects that remove walls or otherwise make the space more open are common, suggesting that the open designs many buyers favor are also somewhat under-represented in the supply of existing homes.

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#### **Home Size**

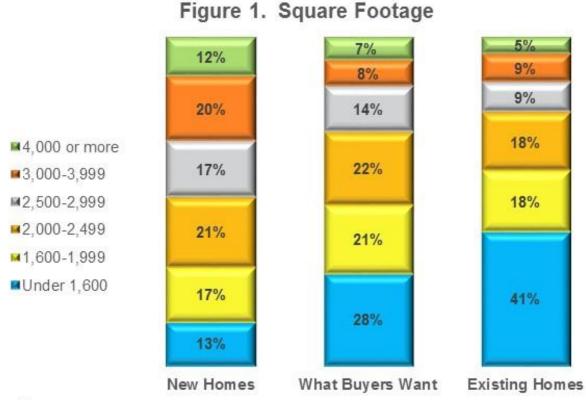
Substantial information on new housing is available from the <u>Survey of Construction</u> (SOC), and on existing housing from the <u>American Housing Survey</u> (AHS), both conducted by the U.S. Census Bureau. The Department of Housing and Urban Development picks up the tab for the AHS and helps fund the SOC. Many readers are probably familiar with the published series on <u>housing starts</u>, which is produced from SOC data. In addition to published reports, the Census Bureau produces data sets that the public can access. NAHB tabulated the latest available data from the SOC (on single-family homes started in 2015) and AHS (conducted in the latter part of 2013) for this article.

Information on housing preferences comes from a survey conducted by NAHB in September of 2015. The survey captured responses from 4,326 recent and prospective homebuyers, stratified and weighted to be representative of the age, geography (nine Census divisions), income, and race and ethnicity of homeowners in the U.S. This survey formed the basis for <u>Housing Preferences of the Boomer</u> <u>Generation</u>, which published results for homebuyers of all ages, although it emphasized the results for Baby Boomers.

Overall, the NAHB preference survey showed that 28 percent of home buyers want a home with less than 1,600 square feet, 21 percent want 1,600 to 1,999, and 22 percent want 2,000 to 2,499. The remaining 29 percent want a home with 2,500 square feet or more.

Compared to what buyers want, the distribution of new homes is skewed toward the large end, and the distribution of existing homes is skewed toward the small end. Only 13 percent of new homes are under 1,600 square feet in size, compared to 41 percent of the existing housing stock (Figure 1).

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Sources:

NAHB tabulation of the 2015 Survey of Construction, U.S. Census Bureau and HUD. 2015 Home Buyer Preference Survey, NAHB.

NAHB tabulation of the 2013 American Housing Survey, U.S. Census Bureau and HUD.

At the other end, 51 percent of buyers want at least 2,000 square feet of space, and 29 percent want at least 2,500. Only 41 percent of existing single-family homes have 2,000 square feet of space or more, and 23 percent have 2,500-plus. On the other hand, 70 percent of new homes have 2,000 square feet of space or more, and 49 percent have 2,500-plus.

### **Bathrooms**

The same data sources provide information on the number of full and half bathrooms. HUD and the Census Bureau define a full bathroom as one with a sink, toilet, and either a bathtub or shower, or shower-tub combination. A half bathroom has a toilet, bathtub, or shower, but not all the fixtures needed to qualify it as a full bathroom.

NAHB's preference survey did not provide a definition, but told the sample of recent and prospective home buyers to assume an additional cost of \$25,000 for each full bath. Armed with this information, 38 percent of buyers said they wanted exactly two bathrooms, 17 wanted fewer, and the remaining 44 percent wanted at least two and a half.

Again this lies between the distribution of bathrooms in new and existing homes. Literally counting each half bathroom as one half of a full one, only 4 percent of new single-family homes have fewer than two full baths, as well as 38 percent of the existing housing stock (Figure 2).



Figure 2. Bathrooms

Sources:

NAHB tabulation of the 2015 Survey of Construction, U.S. Census Bureau and HUD. 2015 Home Buyer Preference Survey, NAHB.

NAHB tabulation of the 2013 American Housing Survey, U.S. Census Bureau and HUD.

After two bathrooms, 26 percent of buyers say they want two and a half, making this the second most popular option. In comparison, 30 percent of new and 16 percent of existing homes actually have two and a half baths. Eighteen percent of buyers also want more than two and a half baths, and 38 percent of new (compared to 15 percent of existing) homes have more than two and half. Twentythree percent of new homes even have more than three bathrooms.

At first glance, these numbers might seem to suggest that builders have gone too far in providing additional bathrooms, but it is important to remember that the percentages of new and existing homes have drastically different denominators. In the SOC data, there were 714,600 single-family starts in 2015. The 23 percent of these that had more than 3 bathrooms works out to a total of 163,000.

In contrast, the AHS showed that there were 83.4 million existing single-family homes in 2013, and the 7 percent of these with more than 3 bathrooms represents a total of 6.37 million. If limited to the roughly 4.5 million existing single-family homes that have sold annually in recent years (as <u>reported by the National Association of REALTORS®</u>), 7 percent of that would represent a little over 300,000 existing homes with more than 3 baths being sold annually.

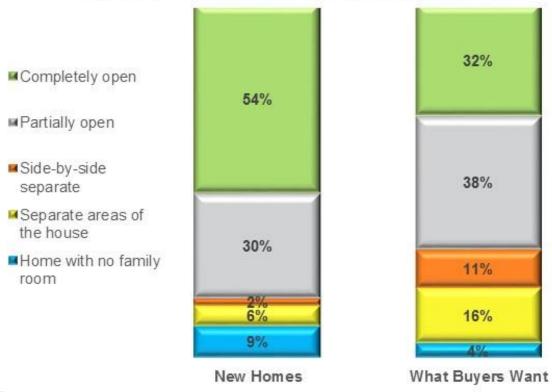
#### **Kitchen/Family Room**

NAHB's home buyer preference survey included questions on the basic design and arrangement of rooms in the home. Among these was a question on how (if at all) buyers prefer to have the kitchen and family rooms in their homes separated.

Home buyers strongly favor designs that are completely open (essentially combining two areas into the same room) or partially open (where the areas are separated by a partial wall, counter, arch, or something else less than a full wall). A full 70 percent of buyers want either a completely or partially open kitchen-family room arrangement (32 percent want it completely open). But an even higher 84

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percent of builders say the kitchen-family room arrangement is completely or partially open in the homes they build. Over half (54 percent) say the arrangement is completely open (Figure 3).





Sources:

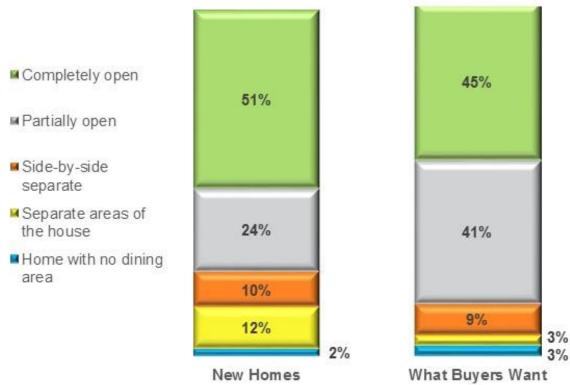
Survey for the NAHB/Wells Fargo Housing Market Index, September 2016. 2015 Home Buyer Preference Survey, NAHB.

Of the remaining possibilities, 16 percent of buyers want the kitchen and family rooms in separate areas of the house, and 6 percent of builders say this is how their typical homes are designed. Eleven percent of buyers want the two areas sideby-side but separated by a wall, while only 2 percent of builders design their typical homes this way. And 4 percent of buyers prefer a home without a family room, while 9 percent of builders do not include a family room in their typical homes. NAHB's surveys gave neither buyers nor builders an option to specify a home without a kitchen area, as this is something the <u>International Residential Code</u> requires every dwelling unit to have.

## **Kitchen/Dining Area**

The NAHB survey contained similar questions about the arrangement of the kitchen and dining area in the home. The responses showed that 45 percent of home buyers favor a completely open kitchen and dining area arrangement, while an even higher 51 percent of builders design their typical single-family homes this way.

However, 41 percent of buyers want a home with a kitchen and dining area that are partially open to each other, while only 24 percent of builders design their typical homes this way. As a result, the 86 percent of buyers who want either a completely or partially open kitchen and dining area is actually higher than the 75 percent of builders who provide the completely or partially open design. This occurs in part because 12 percent of builders locate the kitchen and dining rooms in separate areas of the house, while only 3 percent of buyers say they want their homes this way (Figure 4).



# Figure 4. Kitchen-Dining Area Arrangement

Sources:

Survey for the NAHB/Wells Fargo Housing Market Index, September 2016. 2015 Home Buyer Preference Survey, NAHB.

Notwithstanding these relatively minor differences, the fundamental result of these surveys is that the vast majority of home buyers want a completely or partially open floor plan, and this is how the vast majority of home builders are designing their new single-family homes.

Neither the AHS nor any other data source allows us compare these results to the openness of floor plans in existing homes. However, in its survey for the first quarter 2016 <u>Remodeling Market Index</u>, NAHB asked its panel of professional remodelers roughly what share of their remodeling jobs involved making the main floor more open by removing interior walls/pillars/arches, etc. The median response was that 40 percent of their remodeling projects involved opening up existing

homes this way, indicating that the floor plans of existing homes are often not as open as their owners would like.

On balance then, the evidence shows that builders are doing a good job of providing homes with over 2,000 square feet, more than two full bathrooms, and the open floor plans that many of their customers say they want. Buyers looking for homes that are smaller (particularly under 1,600 square feet), have fewer than two bathrooms, and have full-wall separations between the kitchen, family and dining areas, are more likely to find them among the existing housing stock.