

Multifamily Market Commentary – July 2015

Affordable Multifamily Feeling the Squeeze of Higher Development Costs

Despite the rise in new multifamily unit construction starts – as high as 476,000 units annualized as of June 2015 – in some parts of the country the current stock of multifamily rental units is having difficulty meeting housing demand. Nationally, a variety of economic and demographic circumstances is resulting in extraordinary demand, simultaneously coupled with undersupply. This problem is even more acute for affordable and workforce rental housing, according to a report from the Joint Center for Housing Studies of Harvard University, because most new multifamily housing consists of high-end apartment projects.

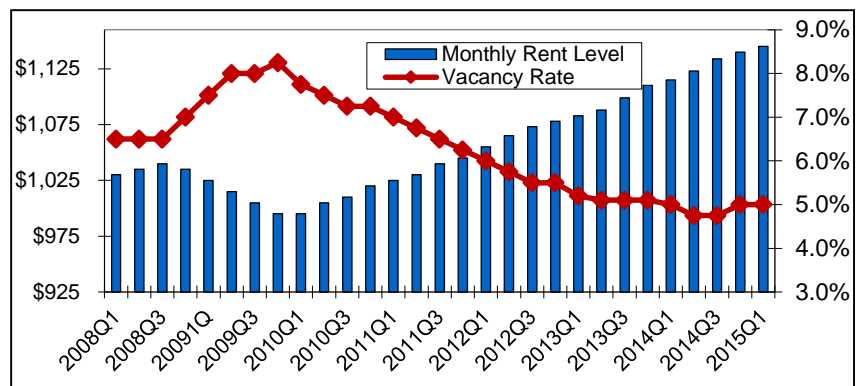
This ongoing demand for multifamily rental units stems from multiple factors, including the after-effects of the Great Recession as reflected in slow job and wage growth, rising single-family housing prices in some of the larger metropolitan areas, and the number of Millennials trying to form households of their own, most of whom seem to prefer renting to homeownership – at least for now.

At the same time, in many places new multifamily supply is inhibited by the high cost of construction. In a recent report from the National Apartment Association, this mix of demand and undersupply was described as “the perfect storm.” Add in the rising prices of developable land and building materials, and this perfect storm has resulted in a proliferation of Class A properties and a dearth of more affordable rental housing.

The New Normal

Supply and demand is a primary driver of increasing rental rates. Multifamily demand is reflected in the rise in estimated rental rates that are up 10.0 percent from their pre-recession peak in the third quarter of 2008 – a 20-quarter straight increase since the first quarter of 2010, as illustrated in the chart to the right. The vacancy rate has been decreasing steadily despite a recent uptick and is estimated at 4.7 percent nationwide as of the second quarter 2015.

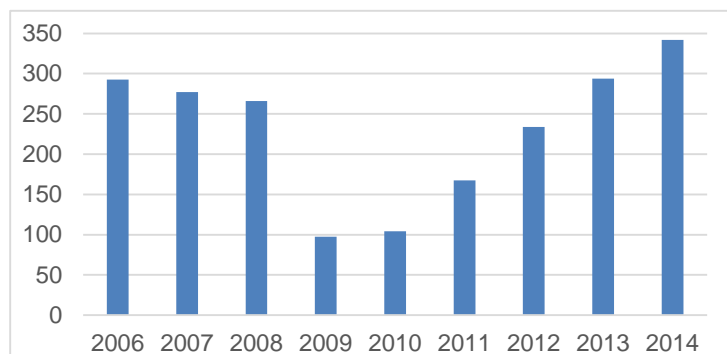
Estimated National Rent and Vacancy Levels



Source: Fannie Mae Multifamily Economics and Market Research Estimates

Despite the increase in new multifamily construction – with about 340,000 new multifamily units started in 2014 alone – as seen in the chart to the right, fundamentals for rental demand remain stable throughout most of the country.

Multifamily Housing Starts



Source: U.S. Census Bureau

We believe that nationwide, projected employment growth coupled with solid demographic trends and low homeownership rates will keep rental household formations healthy over the next 12-18 months. This, in turn, is expected to help the multifamily rental sector remain stable, with annualized rent growth slowing down but nevertheless remaining positive.

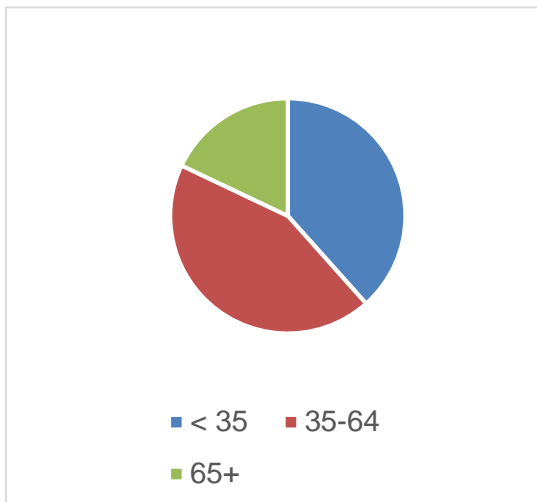
Demand Spurred by Demographics

Why the increase in multifamily rental housing demand? One key reason is demographics. The Great Recession particularly hurt Millennials, which the Pew Research Center defines as those born after 1980. According to an October 2014 report from The Council of Economic Advisors, unemployment peaked in 2010 for individuals aged 18 to 34 years old at a rate above 13.0 percent. However, as the national economy is picking up steam and job growth has been accelerating, more Millennials are moving away from their parents' homes and into apartments, forming new households, and ultimately spiking multifamily rental housing demand. In fact, according to the Urban Land Institute's *2015 Community Survey*, 73 percent of Millennials say they are likely to move in the next five years, perhaps suggesting ongoing demand over the long-term forecast. This is significant for the multifamily sector because a sizable amount of multifamily rental demand comes from people aged 34 years old or younger, as illustrated in the pie chart below.

Millennials' overall lifestyle preferences appear to be different from preceding generations. For example, according to the survey Millennials are less likely to own a car or purchase a home; and while they expect to buy homes in the future, the survey indicates they are less likely to do so than previous generations. The survey also gleaned a locational preference. Millennials stated that they prefer city centers as opposed to suburban or rural areas, with 63 percent stating that they would like to live somewhere that did not require a car.

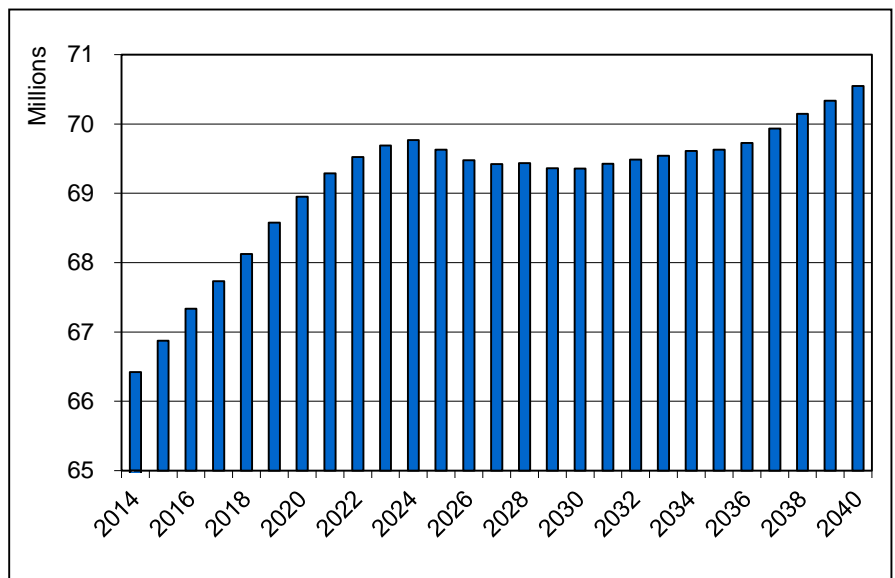
This type of demand preference has been another catalyst in pushing up the price of prime real estate in central business districts as developable land becomes more scarce. In addition to this difference in lifestyle preferences and a tendency to rent instead of own, likely the most important reason that Millennials are driving rental demand is their sheer size in numbers. According to the Census Bureau, Millennials now are the largest segment of the population at an estimated 87 million people; in contrast, Baby Boomers total 76 million. It is perhaps no wonder multifamily developers are starting to focus on the wants and needs of Millennials.

Percent of Multifamily Renters by Age



Source: 2013 American Community Survey

U.S. Renter Population Forecast: Age 20-34 Cohort



Source: U.S. Census Bureau Estimates

Focus On Urban Centers

Millennials' preferences to live in urban centers as opposed to outlying suburbs has shifted many developers' attention to the urban core, which in turn has greatly impacted land prices. Demand appears to be highest in neighborhoods that are centrally located and walkable. This urban focus is reflected in the Real Capital Analytics/WalkScore repeat sales index, which measures trends in prices of highly walkable, somewhat walkable, and car dependent locations.

According to this index, the price of apartments in highly walkable central business districts outperforms all other locations, as seen in the chart below. Developable land in urban areas is comparatively scarcer than in suburbs, and this has placed more pressure on land prices in these high demand, low supply areas. As a result, the rise in value of apartments located in highly walkable central business districts has increased dramatically since the end of 2009.

Rising Land Prices

Land prices tend to be extremely volatile and comprise a significant portion of a developer’s total cost of construction. Property sales and land acquisition are subject to extreme competition between developers and can lead to multiple bids that push up the price. These competing bids are a reflection of what the developers assume rent increases and declining vacancy rates will be over the near term. The price of developable land has been on the rise for quite some time.

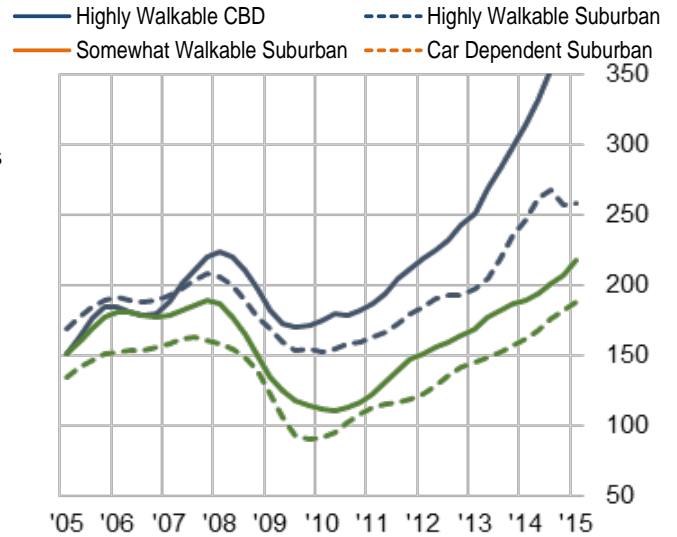
The CoStar Commercial Repeat Sales Index compares the prices of commercial properties each time they have been sold, as seen in the chart below. The value of U.S. commercial vacant land has experienced steady gains since the recession, but is still 23 percent below peak levels that occurred in late 2007. According to CoStar, U.S. commercial land prices experienced its trough much later than other commercial property types and is considered to be in an earlier phase of recovery. Nevertheless, commercial land prices have increased by more than 20 percent over the past year alone.

Key Building Materials Prices Still Outpacing Inflation

A fundamental input in construction is the building materials. The cost of these materials have a direct impact on construction and are susceptible to large variation. Furthermore, the demand for construction materials is relatively inelastic due to a lack of substitutes; developers cannot replace concrete and steel, for example. Although the recent drop in oil prices may correlate to a decrease in price for certain materials, such as asphalt, there are several core building materials, such as gypsum and lumber, that have experienced continued price climbs.

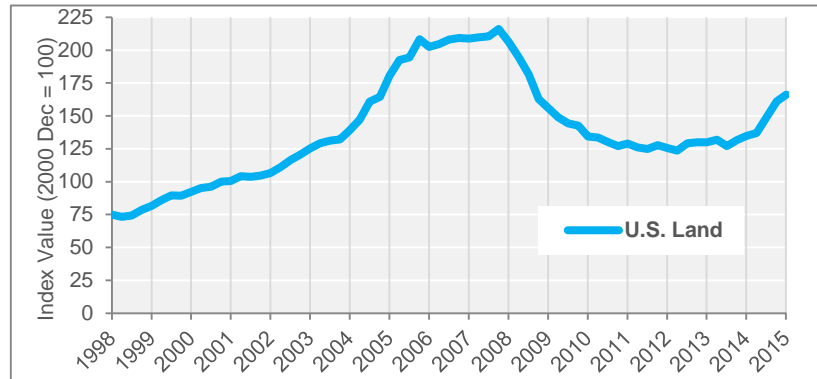
Engineering News-Record (ENR) reported that costs for lumber, steel, and cement have experienced increased rates of inflation. The ENR 20-city average price for 2x4 lumber was up 5.7 percent, and cement prices rose 4.8 percent over the past year and remain at historic highs.

Prices for Apartments and Walk Score



Source: Real Capital Analytics

CoStar Commercial Repeat Sales Index

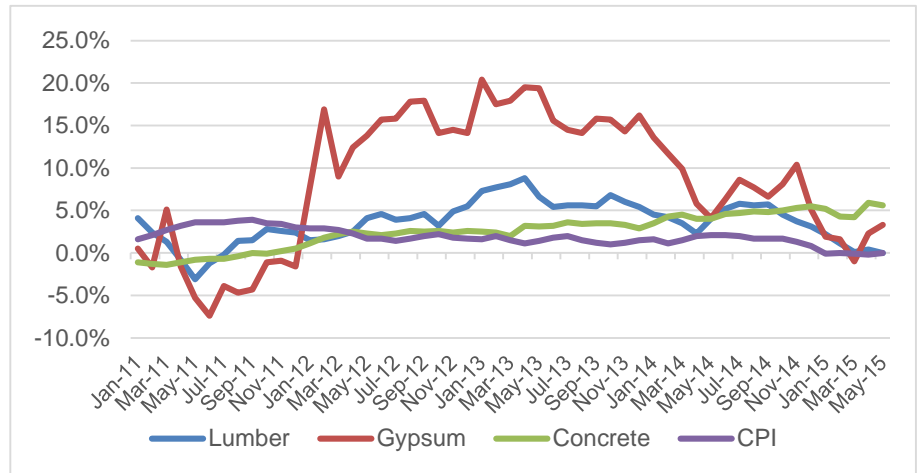


Source: CoStar CCRSI May, 2015

The most recent report from the U.S. Bureau of Labor Statistics states that the non-seasonally adjusted Consumer Price Index (CPI) for all urban consumers was at zero percent for the past year. However, the percent increases for key building materials have well outpaced the CPI, in spite of recent declines.

Over the past few years, rising material costs helped push up the cost of construction, which likely contributed to the increase in more expensive projects. And a higher cost of construction is most likely going to be passed onto tenants in the form of elevated rent levels in Class A properties.

Materials Year over Year Percent Change

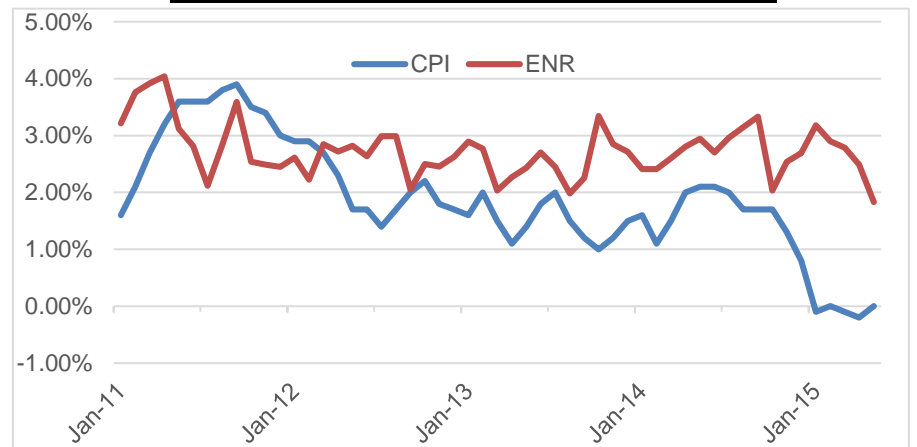


Source: BLS Producer Price Index

Cost of Construction Index

Engineering News-Record's Construction Cost Index reflects the total cost of construction. The index is a weighted aggregate index of prices for structural steel, Portland cement, lumber, and common labor. It does not produce a comprehensive breakdown of cost nor does it include land or financing costs. It does represent basic trends for construction costs, and as seen in the chart to the right, total construction costs continue to outpace inflation at a fairly substantial rate.

ENR CCI and CPI One Year Percent Change



Source: BLS Consumer Price Index; ENR Construction Cost Index

Construction Labor Costs Rising Even Faster

One of the most critical cost inputs in construction is the labor. Construction worker hourly wages have been climbing steadily. Moreover, insurance costs also are increasing and now comprise a total of 8.0 percent of total compensation for construction workers. With construction starts at historically high levels, the number of construction workers has begun to rise, but as seen in the graph below left, it has yet to reach pre-recession levels.

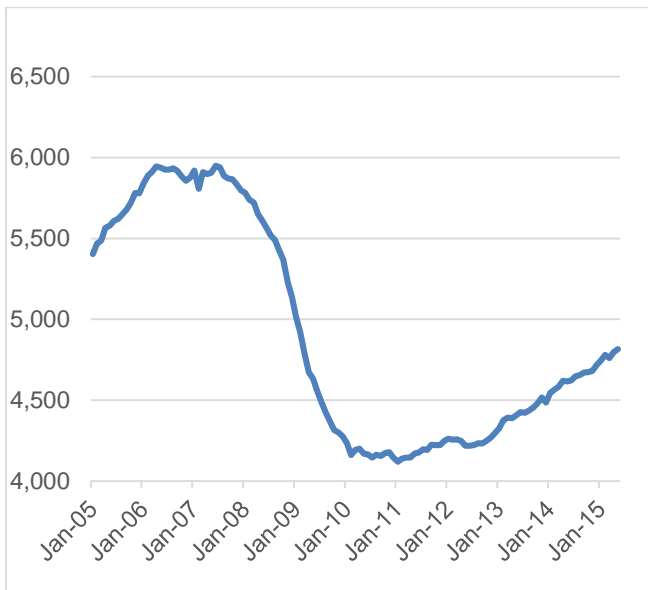
The shortage of qualified construction labor is cited frequently by developers as a hindrance to completing projects on time, if even started at all. As a result, developers have paid higher wages, contributing the higher cost of construction, as illustrated in the graph below.

Where Have All the Construction Workers Gone?

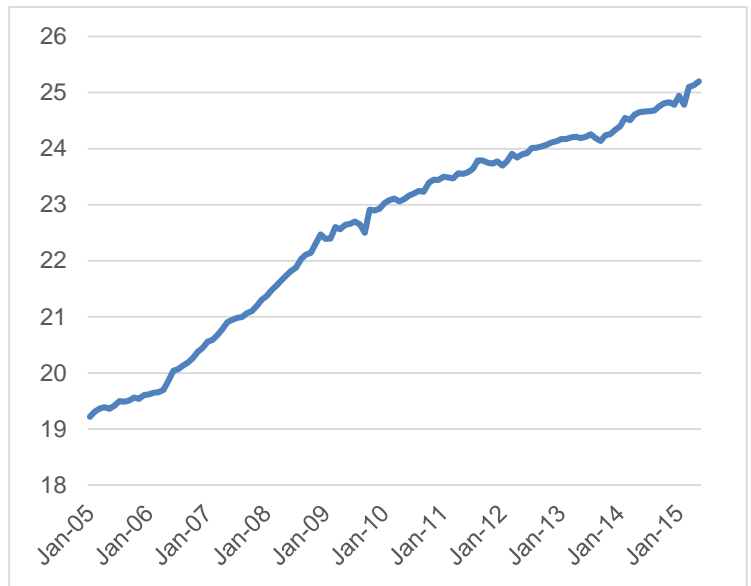
During the Great Recession, when construction activity plummeted, many construction workers are believed to have exited the industry and never returned. According to a May 1, 2014 article from *The Wall Street Journal*, "The shortage of skilled construction workers also partly reflects the return of Mexican workers to their home country during the downturn without returning since." The article goes on to say that developers also believe that "they have lost skilled labor to energy companies drilling in northeastern Colorado and North Dakota, where many of the top construction workers went during the downturn."

Indeed, the unemployment rate for construction workers in 2014 averaged 8.9 percent, down from a high of 27.1 percent during the recession. But not all construction-related jobs are equal. According to a June 2014 survey completed by the National Association of Home Builders, “the share of builders reporting a shortage of labor ranged from a low of 25 percent for building maintenance managing to 63 percent for rough carpentry.” The same survey showed significant shortages of framing crews and bricklayers. These labor shortages negatively impact the construction timeline, as well as labor costs, both contributing to overall higher construction costs.

Number of Non-Supervisory Construction Workers



Average Hourly Earnings of Non-Supervisory Construction Workers



Source: Bureau of Labor Statistics

Multifamily Construction Case Study: High Construction Costs + High Land Prices = High Rents

Because of high construction costs, developers have been focusing on acquiring premium development sites to make projects more profitable, but these are not easily found and it is clear that there is intense competition for prime locations. As an example of the scarcity of such sites, a national developer that was interested in purchasing an empty lot located in Southern California made an initial offer of more than \$65 million for the property, but then had to make a subsequent higher offer due to the number of competing bids. Nevertheless, another competitor offered significantly more to become the winning bid.

According to the national developer, “land prices expand and contract with the market and competing for developable sites is tough.” The developer stated that most other construction costs are equal but it is the variability and fierce competition of land prices that add millions of dollars to a project’s overall construction cost. The developer pursuing the Southern California lot had penciled in about 21 percent of the total budget for purchasing the lot – a fairly significant amount.

Underlying Volatility In Both Hard and Soft Costs

In the scenario noted above, the soft costs for the initial project included design and engineering fees, legal fees, corporate overhead, and permit fees. To get an idea of the disparity of the underlying soft costs, legal fees accounted for just 1.0 percent but permits accounted for more than 60.0 percent of soft costs. Typically, permitting costs are a large

percentage of soft costs but vary greatly depending upon location. This case shows how permits and fees can add up quickly and significantly increase the cost of construction.

According to the developer’s proposed budget outline, this Southern California project had hard costs of well over \$150 million, accounting for more than half of the total projected cost. Materials are an integral part of the construction process and a sizable portion of a project’s hard costs, as well as labor costs. The developer also expressed concern about finding skilled labor in Southern California and noted that over the past few years it has continued to be difficult to find any type of construction worker in general.

With a development budget totaling several hundred million dollars, the rents needed to be fairly high for the project to be profitable. The developer’s initial plans for this building included 600 to 800 units with approximately 10.0 percent of the units being designated as affordable. While increasing the number of units constructed usually lowers the cost per unit, the developer still planned on pricing rents toward the higher end of the market. Nearly all of the market rate rents were above \$2,000 a month, as seen in the table below. Clearly, the budgeted construction costs for this proposed development would have had a direct cause and effect on the rent levels.

**Developer Budget and Average Planned Asking Rents
Multifamily Construction Case Study – Southern California Lot**

Cost	Percent	Apartment Type	Average Cost
Financing	10.7%	Studio	\$ 1,750.00
Land	21.0%	1 Bedroom 1 Bathroom	\$ 2,050.00
Hard	53.2%	2 Bedroom 2 Bathroom	\$ 2,625.00
Soft	15.1%	3 Bedroom 2 Bathroom	\$ 3,100.00
Total	100.0%		

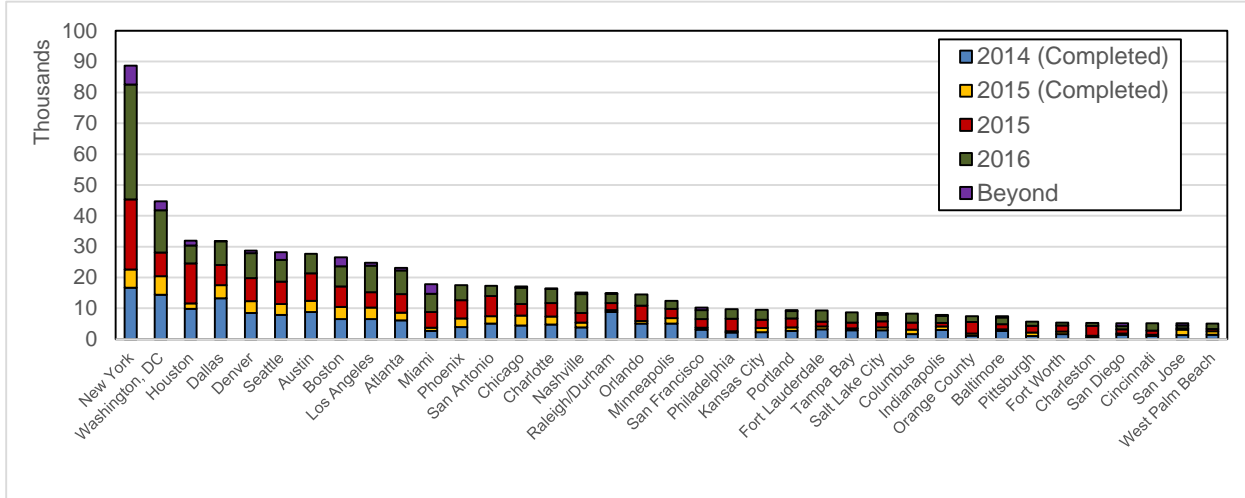
Source: Fannie Mae Multifamily Economics and Market Research

Multifamily Development Concentrated in Larger Metropolitan Areas

According to data from the Dodge Data & Analytics Construction Pipeline, more than 503,000 multifamily rental units are underway as of July 2015 compared to 391,000 units a year ago. Of this total, approximately 332,000 multifamily rental units are expected to come online this year alone. What is interesting is not just the rise in total multifamily rental construction volume, but where much of that supply is located.

As seen in the chart below, there are only 10 metropolitan areas with more than 20,000 units underway, all of which are larger primary metros with more than 2 million people. Within these metros, many developers have focused on certain submarkets and neighborhoods, resulting in a concentration of multiple new projects all located near one another and all being completed and coming online within a fairly narrow timeframe between now and 2016. Unsurprisingly, many of these multifamily projects are offering primarily Class A rental units, which command the highest rent levels in their respective submarkets, thereby compounding the scarcity of new affordable rental units.

Multifamily Apartment Units Underway – Select Metropolitan Areas



Source: CBRE-EA/Dodge Pipeline, July 2015

NOTE: Pipeline data is not an actual forecast of activity, it is a monitor of activity reported on to-date. As more projects are planned and tracked, figures in future periods might go up.

Alternatives Needed For More Affordable Units

The outlook for the multifamily rental housing sector appears stable over the long term. Median household income is projected to continue rising over the next few years. Job growth also is projected to remain steady along with increased household formations. Nevertheless, despite the ongoing improvement in the national economy and most local job markets, the declining amount of affordable and workforce multifamily rental housing is worrisome. The many barriers to new construction of this type of housing – higher construction costs, labor issues, and rising land prices – are likely to remain stubbornly in place, especially in the larger primary metropolitan areas. Exacerbating this trend is that on a national basis approximately 100,000 multifamily rental units are removed from service each year due to obsolescence, and many of these tend to be older, and usually more affordable units, which are likely not being replaced in total with similar units.

There may be ways to somewhat offset the loss of these units. For instance, new subsidized development projects could be put in place and developers could continue to offer a certain number of units at below market rate rent levels. Additionally, a concerted effort on preserving more affordable units could be effective, and can be accomplished through offering a variety of financing vehicles that support modest improvements in existing properties. We expect demand for multifamily rental housing is here to stay and these options might help make it available at all income levels.

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Multifamily Economics and Market Research July 2015

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