

Methodology

NAR estimated the number of home sale closings affected by a lapse of the National Flood Insurance Program.

Calculating Floodplain Weights

First, we calculated the share of housing units, which are located in a 100-year floodplain called Special Flood Hazard Areas (SFHAs). Federal Emergency Management Agency (FEMA) publishes the National Flood Hazard Layer (NFHL)¹, which enables us to determine the flood zone, base flood elevation, and floodway status for each Census block. Meanwhile, 2010 Decennial Census includes the housing units counts for each block. Overlaying these two datasets, we estimated the share of housing units in a 100-year floodplain.

Furthermore, the share of housing units in a 100-year floodplain was weighted by the land/water area share² for each state accordingly.

Estimating the number of housing units in a 100-year floodplain

Assuming the share of housing units in a 100-year floodplain remains the same as in 2010, the American Community Survey (2011-2015) housing estimates were used in order to calculate the number of housing units in a 100-year floodplain for each region and nationwide.

Estimating the number of home sale closings affected by the lapse

NAR releases the number of existing home sales by region while Census provides information about the number of new home sales. Applying the share of housing units in a 100-year floodplain by location to the new and existing home sales of 2016, NAR estimated the number of home sales affected by a NFIP's lapse.

¹ Last updated in March 2017.

² <https://water.usgs.gov/edu/wetstates.html>