

# Survey of Construction

## Methodology Used through 1998

### New Home Sales

The compilation of the new home sales series was a multistage process. First, an estimate was made monthly of the number of housing units for which building permits were issued in all 19,000 permit-issuing places as described above.

Second, for each permit selected in the 900 permit-issuing places, an inquiry was made of the owner or the builder to determine if the house was already sold or was for sale. If already sold, the month and year the house covered by the permit was sold was obtained. In case the house authorized by a permit in a particular month was for sale, follow-ups were made in successive months to find out when the unit was actually sold.

Ratios were calculated of the number of houses sold to the number of houses covered by permits based on estimates generated from the 900 SOC permit offices. Separate ratios were calculated for houses sold from permits of that month and of each preceding month for the past 7 years. These ratios, or sales rates, were then applied to the appropriate estimate of the number of houses authorized by permits, based on the Building Permits Survey, in the corresponding months to provide estimates of the number of houses sold for each month of authorization.

Having produced estimates of the number of houses sold with permit authorization, two additional adjustments were made. An upward adjustment of 3.3 percent was made to the number of houses started to account for those units started within permit-issuing areas but without permit authorization. (A study spanning a four year period during the mid 1960s indicated that permits were obtained for all buildings with two housing units or more.)

The estimates for housing units sold in the 19,000 permit-issuing places resulted from the procedures outlined above.

Third, units identified as sold in the monthly canvass of nonpermit areas were weighted appropriately to provide an estimate of total houses sold in areas not covered by building permit systems. Adding this estimate of houses sold in nonpermit areas to the estimate of houses sold in the 19,000 permit-issuing places resulted in an estimate of total private houses sold.

Adjustments are made to account for those houses sold prior to permit authorization and for late reports. These adjustments are applied by stage of construction based on historical patterns of pre-permit sales and late reports. An outlier procedure is used to adjust for extreme values in the history. No adjustment is made for units in permit areas built without a permit. This same methodology was also used for the estimates of houses for sale.

The procedure described above was done by region. Eight sets of sales rates were used: separate sets of rates for metropolitan and nonmetropolitan areas within each of the four regions.