

## The Long-Term Outlook for U.S. Residential Construction

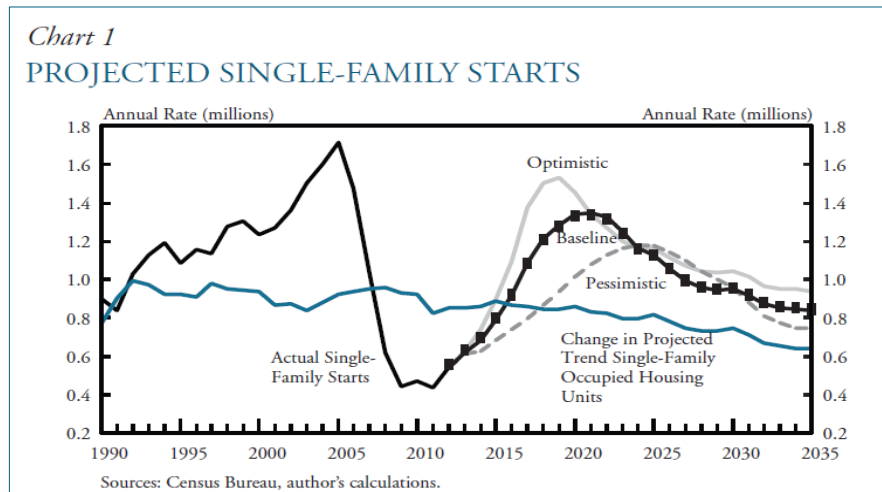
By [Jordan Rappaport](#)

*Although residential construction grew strongly in 2011 and 2012, it plateaued in early 2013, calling into question the strength of the housing recovery. But an analysis of demographic trends suggests construction growth will likely resume in the near term, especially in multifamily housing. Over the longer term, however, slowing U.S. population growth will exert significant downward pressure on housing demand. Even under optimistic assumptions, overall residential construction is projected to enter an extended decline by the early 2020s.*

Long-term demand for both single- and multifamily housing can be projected by considering the observed, historical housing choices of different demographic groups defined by age and gender.\* By combining this information with U.S. Census Bureau forecasts for the size and composition of the country's population through 2035, we project the long-term path of the number of occupied housing units in the United States. This projected trend is well above the current number of occupied units, especially for multifamily housing. Closing the gap between actual occupancy and the projected trend will require a significant rise in construction over the next few years.

However, the longer-term outlook for construction growth is significantly weaker. As the gap between projected occupancy and its long-run trend closes over the next decade, demand for residential construction will decline. For both single- and multifamily construction, slowing population growth will exert downward pressure on trend demand. For single-family housing, an additional source of downward pressure will be the aging of the baby boom generation: as people enter their senior years, many tend to move out of single-family housing and into multifamily housing.

Under a baseline projection, single family starts increase by 150 percent from 2012 to their peak in 2021 (Chart 1). The annual level of starts at this peak is about the same as in 2002, one year into the single-family construction boom. Single-family construction is then projected to fall over the subsequent decade to a low level not seen since the early 1990s, and then to continue to decline through at least 2035.



Alternative optimistic and pessimistic projections can be derived by varying the assumptions made about three key factors: first, the number of currently vacant housing units that will eventually be reoccupied; second, the long-term rate at which housing units become uninhabitable and are abandoned; and third, the rate at which the gap closes over the years between the projected number of occupied units and the long-term trend.

# THE MACRO BULLETIN

Macroeconomic research from the FEDERAL RESERVE BANK of KANSAS CITY

DECEMBER 20, 2013

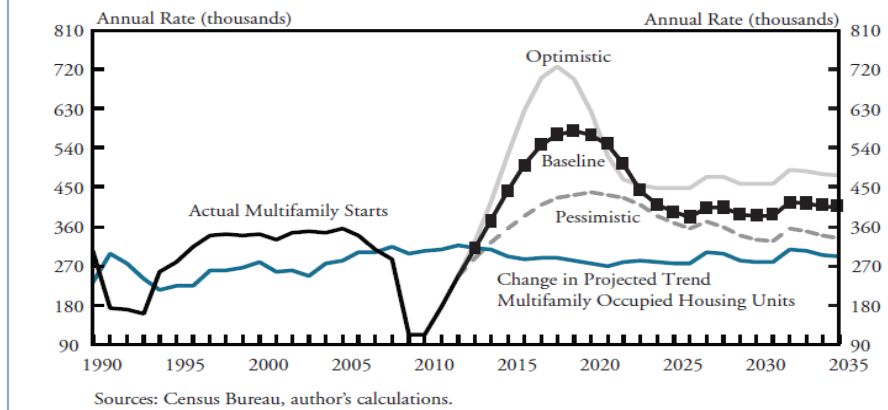
Baseline, optimistic and pessimistic scenarios may then be charted by varying the assumed rates of re-occupancy, abandonment and gap closure.

An optimistic set of assumptions yields an alternative projection in which single-family construction peaks considerably higher and sooner than under the baseline projection (also shown in Chart 1). But it then enters an extended, initially-sharp decline. Even in this optimistic scenario, single-family construction falls eventually to its lowest annual level since the early 1990s.

For multifamily housing, construction is projected to grow at an annual rate near 10 percent through 2016, even under pessimistic assumptions. Under baseline assumptions, multifamily starts peak in 2019 at their highest annual level since the mid-1980s (Chart 2). In contrast with single-family construction, the baseline projection for multifamily housing is characterized by continued strength even in the longer term.

The downward pressure exerted by slowing population growth is projected to be offset by the demographic shift from single-family to multifamily housing. Multifamily construction does eventually contract, but stabilizes at a relatively high level and remains above the average level of annual multifamily construction during the late 1990s and early 2000s.

Chart 2  
PROJECTED MULTIFAMILY STARTS



\*For more, see *"The Demographic Shift from Single-Family to Multifamily Housing"* by Jordan Rappaport in the *Economic Review*, Federal Reserve Bank of Kansas City, Fourth Quarter. The views expressed are those of the author and do not necessarily reflect the positions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.