Multifamily Research Perspectives

July 31, 2014

Steve Guggenmos | 571-382-3520
Harut Hovsepyan | 571-382-3143
Sara Hoffmann | 571-382-5916
Xiaoli Liang | 571-382-3250
Yu Guan | 571-382-4730
Jun Li | 571-382-5047
Dohee Kwon | 571-382-4672
Tom Shaffner | 571-382-4156

Multifamily Mid-Year Outlook 2014

Executive Summary

Freddie Mac Multifamily Research recently assessed the state of the multifamily rental housing market and where it's headed through 2014 and beyond. As part of this, we also looked at broader economic and demographic factors and how they affect the multifamily market. A high-level summary of our findings follows. Read our full Multifamily Mid-year Outlook 2014 for detailed findings and analysis.

Despite mixed economic messages, market drivers propel the multifamily housing market forward.

The economy overall continues its recovery, albeit more inconsistently than expected. The multifamily housing market has remained strong thanks to the economic recovery including an improving job market.

- Robust demand for multifamily rental housing, resulting in vacancy at a 13-year low at the start of 2014 and rising rents.
- Improving employment, with significant gains for young adults, who have the greatest propensity to rent; the recovery, however, is uneven across industries and markets.
- Increasing new supply, which is being absorbed by demand from new and existing renters as it comes on the market; most markets are not in danger of overbuilding.
- Rising property valuations as fundamentals are strong and the financing environment is favorable.
- Liquidity in the market, but more competition for fewer loans at the start of 2014.
- Tight supply of single-family residential housing, leading some would-be homebuyers to rent.

The multifamily market overall is strong, but that strength increasingly varies by location.

Multifamily demand continues to be strong at the national level and is expected to remain so, at least through next year. However, there is growing dispersion across markets, meaning that some geographic markets will veer from the national trends.

- The number of multifamily rental housing starts in the first half of 2014 exceeded historical averages. Completions should follow in a year or two.
- For a majority of the markets, high demand paired with the dearth of construction during the Great Recession means that new supply will continue to be absorbed as it enters the market and rents will continue to rise. Contributing to this: Employment growth and, as a result, more household formations, especially among young adults. Low supply and declining affordability of single-family homes also factor into the multifamily market's growth in these areas.
- Other markets will experience higher vacancy and slower rent growth, for reasons that vary by market.

In our Outlook, Seattle, Houston, and Las Vegas serve as examples of how economic and other conditions affect multifamily markets today and through the next year.

Formation of pent-up households will pump up demand for multifamily rental housing for the next decade.

An estimated 3.9 million households that normally would have been formed during the years of the Great Recession weren't formed. Young adults (18 to 34 years old) account for close to 75 percent of these pent-up households; this age demographic is more likely to rent than own a home.

- Household formations accelerated in the first half of the 2000s, but lagged significantly since then – the recession, unemployment and underemployment, and student debt being the contributing factors.
- As the economy continues to recover, pent-up households will become actual households, benefiting the housing market as a whole.
- Based on the U.S. Census Bureau's population projections through 2025 and assuming that pent-up demand is released evenly each year during that time span, we forecast that demand for new multifamily units over the next decade could be 63 percent higher than the historical average of annual completions between 1995 and 2007.

Looking backward suggests that around 300,000 units each year is a comfortable rate for new supply. But our research suggested that, looking forward, the number needs to be around 440,000 to meet coming demand over the next decade. If our research included investigating cultural and demographic influences on housing choice, our forecast for multifamily demand would be higher.

For other insights from the Freddie Mac Multifamily Research team, visit the Research page on FreddieMac.com/Multifamily.

Multifamily Mid-Year Outlook 2014

Finding A New Normal

- The multifamily rental housing market is strong despite fluctuating macroeconomic indicators in the first half of 2014.
- Supply of new multifamily units is being absorbed by demand and market fundamentals are expected to remain strong over the next two years, converging towards historical averages.
- An estimated 3.9 million potential households were under-created due to the Great Recession, with young adults accounting for close to 75 percent of those pent-up households.
- Over the next decade, an estimated 440,000 multifamily units may be needed each year to meet the growing demand, based on demographic trends.

Despite fears of a slowdown, multifamily market conditions remained strong during the first half of 2014 and are expected to continue through the rest of the year and into the next, but with more dispersion across markets. Initial reports indicate that demand has kept pace with supply, enabled in part by jobs gains. Nationally, occupancy rates have been low and stable, while rents have been rising.

Meanwhile, the overall economy continues to recover, albeit more inconsistently this year than anticipated. The good news on the labor front is that jobs finally surpassed the pre-recession peak during the first half of 2014. However, economic growth was negative, which dampens full-year macroeconomic expectations even though the second half of the year is expected to be stronger. The multifamily sector benefited from the sluggish single-family sector recently; but both housing segments could benefit from a robustly growing economy – especially as affordability is becoming a growing issue.

In the long-run, we expect the multifamily sector to benefit from robust household formations. Household formations slowed during the economic recession, particularly among young adults. As the economy continues to improve, household formations will likely resume and pent-up demand will gradually release. We project the multifamily sector will disproportionally benefit from the release of pent-up demand because young adults have a higher propensity to rent.

Section 1 – Multifamily Market Drivers

The economy suffered a gloomy first quarter 2014, with gross domestic product (GDP) down an annual rate of 2.9 percent, the largest drop since the first quarter of 2009. The lackluster performance was partially attributed to the harsh winter, which hampered many segments of the economy, including construction and home sales across much of the nation. Overall, the financial market's reaction to the slow economic growth was muted, indicating that many see this as a temporary contraction. GDP is expected to grow 3 percent during the remaining six months, ending 2014 2.0 to 2.5 percent higher than a year ago.

Despite the unfavorable economic growth, the multifamily sector continued its strong run as the labor market improved and the single-family market remained sluggish. As employment rises and more households are formed, demand will increase for multifamily and single-family housing, with multifamily benefiting disproportionately, according to our forecasts and as described later in the paper.

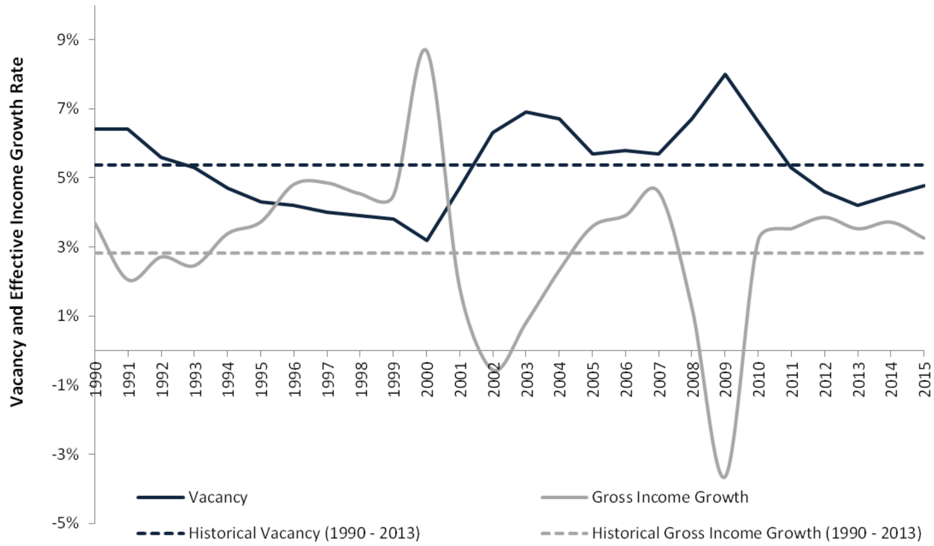
Multifamily Demand Is Robust

In the beginning of 2014, the multifamily vacancy rate reached a 13-year low as new supply has been absorbed by strong demand.

Multifamily rental housing inventory remained tight in the first half of 2014; rent growth and occupancy exceeded expectations of some forecasters despite increasing supply coming into the market. Absorption of multifamily units was very strong in the beginning of 2014 and, as a result, vacancy rates are at their lowest level in 13 years. By the end of 2014, we expect vacancy rates to turn the corner as new supply continues to be delivered to the market. However, we project the vacancy rate to remain below the long-run average in the near term, indicating that the supply is meeting demand and the market is gradually reaching equilibrium. Furthermore, effective gross income growth has been above its historical average. As shown in Exhibit 1, we project that vacancy rates will increase to 4.8 percent by year-end 2015 and gross income growth will slow to 3.3 percent in 2015, both moving toward their historical averages.

Exhibit 1 - Vacancy Rate and Gross Income Growth, History and Forecast

Apartment vacancy rates and income growth continue to be better-than-average in our short-term forecast.



Source: REIS, Freddie Mac projections

Employment Is Improving

The job market stayed strong during the first half of 2014. Total non-farm employment surpassed the pre-recession peak reached in 2007. A total of 1.4 million jobs were added to the economy in the first six months of 2014, and the unemployment rate decreased to 6.1 percent from 6.7 percent at the start of the year. We expect employment to continue to grow in the second half of the year and the economy to add more than 2.6 million jobs during 2014, exceeding the previous year's by more than 13 percent.

In the year ending June 2014, nearly half of the jobs created, 47 percent, went to 20-to-34-year-olds. Because the likelihood for renting is the highest among this age cohort, the jobs gained in this group have a strong impact on multifamily occupancy and rents.

These trends are encouraging, but the overall labor market is not yet fully recovered. Job gains have disproportionately favored certain industries and markets. Those industries that have regained their recession losses include mining, education and health services, leisure and hospitality, and professional and business services; construction, information technology (IT), and manufacturing still lag. Differing industry concentrations by market contribute to differing conditions across markets.

The low labor participation rate also indicates employment is not yet completely recovered. The participation rate, or labor force divided by the working-age population, stood at 62.8 percent as of June 2014. It is down from its peak more than a decade ago of 67.3 percent and is at its lowest level since 1978. Increases in the participation rate, along with recovery in lagging industries and markets, are indicators of further strengthening of the overall economy. People being drawn into the job market and the workforce will signal potential increased demand in the housing market and a need for new supply to meet that demand.

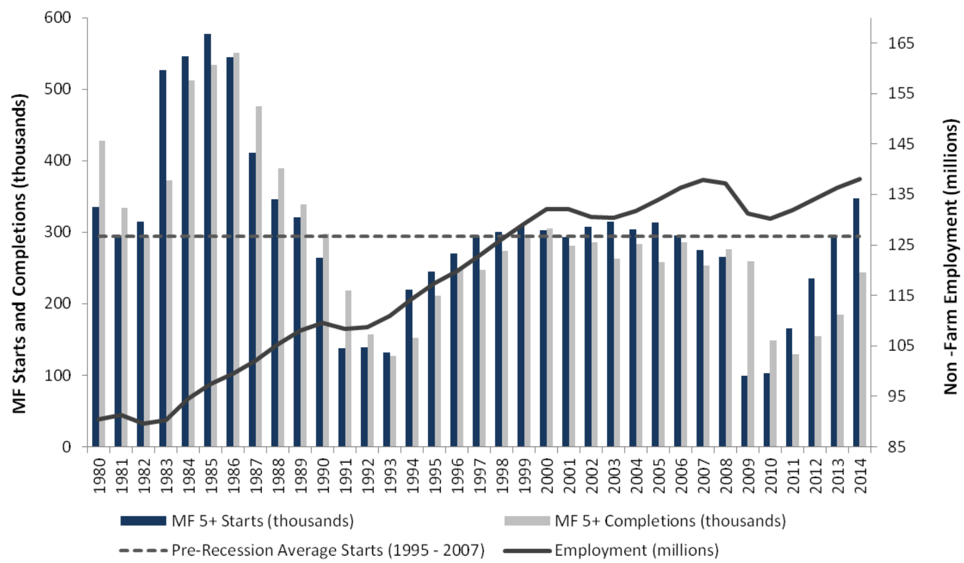
Multifamily Supply Is Entering the Market

Multifamily starts exceeded the historical average in the beginning of 2014 by 50,000 units.

Multifamily supply continues its upward trend. In 2013, starts of multifamily properties with five or more units reached the long-run average from 1995-2007 at 295,000 units. In the first half of 2014, starts exceeded the average by about 50,000 units (annualized), as depicted in Exhibit 2. Although some market observers have expressed concerns about supply exceeding the long-run average, the current flow of supply does not appear to exceed demand. In fact, rent growth and occupancy in the first half of the year exceeded some expectations. As new supply enters the market, vacancy rates will move towards the long-run equilibrium levels.

When analyzing the supply of multifamily units, it is also important to consider the overall supply of housing units, which includes single-family homes and properties with 2-4 units. As the job market continues to recover, new households will be formed, increasing the demand for housing. However, the single-family sector has been slow to recover and is much below historical starts levels. Also, properties with 2-4 units make up a tiny portion of the share of new housing starts, and these levels have been declining steadily since the mid-1980s. This leaves multifamily, with five or more unit properties, to meet the demand of new households.

Exhibit 2 – Multifamily Starts, Completions and Employment



Source: Freddie Mac, US Census Bureau, Moody's Analytics

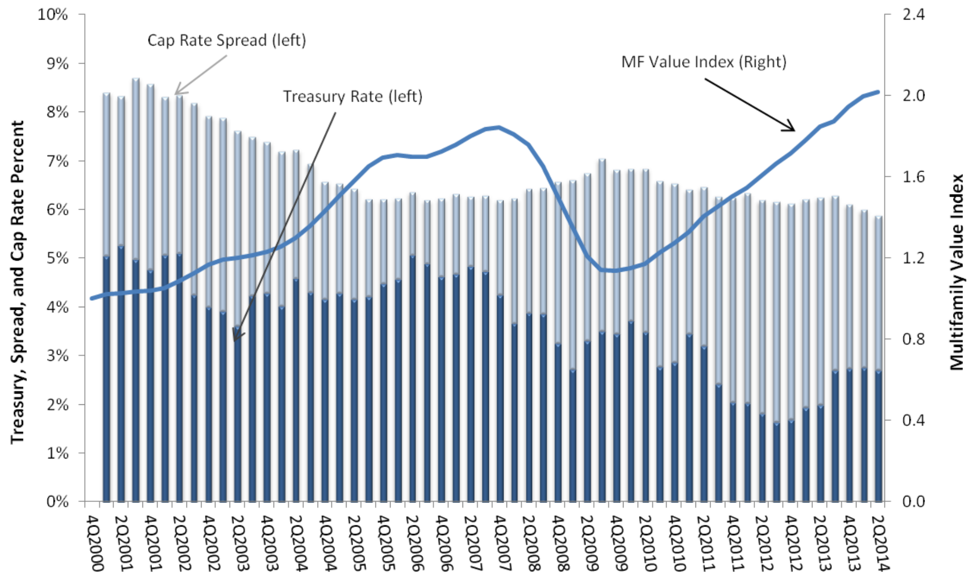
Property Valuations Are Appreciating, Cap Rate Spreads Declining

Multifamily investors have benefited from strong value appreciation in recent years. Investors are attracted to multifamily by a number of factors, including strong fundamentals and a still relatively favorable financing environment. Multifamily values have surpassed their pre-recession peak by 8.7 percent, according to Real Capital Analytics (RCA). In comparison, office, retail, and hotel sectors experienced price appreciation in 2013 and the first half of 2014, but are still below their pre-recession peaks.

Strong investor demand supports growth in multifamily property prices and kept cap rates flat to slightly down despite the rise in interest rates last year.

Multifamily cap rates were not significantly impacted by the steep jump in Treasury yields a year ago and bond market fluctuations since then. Generally, an increase in Treasury rates pushes up all other rates tied to the "risk-free" rates. This includes cap rates because future cash flows are worth less in higher-rate environments, which, all else equal, contributes to lower property values. However, other factors affect cap rates in addition to interest rates, including market fundamentals, economic performance, and investor demand. These factors have kept cap rates steady, but spreads to the 10-year Treasury are tightening – now down to 318 basis points, close to the historical average (2000 to the present) spread of 310 basis points, as shown in Exhibit 3. Our analysis indicates that as of the end of 2015 multifamily cap rates will move into the 6.5 to 7 percent range. This forecast is consistent with steady employment growth and a slow rise of the 10-year Treasury to around 3.6 percent, and spreads continuing to tighten mildly to 290-300 basis points.

Exhibit 3 – Multifamily Value Index, Cap Rate Spread and Treasury Rate



Source: Freddie Mac, RCA, US Census Bureau, Moody's Analytics

Origination Volume Is Down, Competition Up

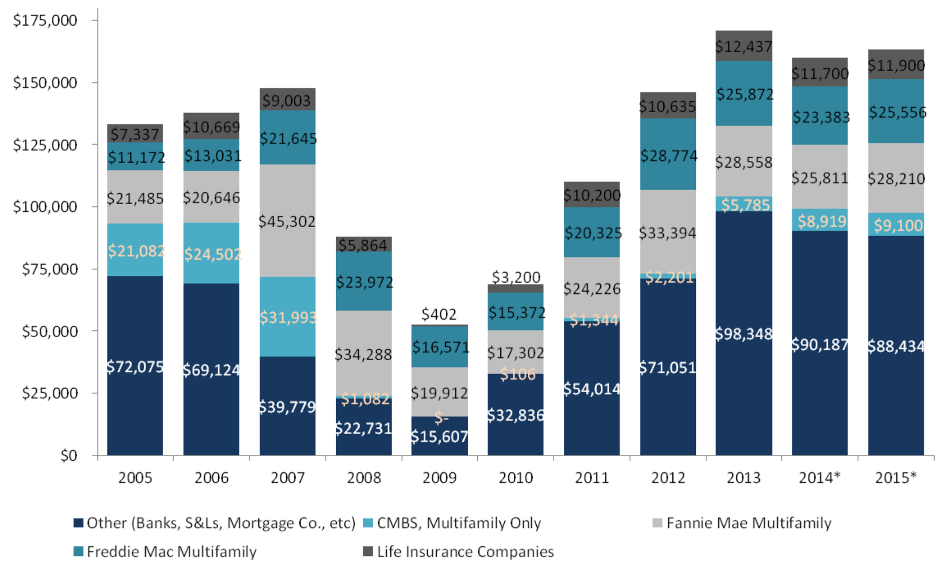
On the debt side, 2013 was another strong year for liquidity in the multifamily market, but the slow start to 2014 indicates that the total volume of mortgage originations might be lower this year.

Total multifamily volume is expected to be slightly lower in 2014 and 2015 compared to 2013, with GSEs' share to be around 30 percent both years.

According to the Mortgage Bankers Association (MBA), the volume of multifamily originations in first quarter 2014 was 17 percent lower than the volume in the same quarter a year ago. Despite the slow start, we anticipate the origination volume to pick up in the second half of 2014, ending the year around $160 billion, or $11 billion less than in 2013. The volume in 2015 is projected to increase from 2014, totaling $163 billion, but still below 2013 volumes, as shown in Exhibit 4.

Consistent with expectations, the GSEs' market share is lower due to the growing appetite from other market participants for multifamily loans. The GSEs play a countercyclical role, providing more liquidity during economic downturns when private capital shrinks back and reducing their footprint when the private sector is more actively providing capital. At the height of the recession, the GSEs served 70 percent of the market, up from 25 percent a few years earlier. Since the recession, more participants have entered the market, and the market share of GSEs fell. GSE market share in the vicinity of 30 is consistent with other market participants actively competing for multifamily loan originations.

Exhibit 4 – Multifamily New Purchase and Guarantee Volume ($ millions)



Source: Mortgage Bankers Association, Freddie Mac
Notes: 2014 and 2015 numbers are projections as of June 2014

Single-Family Housing Holding Back

The single-family sector performance fell below expectations in the first half of 2014. The Freddie Mac Multi-Indicator Market Index (MiMi) indicates a still-recovering single-family housing market compared to historical levels, but improvement from a year ago.[1] Overall, residential housing markets are tight; single-family housing starts remain well below long-run averages at a time when the ratio of for-sale inventory to total households is historically low. House prices are expected to grow faster than inflation in the next two years, around 5 percent in 2014 and 3.0 percent in 2015, down from the 9.3 percent seen in 2013.[2] Freddie Mac projects a gradual increase in the 10-year Treasury rates, ending this year at 2.8 percent and reaching 3.6 percent by the end of 2015. As such, mortgage rates are expected to climb to 5.2 percent by the end of 2015. With the increase in mortgage rates and home prices, the affordability of homeownership will further decline from currently low levels and may impact the ability to buy.

---

[1] The MiMi measures the market's stability by comparing current local data with Freddie Mac data for all 50 states plus the District of Columbia, top 50 metro areas, and the nation. The index assess where each market is relative to its own long-term stable range by looking at home purchase applications, payment-to-income ratios, proportion of current mortgage payments, and local employment. See http://www.freddiemac.com/mimi/ for more details.
[2] See the complete 2014 Mid-Year Economic and Housing Outlook at http://www.freddiemac.com/finance/pdf/June_2014_public_outlook.pdf

Section 2 – Multifamily Market-level Outlook

Multifamily demand continues to be strong at the national level, but there is growing dispersion among the markets. Some markets are expected to out-perform both the nation and their historical levels, while others are projected to grow slower. The drivers within each market vary greatly. Overall, we expect most major markets to continue to perform above their historical averages. More than half of the markets are expected to experience higher-than-average rent growth in 2014 and 2015 even while vacancy rates rise in the majority of markets.

While multifamily construction plummeted in all markets during the Great Recession, the post-recession resurgence greatly varies from market to market. Multifamily starts put in place in the beginning of 2014 outpaced average historical starts in most markets, and exceeded them by as much as 50 to 150 percent in a few. Vacancy and rent projections compared to historical averages indicate which markets are better equipped to absorb the new supply. The following two exhibits depict this information for the 35 major markets. Exhibit 5 compares current starts relative to historical average and juxtaposes market-level short-term forecasted vacancy and historical vacancy. Exhibit 6 compares market-level short-term rent growth and historical rent growth. The two exhibits together show how individual markets are projected to react to supply and demand in the short-run, measured by their proximity to market-level equilibrium.

In Washington, D.C. and Norfolk, for example, new supply exceeds historical levels, while demand will struggle to keep pace and may fall short of the supply. The federal sector in both markets composes a large share of the total labor market. While the federal sector was the driver of these markets during the recession, recent drag from fiscal policies has slowed employment growth in these markets. The forecasted vacancy rate is above the historical average, while rent growth is below historical rent growth. This indicates that in the short-run there is a risk that increased supply may lead to weaker multifamily performance.

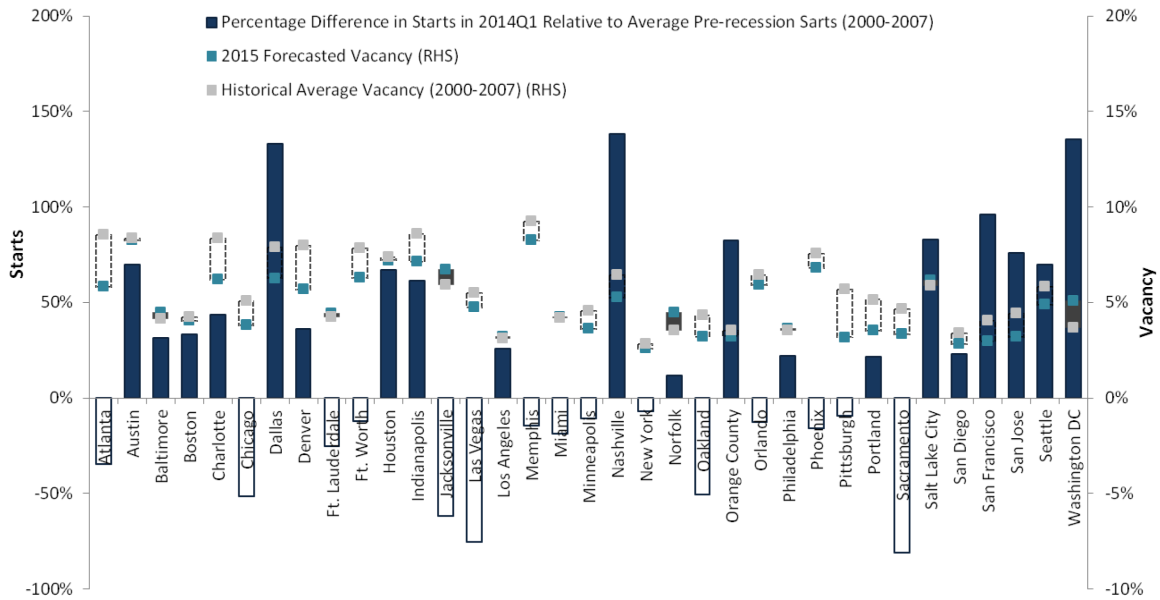
The multifamily sector in the majority of markets is expected to remain strong in the near horizon.

In other markets, such as Fort Lauderdale, Jacksonville and Las Vegas, while the supply of new units is well below historical levels, both vacancy and rent growth are expected to fare near or worse than historical averages because of lasting impacts from previous housing market shocks in these areas. These markets are still recovering and we do not expect meaningful growth in the near term.

In contrast, the multifamily sector in Dallas, Denver, Charlotte, and San Francisco is expected to continue strong growth. Despite higher-than-average deliveries of new supply, both vacancy and rent growth are expected to fare better than historical levels. The post-recession boom in these markets is attracting many new companies and job opportunities, mostly in technology and in business and financial services.

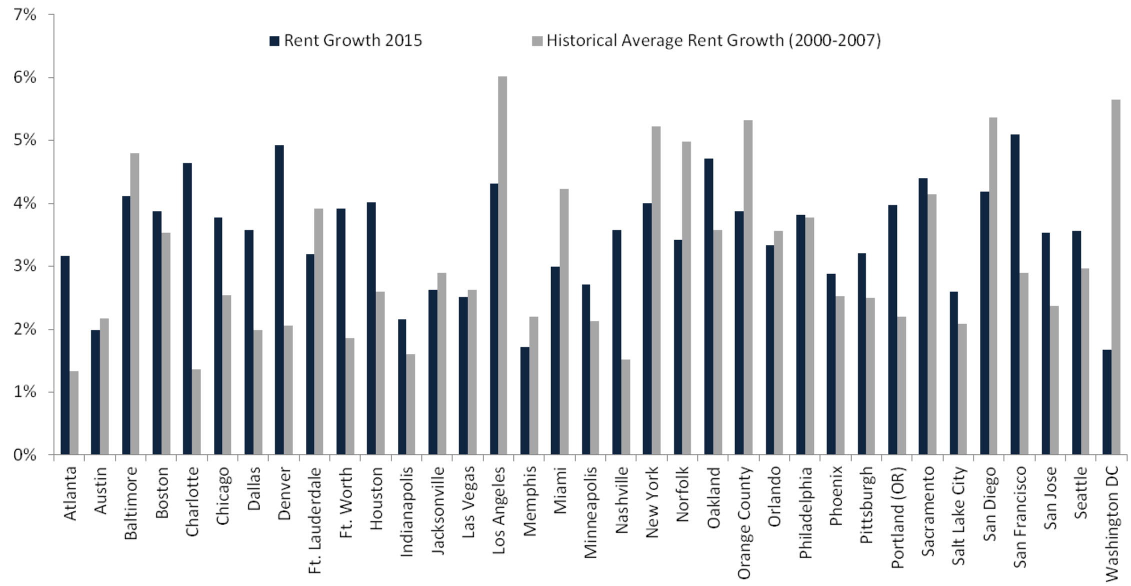
Overall, the multifamily sector in the majority of the metros is projected to experience healthy growth in the near-term. Exhibit 6 shows that growth rates are almost entirely quite strong. While some areas will experience rent below their historical average, we anticipate the rent growth to be higher than the expected inflation level (2 percent) in our top 35 major markets, except for Washington, D.C.

Exhibit 5 – Multifamily Starts and Forecasted Vacancies Relative to History



Source: REIS, Moody's Analytics, Freddie Mac projections

Exhibit 6 – Rent Growth Forecasts Relative to Historical Average



Source: REIS, Freddie Mac projections

Looking at our projected top 10 markets by gross effective income for 2015, shown in Exhibit 7, their performance stems from absorption of supply due to either high demand fueled by a strong job market, or a healthy job market paired with relatively limited multifamily stock and low affordability of single-family homes.

Exhibit 7 - Top 10 Metro Effective Income and Vacancy Forecasts

Metropolitan Market	Annualized Growth in Gross Effective Income 2015	Vacancy Forecast 2015
San Francisco, CA	5.2%	3.0%
Oakland, CA	4.6%	3.2%
New York, NY	4.2%	2.6%
San Diego, CA	4.1%	2.8%
Orange County, CA	3.8%	3.2%
Portland, OR	3.8%	3.5%
Boston, MA	3.8%	4.0%
Denver, CO	3.8%	5.7%
Seattle, WA	3.8%	4.9%
Baltimore, MD	3.7%	4.5%
United States (top 70 metros)	3.3%	4.8%

Source: Freddie Mac projections

To illustrate how individual markets are reacting to the drivers behind their economic and multifamily conditions, we looked more closely at three markets. Seattle's rental market is thriving with strong job and population growth. Houston, an up-and-coming market, is experiencing a growing and increasingly diversified economy. Finally, Las Vegas was particularly hard-hit by the recession but indicators suggest some potential for the multifamily market.

Seattle

Seattle's economy has prospered over the past several years. Non-farm employment surpassed the pre-recession peak a year ago and added another 40,000 jobs since. Every sector is growing, but not all have recovered to their pre-recession peaks; for example, construction and financial services have not yet fully rebounded. Multifamily starts are expected to be slightly lower in 2014 compared to 2013, but still 70 percent higher compared to the pre-recession average level. So far, apartment demand has kept up with supply, largely because people have been flocking to the area to take advantage of job opportunities. Healthy population growth is expected to continue through at least 2015, which will keep demand up for multifamily units as they are delivered to the market.

Multifamily fundamentals are expected to remain strong through the end of 2015. As new supply is delivered, vacancy rates are projected to increase slightly by the end of this year and in subsequent years, remaining around 5 percent, while gross income is expected to remain stable, slightly above the national average.

Houston

Houston is no stranger to boom-and-bust economic cycles, given its historical heavy reliance on a single industry: oil. This metro area now has a more diverse economy, which combined with an expanding energy sector, contributed to its resiliency during the recession and fast growth afterwards. The only sectors not hiring more workers are utilities and the federal government. As of June 2014, 90,000 new non-farm jobs had been added over the prior 12 month period. The metro area only lost 115,000 jobs from peak to trough, but since the trough it has added 375,000 jobs. The top contributor was trade and transportation (which benefits from the widening of the Panama Canal), followed by professional and business services, leisure and hospitality, local government, and education and health services.

The booming economy has attracted more new residents, which benefits the housing market as a whole. While a large number of multifamily units are being built, most of the new supply is absorbed by the increased demand generated from employment gains and population growth. However, vacancy rates are expected to increase slightly and revert to the historical average by 2015. Gross income will continue to rise and will remain close to the national average through 2015.

Las Vegas

Las Vegas's housing overhang and other effects of the recession hurt this market for an extended period, but Las Vegas has gained some momentum recently. The area has one of the highest unemployment rates among the major markets, but is improving; however, this rise is partly attributable to a shrinking labor force. The area relies heavily on two industries, leisure and hospitality and construction. The leisure and hospitality sector, which makes up roughly 30 percent of all jobs, is the main driver for the Las Vegas economy. While jobs in that sector have almost completely recovered from the recession, growth has been slow and inconsistent. Meanwhile, the construction industry is still struggling to recover and the employment gap in this sector accounts for the majority of the 58,000 jobs still not recovered from the pre-recession peak.

Even though multifamily fundamentals here will improve due to the record-low completions, the overall demand for housing is not yet recovered. Vacancy rates are expected to continue to decline due to the limited supply, while gross income will be below the national average through 2015.

Section 3 – Demographics of Multifamily Demand

U.S. household formations slowed during the recession compared to historical rates. While the population grew by 11.2 percent between 2000 and 2012, the total number of households grew by 9.9 percent. Historically, household growth is faster than population growth. The slowdown in household formations adversely affected the demand for housing, both single-family and multifamily.

An estimated 3.9 million households delayed formation due to adverse economic factors during the Great Recession.

There are many factors driving household formation. Economic stability is a crucial factor; cultural and demographic factors are also important. We estimated the effect of the economic slowdown at the end of the last decade on household formations.

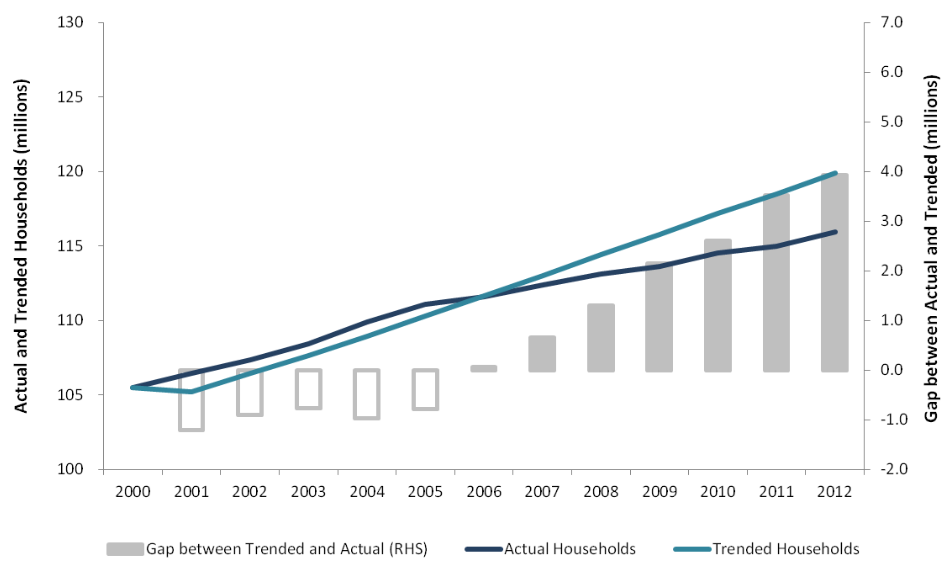
Based on our analysis, we estimated that household formations fell 3.9 million short of expectations.[3] The shortfall equals the difference between trended and actual household formations between 2000 and 2012, as shown in Exhibit 8. The trended line shows how many households there would be if the propensity to form

[3] Methodology: We first broke down total population into five-year age groups. For each group, we calculated the benchmark household formation rates, using 2000 Decennial Census Data. Next, we applied the benchmark headship rates to the corresponding population age group for 2001 through 2012 to estimate the households that would have been formed if the headship rates remained at benchmark level (2000). The methodology allowed us to estimate and compare the household shortfall for each of the age cohort.

households in each subsequent year remained the same as in 2000. The actuals line shows the recorded, or actual, number of households each year. During the first half of the 2000s, actual household formation exceeded projections based on the trending. As the economy expanded, household formation rates in these years were higher compared to the benchmark year.

Since then, with the slowdown in the economy, actual household formation has slowed meaningfully and lagged the trended line. As evidenced by the American Community Survey data, people are less likely to form households today than a decade ago. The stressed economy, weaker financial stability due to many adults being unemployed for an extended period of time, and high levels of student debt are some of the major reasons that household formations have declined.

Exhibit 8 – Trended Compared to Actual Household Formations 2000 - 2012



Source: Freddie Mac, Census Bureau, American Community Survey

Millennials made up 75 percent of the household shortfall.

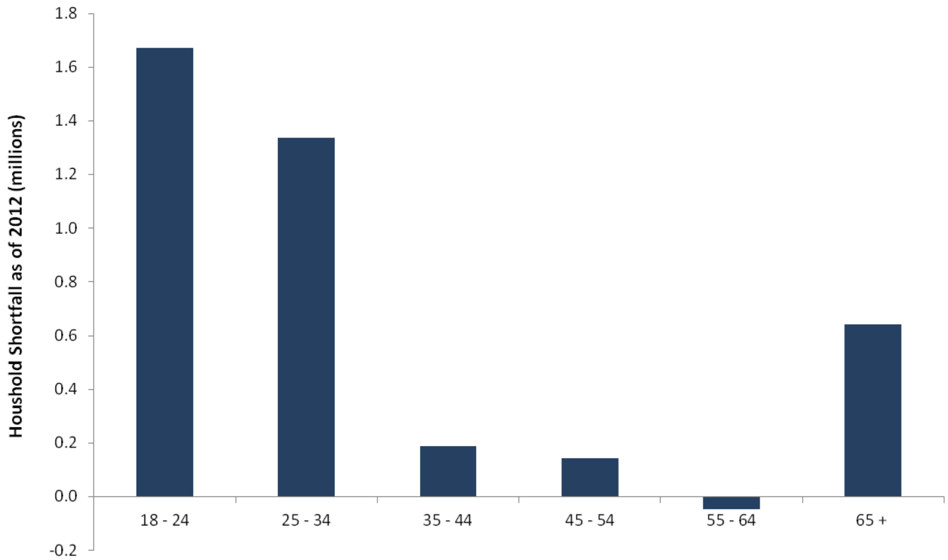
The gap between actual and trended is pent-up demand created because of the decrease in the headship rate, or the ratio of the number of households to population. The headship rates declined from 2000 to 2012 by 1.2 percent. The decline was more pronounced among young adults, with a 25 percent drop among 18-to-24-year-olds and 7 percent among 25-to-34-year-olds. Exhibit 9 breaks down the shortfall by age cohort. Millennials, 18-to-34-year-olds, account for close to 75 percent of the 3.9 million shortfall in household formations. The decline in the headship rate among those 65 years and older was smaller, 2.4 percent, but accounted for the third-largest gap in household formations. Overall, the headship rate remained relatively stable among older adults, because they have already formed households or the recession affected their decisions to form households less than for Millennials.

Instead of forming their own households, many adults found alternative living situations by doubling up with relatives. Based on data from the American Community Survey, the share of people who doubled up with relatives increased in all age cohorts, but was most pronounced among Millennials. The younger age cohort is more likely to stay with relatives if conditions are not ideal for starting their own household; they typically don't have as much financial stability as their older peers. Once this trend begins to reverse, we can expect the pent-up demand to start releasing into the market as newly formed households.

The analysis was further broken down by housing type, either single-family or multifamily. Multifamily includes properties with five or more units. Assuming that households were formed at the 2000 headship rate and housing decisions were like those made in the benchmark year, we estimated that 1.6 million households (or 40 percent of the total gap) are from the multifamily sector, while the remaining 2.3 million are from single-family and all other housing types.

The large gap in multifamily reflects that the pent-up demand is heavily skewed toward young adults, who historically have a higher propensity to rent compared to older age groups. Of the households formed in each cohort, 87 percent of those aged 18 to 24 and 62 percent of those 25 to 34 were renters in 2012, compared to 21 percent in the 65+ age cohort. Clearly, the young adult cohort is a key renter demographic. Renter households are likely to increase meaningfully as the economy improves and more young adults gain financial stability. Consequently, as the pent-up demand releases, multifamily will experience significant growth.

Exhibit 9 – Household Formation Shortfall by Age Cohort

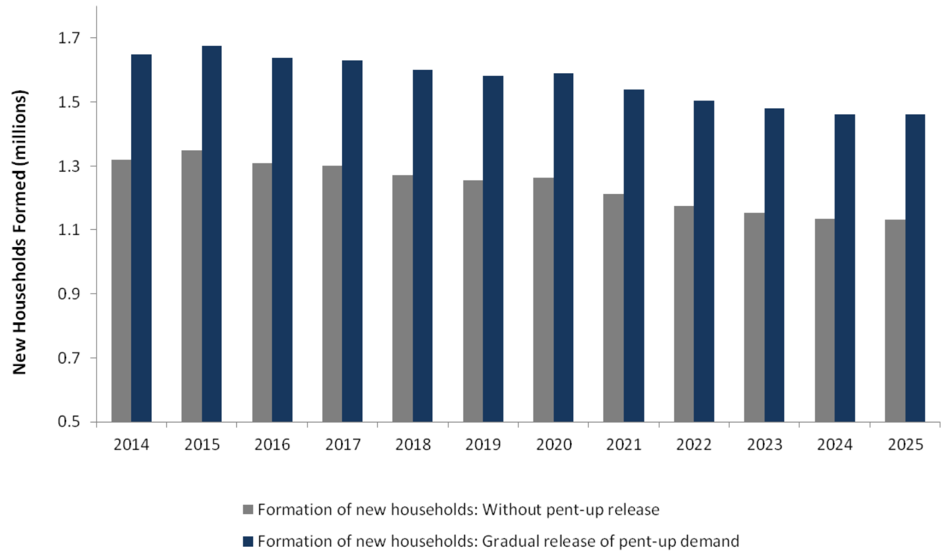


Source: Freddie Mac, Census Bureau, American Community Survey

Looking forward, as the economy continues to recover and the job market expands, the pent-up households will become actual new households. We already see weak signs of release in the pent-up demand. Per Current Population Survey (CPS) data, the proportion of adults aged 18 to 24 who doubled up with relatives slightly declined to 17.6 percent in 2013 from 18.0 percent in 2012. While the share remains higher than the 12.8 percent recorded before the recession, the tick downward is encouraging and will continue as the economy expands.

Next, we forecast household formations, with and without the pent-up demand released. The basis of our forecast was the U.S. Census Bureau's projected population through 2025. We applied the same 2000 headship rates for each forecast year. Solely gauging population trends, we generally expect between 1.13 million and 1.35 million new households per year will be formed during the next decade, as shown in Exhibit 10 – a number that is roughly consistent with recent history going back to the 1980s. The average number of U.S. household formations stands at 1.23 million households per year. Thus, assuming pent-up is not released, the estimated household formation will be in the ballpark of the historical average level. Assuming that pent-up demand will be released at a steady rate over the same time period, the number of household formations is boosted by 328,000 households annually, a 25 percent increase. The total household formation under this assumption ranges between 1.46 million to 1.68 million. This is roughly equivalent to the household formations in the mid to late 1970s, when household formations peaked as Baby Boomers formed households.

Exhibit 10 – Household Formation Projections by Year



Source: Freddie Mac, Census Bureau, American Community Survey

To meet the growing demand, new supply of housing units will need to be delivered at levels higher than long-run averages over stable periods. After accounting for the rate at which units are retired from inventory, known as the obsolescence rate, we estimated the demand for multifamily units to be around 300,000 units per year. Adding the pent-up households, demand will increase to 440,000 units per year through 2025. This is 63 percent higher than the historical average of 270,000 units completed per year between 1995 and 2007.[4] Other studies found similar or even greater demand for multifamily units during the next decade. For example, research by the Federal Reserve Board of Kansas City published in fourth quarter 2013 found that the demand for multifamily units will be in the range of 400,000 to 550,000 units per year, depending on the magnitude and timing of the release of pent-up demand.[5] The Joint Center for Housing Studies of Harvard University (JCHS) estimated in its

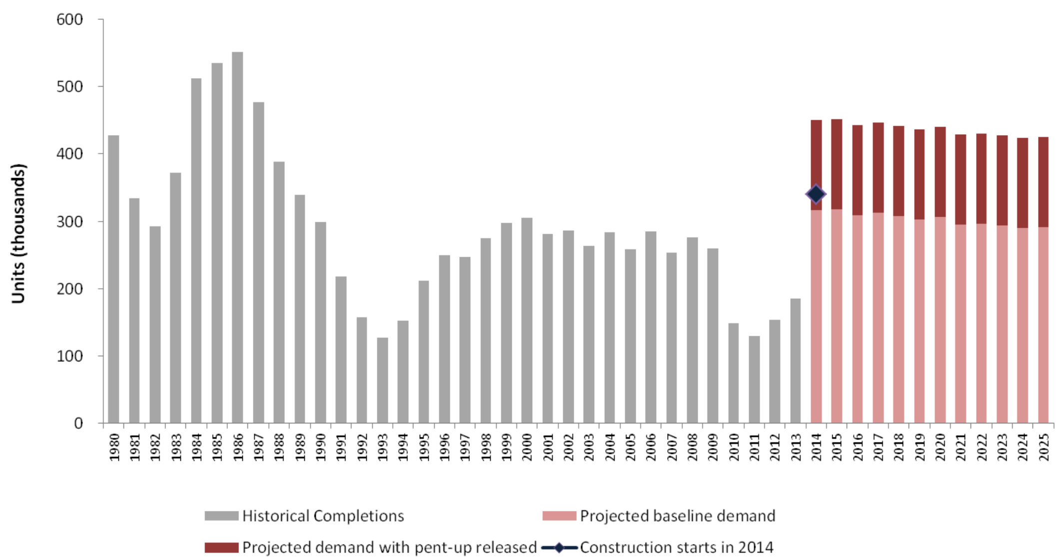
[4] Estimations presented in this outlook are based on the constant series of U.S. Census population projections. Estimations based on other series of population projections – middle, low, and high – yield higher number of household formations. Furthermore, as these series assume higher immigration rate, hence higher number of young adults, the demand levels for multifamily based on these series are greater than estimations based on the constant series.
[5] The research article "The Demographic Shift from Single-Family to Multifamily Housing" by Jordan Rappaport at the Federal Reserve Bank of Kansas City can be found at [http://www.kansascityfed.org/publicat/econrev/pdf/13q4Rappaport.pdf.](http://www.kansascityfed.org/publicat/econrev/pdf/13q4Rappaport.pdf)

Annually, an estimated 440,000 multifamily units will be needed with the release of pent-up demand over the next decade.

"2014 State of the Nation's Housing" report that between 400,000 and 470,000 renter units will be required in the next decade.[6]

The fast recovery of multifamily construction following the decline experienced during the recession indicates that investors are aware of the growing demand. As shown in Exhibit 11, in the first half of 2014, 340,000 multifamily units (annualized) were started, with completions expected by the end of 2015. Although this new supply falls short of the projected demand when the release of pent-up demand is included, it exceeds our projected baseline demand for 2014.

Exhibit 11 – Historical Multifamily Completions and Projected Demand



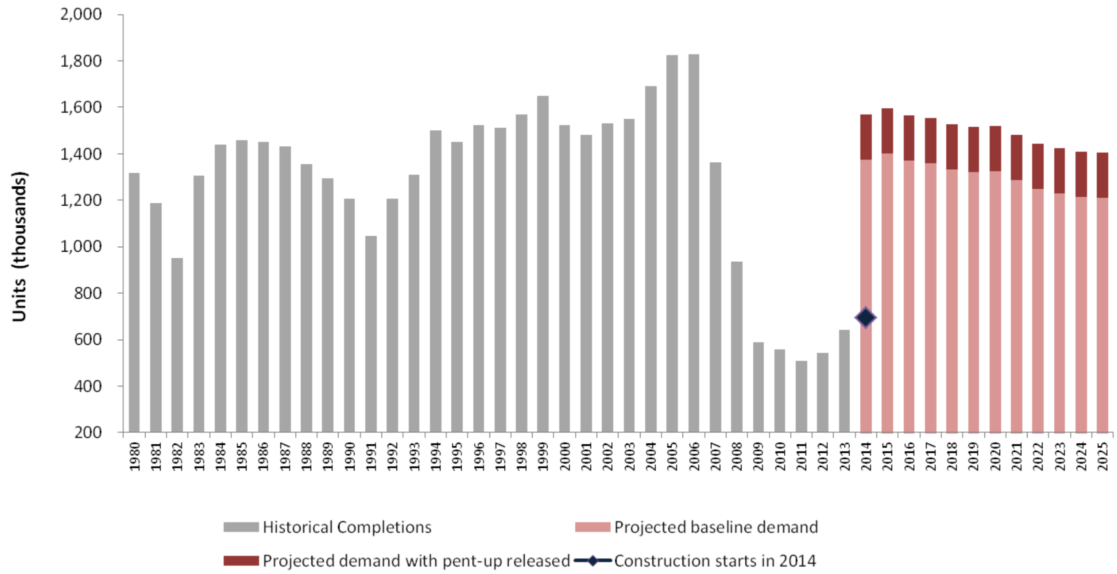
Source: Freddie Mac, Census Bureau, American Community Survey, Moody's Analytics

Annually, an estimated 1.5 million single-family units will be needed over the next decade, but current construction is falling short of meeting that number.

Similarly, we also project that demand for single-family housing will be much higher than the current completion levels, as shown in Exhibit 12. We estimated the demand for this sector to be around 1.3 million units per year under the baseline assumption and 1.5 million units assuming that pent-up demand will be released over the next decade. However, 695,000 single-family units (annualized) were started in the first half of 2014, far below the projected demand. Even though inventory is tight in the single-family space, builders do not have the necessary economic incentives to start building the homes needed to meet such high demand. In the meantime, many households who otherwise would buy homes must instead rent, putting further pressure on the already-tight multifamily sector.

[6] See the full JCHS report at http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/sonhr14-color-full.pdf.

Exhibit 12 – Historical Single-Family Completions and Projected Demand



Source: Freddie Mac, Census Bureau, American Community Survey, Moody's Analytics

The research presented here confirms intuition related to multifamily and overall housing market conditions. Significant demand is pent-up in the market because of the drop in household formations during and since the Great Recession. It will be released as the economy continues to strengthen. As these new households are formed, they will drive up demand for housing units significantly– on top of the demand that will be generated by expected population growth.

Several key assumptions underlying the research presented in this paper warrant further study, which we intend to perform later this year. One, we assumed a gradual and proportional release of the pent-up demand. However, it is likely that the release will take place faster if the economic recovery accelerates. In this case, the shock in demand can cause market distortions. This study focused on household formations at national level. But because household formations are likely to depend on the pace of economic growth in each market, the demand for multifamily housing will be unevenly distributed across the markets and so we will assess market-level demographic trends. Another consideration is that we assumed a constant homeownership rate, fixed at historical average level. However, any other shifts, such as changes in household preferences, are outside of the scope of this analysis. Changes in preferences are difficult to predict, but any move toward more renting among young adults, which is often highlighted in research and the media, would further increase multifamily demand beyond our forecasts, making this an interesting topic for future study.

Conclusion

The long-run outlook for the housing appears to be strong as household formations are projected to remain at healthy levels over the next decade and will be stronger when the recession-caused pent-up demand is released. The multifamily sector will particularly benefit from the release of the pent-up demand as young adults constitute a large share of such demand and are more likely than other age cohorts to rent their homes.

For more insights from the Freddie Mac Multifamily Research team, visit the Research page on FreddieMac.com/Multifamily.