URBAN SATELLITES RISING IN THE ORBIT OF MAJOR CITIES

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There is a shortage of walkable, transit friendly, relatively affordable, work proximate housing in America's most desirable cities[1]. Americans, especially millennials, are attracted to successful cities because that is where the best, highest-paying professional, tech, and creative jobs are, and where dense professional networks occur. Top core urban areas are major productivity and job centers which are ignited by the presence of highly educated professionals. In addition, people are drawn to amenities including museums, art galleries, restaurants, theaters, and nightlife. As city dwelling has become more popular, affordability levels declined since supply has not kept up with demand[2]. As successful center cities become more desirable and expensive, urban satellites have surged in popularity.

Urban satellites have experienced substantial working age population growth and new apartment construction over the past six years. The upward trajectory of urban satellites indicate that many Americans are trying to stay with the winners, choosing to stay in the orbit of large successful cities such as New York, Washington, and San Francisco.

An urban satellite is an urban area within a Combined Statistical Area (CSA) that is not the core metropolis. Urban satellites are not simply suburbs and not edge cities[3] and not necessarily even independent incorporated areas but rather they are urban settings that exist in the orbit of the core urban conurbation and serve as a smaller, less expensive, alternative for housing or office solutions.

While they lack the scale of economic engines and cultural amenities of the core metro area, they still benefit from high quality restaurants and bars, high ranking schools, and have comparably lower crime rates. Advantages include lower rent or home prices than the urban core and proximity to the city and the less expensive non-urban suburban locations. The urban satellite has high Walkscores and either good rail transportation linkages and/or excellent roadway access to the core city. It is a compromise between the high cost city and the low-density suburb. Not all the demand is spawned by lower costs. There are those who appreciate a quieter smaller downtown with many of the amenities of the big city albeit on a much smaller scale.

Urban satellites manifest themselves distinctly in different parts of the US. In the northeast, it would include cities with rail and bus links to the urban core. Many of the satellites in the northeast once functioned with more economic independence than they do today. As the core city expanded and became dominant, the satellites became more subsumed in to the economy of the greater metropolitan area and many morphed in to suburbs as transportation linkages brought commuters in to the urban core. Urban satellites can serve as alternative multifamily or office markets. Transit oriented urban satellite office space generally outperform suburban office park type locations[4].

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[1] Or in the words of Joe Cortright "High housing prices in American cities are a symptom of our shortage of great urban neighborhoods." See Joe Cortright "Our Shortage of Cities", City Observatory, October 14, 2014.
[2] Very desirable urban areas often have caps on development.
[3] An urban satellite is an urban area in the orbit of the central core. Joel Garreau's definition of edge city in his 1991 book "Edge City: Life on the New Frontier" was that the suburban areas around a city which includes a concentration of office space retail and residential has become the standard form of urban growth worldwide, representing a 20th-century urban form unlike that of the 19th-century central downtown. In my view Edge cities are not really cities – they are suburban agglomerations.
[4] Transit-served submarkets are outperforming the broader office market and poised for long-term success", JLL, Winter 2017. Stephen Jenco "Transit Hub Perspective, On Track: Green Signals and Clear Tracks ahead for state's transit hub markets", JLL, Spring 2016. All three footnotes

TYPES OF URBAN SATELLITES

Urban satellites can take several forms including the renaissance suburban city, the urbanized suburb, the urbanized former industrial zone, and the urban satellite island.

Renaissance Suburban City

The renaissance suburban city traditionally functioned as an independent metro area in the megalopolis nearby. It has excellent transportation linkages to the core metro with both rail, bus and automobile. This contrasts with the converted suburban city which historically functioned as a suburb and has been recently urbanized.

Examples include Jersey City and Hoboken, NJ, Downtown Brooklyn, NY, White Plains, NY, and Stamford, CT. Many of these types of areas are allowing developers to build a significant amount of housing units near train stations with good connections to job rich urban cores.

The Urbanized Suburb

Most US suburbs were built around the needs of the automobile. Suburban office buildings, malls, and residential areas, although proximate to each other, can typically only be accessed from each other via automobile. Some suburbs are being urbanized. Tysons (formally known as Tysons Corner) is being transformed as its office buildings, retail centers, apartment buildings are being knit together by internal roads and walkways, and four new silver line metro stops.

The Urbanized Former Industrial Zone

Some urban satellites are former urban industrial zones that have been converted for residential and office use. Examples include Long Island City in the borough of Queens, NY and the DUMBO section of Brooklyn, NY.

Urban Satellite Islands

There are urban satellite islands which do not have rail transit linkage to urban cores and rely on highway access. However, within these areas, there is a streetscape that is walkable, has a quasi-urban vibe, and includes office, retail, multifamily, and hotel facilities. Examples of urban satellite islands include Playa Vista in the Los Angeles area and Legacy Town Center in the Dallas (Plano) area. There is a consequential number of aging and obsolete malls and suburban office parks converted or being converted to mixed use urban satellite islands. Examples include the 34-acre environment set to replace the Promenade Mall in Woodland Hills, California, The Villa Italia Mall streetscape conversion in Lakewood, Colorado, outside Denver, and the former Bell Labs suburban office complex in Holmdel, NJ.

The Promenade Mall site would conform to an urban blueprint for a highly dense working, shopping and living "downtown" adjacent to the Metro Orange Line busway. It would include creative office studios, upscale apartments, a traditional office tower and two hotels interwoven by leafy boulevards and alleys lined with shops, restaurants and art galleries. The Villa Italia Mall in Lakewood, Colorado, outside Denver, was almost completely demolished to make way for a new street grid lined with offices, arts facilities, parks, and residences, as well as new stores. The former 2-million-square-foot Bell Labs headquarters will be converted to as mix of new office space, stores, restaurants, 40 single-family homes, and 185 townhouses.

The importance of Urban Satellites at this Time

Urban satellites are becoming increasingly important primarily for three reasons; 1) shortage of successful American cities, 2) women gaining higher paying jobs, 3) singlehood becoming more widespread, and (4) the growth of 65+ demographic group. In addition, the generation of millennials have expressed a greater desire for shorter commutes[5].

[5] NAR 2015 Community Preference Survey

Shortage of Successful American Cities

There is a shortage of walkable, transit friendly, relatively affordable, work proximate housing in America's most desirable cities. As city dwelling has become more popular, affordability levels have declined in America's most successful cities. In many cities, zoning restrictions, discretionary approval processes and excessive parking requirements renders new development difficult and expensive. Very desirable urban areas often have caps on development. Many top urban areas have extremely strict building codes and lengthy and highly bureaucratic processes which restrict the supply of housing.

The concentration of urban land value in a handful of American cities illustrates the disproportionate demand and insufficient supply in America's most desired cities. The total value of America's urban land added up to more than $25 trillion as of 2010. Five urban areas, New York, Los Angeles, San Francisco, Washington, D.C., and Chicago, account for 48 percent of all urban land value in the United States with land in and around the urban core being the most valuable. The gap between the land values of these great cities and the rest of American metros is stark. An acre of central land in New York City was worth approximately 72 times more than an acre of central Atlanta or Pittsburgh, and almost 1,400 times more than the same in many midwestern and Sunbelt metros[6]. Considering that property values have risen 90% in six major metros compared to 80% in non-major metros and that property values have risen 94% for CBD office vs 62% for suburban office over the past seven years[7] – it is likely that the value advantage of successful American cities has become even more pronounced. Likewise, the underlying land value between the core and the periphery has further diverged.

Another indication revealing how unaffordable major cities have become is the share of adults sharing a residence with either a roommate or a parent. In the US 30.2% of adults lived in doubled-up households[8] as of 2016 compared to 22% in 2000. In 2016 the share in Americas largest most desirable metropolitan areas was even greater; New York was 40.0% compared to 32.7% in 2000, Los Angeles (45.5%, 37.4%), San Francisco (38.5%, 32.3%), Miami (41.0%, 30.1%), and Washington, DC (34.6%, 27.1%).

The rise in doubled-up households accords with increasingly unaffordable rental prices nationwide. Americans making the national median income typically pay approximately 30 percent of their monthly income toward rent. In New York renters spend 39.3% of their income on rent. In Los Angeles, San Francisco, Miami, and Washington, DC renters paid 48.4%, 42.4%, 41.0%, and 26.1% respectively.

The chart below details the metropolitan areas with the greatest share of adults living in doubled-up households.

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[6] The study by economists David Albouy and Minchul Shin of the University of Illinois, and Gabriel Ehrlich of the University of Michigan, used data from CoStar, covered land transactions from 2005 through 2010. The data contains detailed information on the address, lot size, and price for each transaction, and covers 69,000 land sales that span more than 75,000 square miles. The study organizes these data points across America's 300-plus metros, and estimates not just the total value of urban land, but the average land price per acre. It also estimates the average price per acre in the urban center, which is defined as the area within 10 miles of city hall, or the mayor's office. (In New York City, the Empire State Building is used as the city center instead.) Land values at the city center increase with city size, as do land-value gradients; both are highly variable across cities. Source(s): David Albouy and Minchul Shin of the University of Illinois, and Gabriel Ehrlich of the University of Michigan, used data from CoStar, Richard Florida, Martin Prosperity Institute

[7] RCA – as of yearend 2017

[8] Zillow defines a doubled-up household is where two or more working-aged adults live together but aren't married or in a relationship — this could mean two millennial roommates or an adult living with parents.

Table 1

Metropolitan Area	2016 - Percent of Adults Living in Doubled-Up Households	2000 - Percent of Adults Living in Doubled-Up Households	2017 Q3 Rental Affordability	Zillow Rent Index (ZRI[1])
Los Angeles-Long Beach-Anaheim, CA	45.50%	37.40%	48.40%	$2,720
Riverside, CA	43.70%	28.20%	36.70%	$1,840
Miami-Fort Lauderdale, FL	41.00%	30.10%	41.00%	$1,848
New York, NY	40.00%	32.70%	39.30%	$2,393
San Jose, CA	38.60%	36.30%	38.50%	$3,488
San Francisco, CA	38.50%	32.30%	42.40%	$3,379
San Diego, CA	37.90%	28.60%	42.00%	$2,535
San Antonio, TX	37.20%	23.60%	28.00%	$1,335
Las Vegas, NV	36.40%	27.70%	28.00%	$1,284
Orlando, FL[2]	35.00%	22.80%	32.00%	$1,430
Washington, DC	34.60%	27.10%	26.10%	$2,133
Baltimore, MD	33.40%	23.40%	27.40%	$1,730
Sacramento, CA	33.10%	21.70%	31.80%	$1,813
Philadelphia, PA	33.00%	23.90%	27.70%	$1,578
Houston, TX	32.80%	24.30%	28.80%	$1,532
United States	30.20%	22.10%	29.10%	$1,432

[1] The Zillow Rent Index (ZRI) is the median Rent Zestimate® (estimated monthly rental price) for a given geographic area on a given day, and includes the value of all single-family residences, condominiums, cooperatives and apartments in Zillow's database, Data from October 2017.
[2] As of September 2017.
Source: Zillow Rent Affordability, Zillow analysis of U.S. Census Bureau American Community Survey, 2016, made available by the University of Minnesota, IPUMS-USA.

The chart below is sorted based on the metropolitan areas rent to income ratios.

Table 2

Metropolitan Area	2017 Q3 Rental Affordability	Zillow Rent Index (ZRI[1])	2016 - Percent of Adults Living in Doubled-Up Households	2000 - Percent of Adults Living in Doubled-Up Households
Los Angeles-Long Beach-Anaheim, CA	48.40%	$2,720	45.50%	37.40%
San Francisco, CA	42.40%	$3,379	38.50%	32.30%
San Diego, CA	42.00%	$2,535	37.90%	28.60%
Miami-Fort Lauderdale, FL	41.00%	$1,848	41.00%	30.10%
New York, NY	39.30%	$2,393	40.00%	32.70%
San Jose, CA	38.50%	$3,488	38.60%	36.30%
Riverside, CA	36.70%	$1,840	43.70%	28.20%
Boston, MA	33.80%	$2,365	32.30%	25.30%
Portland, OR	32.50%	$1,872	28.50%	20.20%
Denver, CO	32.40%	$2,035	27.10%	20.70%
Tampa, FL	32.10%	$1,364	29.00%	19.10%
Orlando, FL[2]	32.00%	$1,430	35.00%	22.80%
Sacramento, CA	31.80%	$1,813	33.10%	21.70%
Dallas-Fort Worth, TX	30.20%	$1,596	30.00%	22.60%
Seattle, WA	30.20%	$2,198	28.30%	20.00%
United States	29.10%	$1,432	30.20%	22.10%

[1] The Zillow Rent Index (ZRI) is the median Rent Zestimate® (estimated monthly rental price) for a given geographic area on a given day, and includes the value of all single-family residences, condominiums, cooperatives and apartments in Zillow's database, Data from October 2017.
[2] As of September 2017.
Source: Zillow Rent Affordability, Zillow analysis of U.S. Census Bureau American Community Survey, 2016, made available by the University of Minnesota, IPUMS-USA.

Women gaining higher paying jobs

Another reason urban satellites are growing and should continue to do so in the future is the rising education attainment rates and as a corollary the growing economic resources of women. According to the US Department of Education, women comprise more than 56 percent of students on campuses nationwide equating to 2.2 million more women than men enrolled in college. By 2026, the department estimates, 57 percent of college students will be women. This is the inverse of the share recorded in the 1970s. Since education attainment rates are closely correlated with income levels, women's wages should continue to increase. In 2016, women who were full-time wage and salary workers had median usual weekly earnings that were 82 percent of those of male full-time wage and salary workers. In 1979, the first year for which comparable earnings data are available, women's earnings were 62 percent of men's. Most of the growth in women's earnings relative to men's occurred in the 1980s and 1990s. Since 2004, the women's-to-men's earnings ratio has remained in the 80 to 83 percent range[9]. However, as the greater number of college educated women advance further in their careers, their earnings should increase as well.

In 38% of marriages - women are the primary bread winner[10]. Although that number drops to 29% if marriages in which the husband has no earnings are excluded, these figures represent an incredible increase from the 29.9% and 23.3% recorded in 2000 and 24.8% and 19.2% recorded in 1990[11]. John Burns and Chris Porter argue that these women may favor offices that are proximate to their homes, children's schools, and doctors[12]. Urban satellites[13] that offer the possibility of being more proximate to work and home, either by living and working in the urban satellite or living in a suburban subdivision and taking a short commute to the urban satellite, or living in an urban satellite and commuting to the urban core are positive alternatives for the partner who continues to be the primary care giver of children and despite higher earnings continues to do the majority of household labor[14].

Singlehood becoming more widespread

Single people are more likely to live in apartments in the urban core or urban satellites than married people with and without children at home. The demand for urban multifamily rentals or condominiums has been strengthened by demographic trends including longer singlehood, permanent singlehood, delayed child birth, permanent childless households, and more years spent as empty nesters.

Single or non-family households are the majority

Single individuals (single or non-family households) head 51.8% of all households. This is a significant reversal from previous decades when single or non-family households where as follows; 2000: 47.2%, 1990: 44% and 1980: 39.2%. In 1950 single or non-family households constituted only 21.8% of all households. About 50.2 percent or 124.6 million American adults are single compared to 22 percent in 1950[15]. This trend is not only attributed to divorce and widowhood, but also to never married adults that constitute a significant and growing part of single people[16].

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9 "Highlights of women's earnings in 2016", U.S. Bureau of Labor Statistics, August 2017, Report 1069

10 Bureau of labor Statistics Annual Social and Economic Supplements to the Current Population Survey

11 U.S. Department of Labor, U.S. Bureau of Labor Statistics.

12 John Burns and Chris Porter "Big Shifts Ahead: Demographic Clarity for Business", Advantage, Charleston, SC Chapter 4, Location 1,011 and John Burns Consulting LLC calculation of National Center for Education Statistics Data

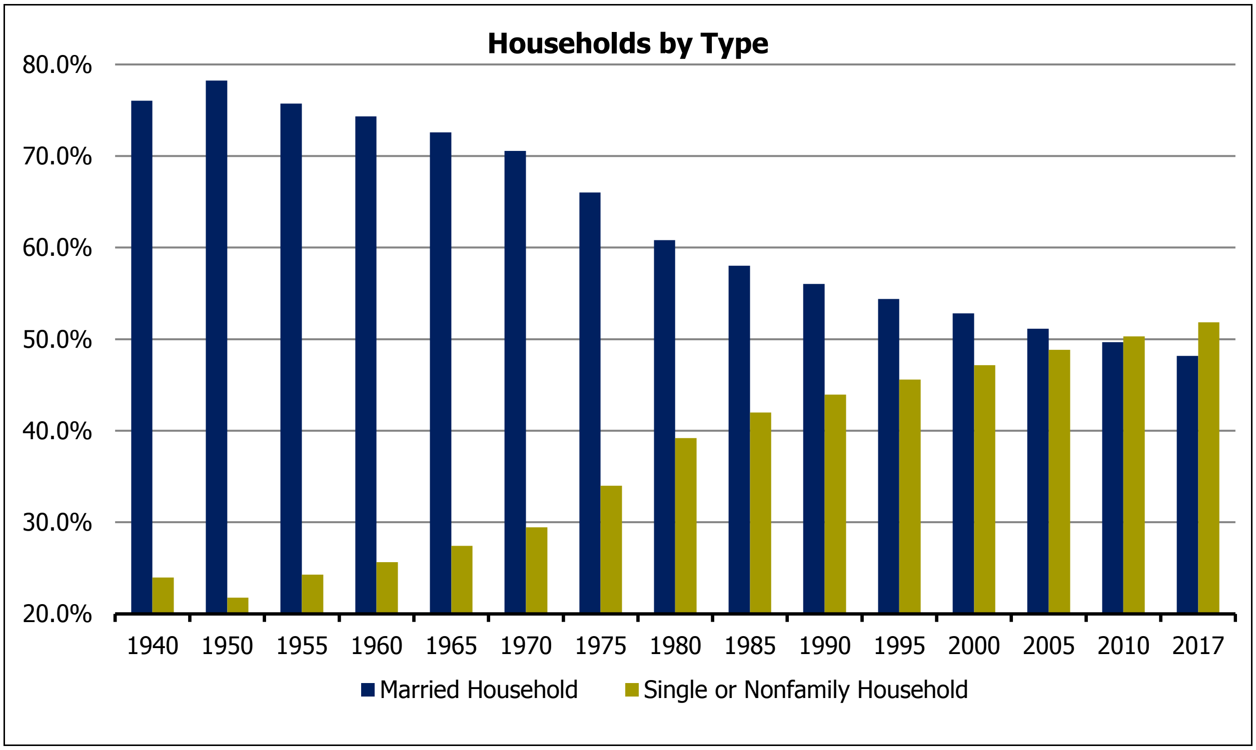
13 Burns and Porter use the term "surban" which is different than my reference to urban satellite, nevertheless, there are certain commonalities.

14 Bureau of labor Statistics American Time Use Survey – 2016 Results, June 27, 2017. https://www.bls.gov/news.release/pdf/atus.pdf

15 Eric Klinenberg, "Going Solo: The Extraordinary Rise and Surprising Appeal of Living Alone", Penguin Books, February 2012.

16 For possible reasons see June Carbone and Naomi Cahn, "Marriage Markets: How Inequality is remaking the American Family", Oxford University Press, May, 2014.

Table 3

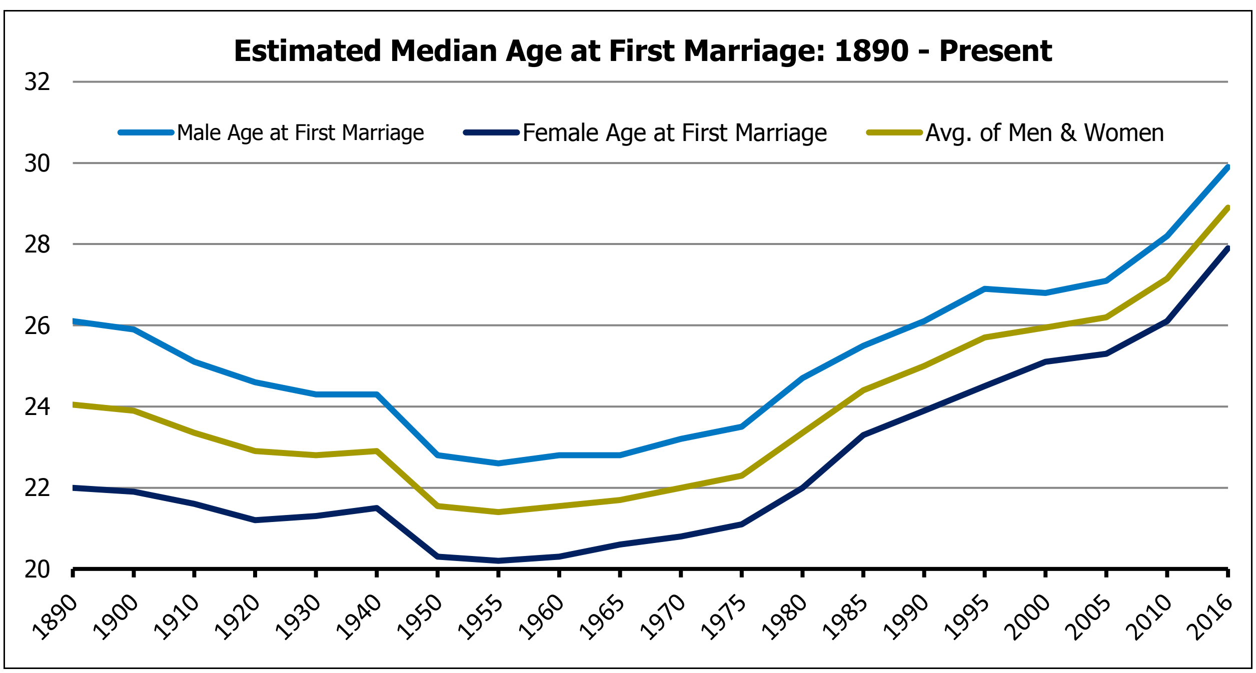


Source: US Census Bureau, Federal Reserve Bank of St. Louis

Delayed marriage

Age at time of first marriage has increased 3.9 years since 1990 and 7.4 years since 1960. The age at first marriage was 28.9 (29.9 for men and 27.9 for women) in 2016 compared to 25.0 (26.1, 23.9) in 1990 and 21.6 (22.8, 20.3) in 1960. If these trends continue more demand will be created for multifamily housing.

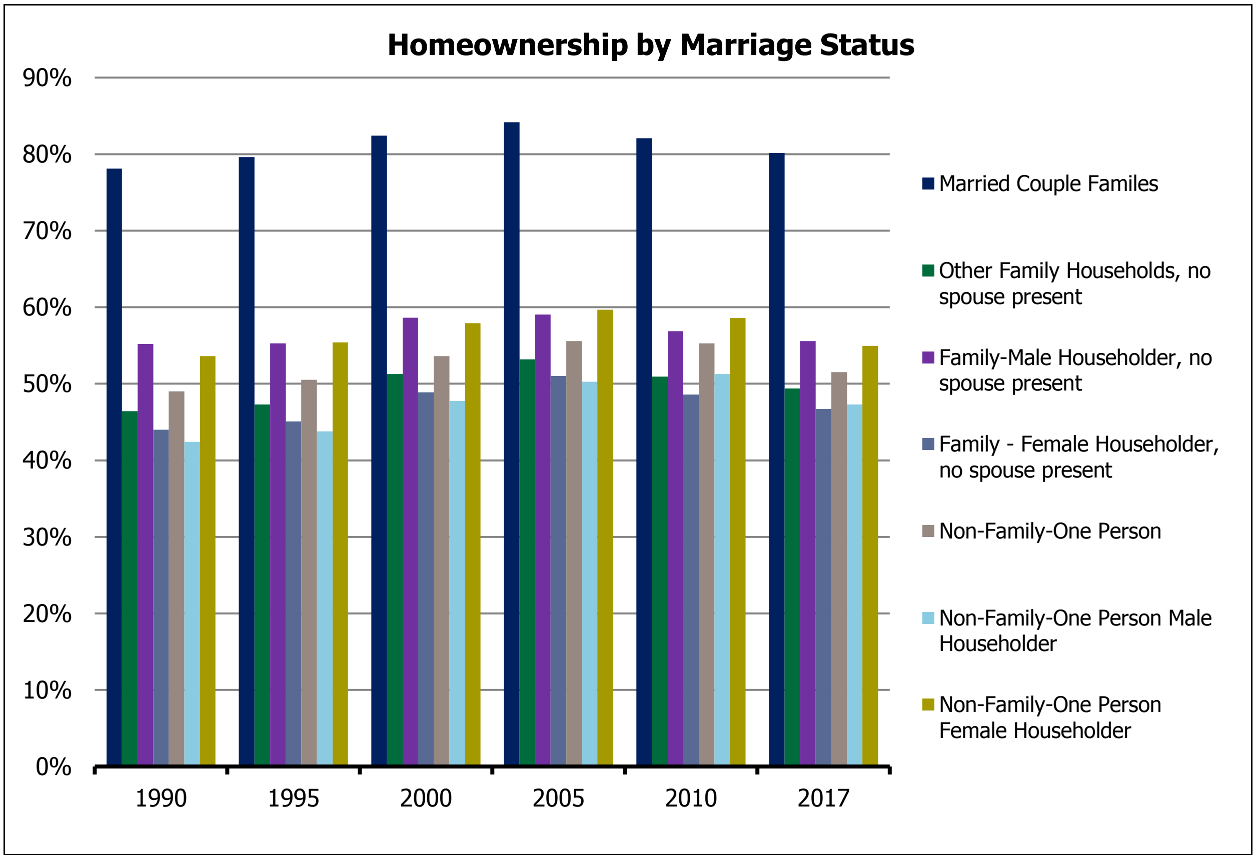
Table 4



Source: US Census Bureau

In 2017 unmarried headed households were more likely to be apartment rental candidates than married headed households. The chart below details the homeownership rates for married and unmarried households since 1990.

Table 5



Source: U.S. Census Bureau, "Housing Vacancies and Home Ownership"

As the share of adults that are married has declined over the past 65 years, the pool of potential renters in urban satellites increased. Sam Zell considers this to be "perhaps (the) most significant factor in keeping multifamily as the strongest investing area in commercial real estate" [17].

People who are not married are more likely to rent apartments than to own a home. There are several demographic and social trends that indicate that more Americans are spending a larger share of their adult years being single and/or not having children at home. A growing part of the US population is childless by choice[18]. Married couples between the ages of 20 and 50 without children are considerably more likely to live in multifamily units than are married couples in the same age category with children. This is most pronounced in the 30-34 age category. Sixty-one percent of individuals aged 30 to 34 who occupied a multifamily unit in 2013 lived alone compared with 35 percent of those who were married without children and 18 percent of those who were married with children[19].

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[17] David Benoit, "Sam Zell on Marriage, Multi-Family and Single-Family Real Estate", Wall Street Journal, October 29, 2013 and http://blogs.wsj.com/moneybeat/2013/10/29/sam-zell-on-marriage-multi-family-and-single-family-real-estate/ Mr. Zell said the continued trend to defer marriage until later in life has proved a boon to apartments and condos across the country, and to his own company, Equity Group Investments.

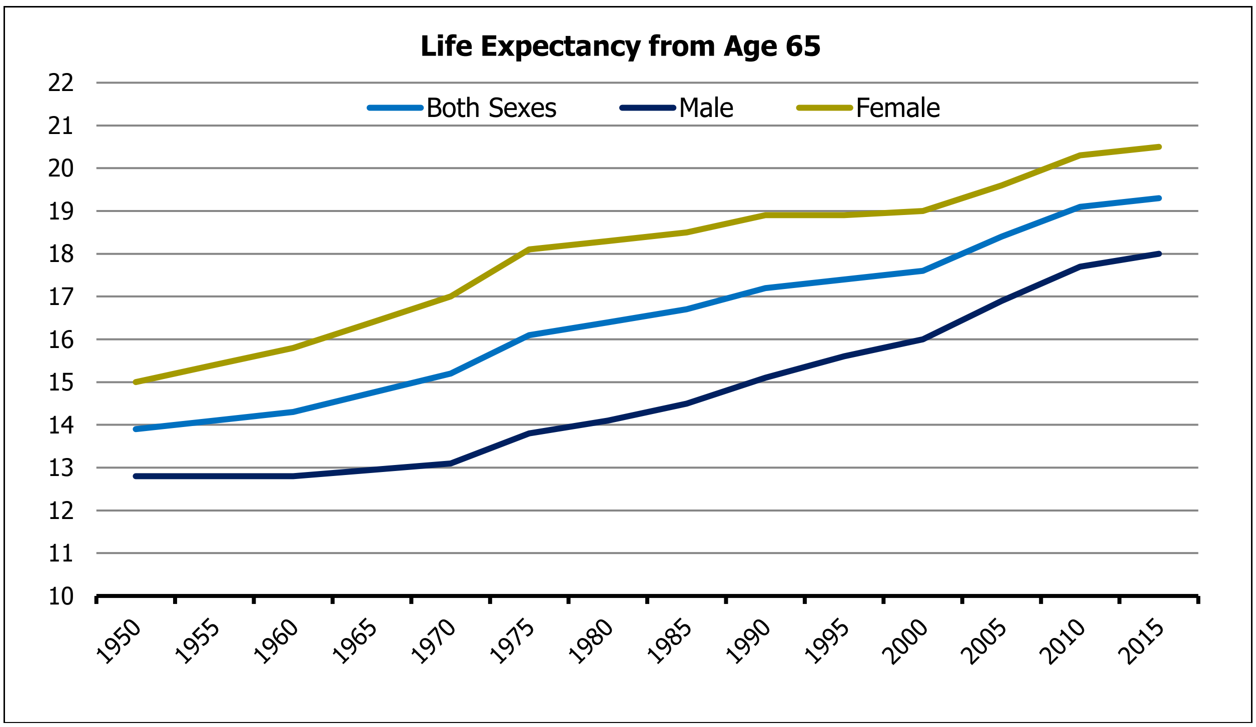
[18] Teddy Wayne, "No Kids for Me, Thanks", New York Times, April 3, 2015.

[19] Jordan Rappaport "Millennials, Baby Boomers, and Rebounding Multifamily Home Construction" Page 13, Federal Reserve Bank of Kansas City, July, 2015.

Growth of 65+ population
Another demand generator is the growth in the 65 + demographic segment which is fueled by the aging of baby boomers and the extended US life expectancy. As baby boomers age, the largest population increase will be in the 65+ age category. The number of Americans age 65+ is expected to increase by 61% from 46 million in 2014 to 74 million by 2030. The world has experienced unprecedented human lifespan growth over the past 115 years. In the United States life expectancy at birth increased from 47 years in 1900 to 78.7 in 2015[20]. The US life expectancy rate at age 65 has increased to 19 years in 2016 from 17 years in 2000 and 16 years in 1990. This has resulted in more years of adulthood without children living at home.

Even though individuals in the 65+ age bracket are less likely to rent apartments, the significant growth of this age segment will add substantial numbers to the potential rental pool. Even if the current share of seniors that downsize from owning single family homes to renting apartments or owning condominiums remains steady – the large size of the age cohort will increase demand for units in urban satellite. Pre-retirees looking to downsize frequently find urban satellites attractive as they can exit their suburban single-family home, yet retain a substantially sized apartment in an urban satellite with proximity to work and amenities. Retirees may prefer walkable or more proximate access to healthcare and cultural institutions.

Table 6



Source: NCHS, National Vital Statistics System, public-use Mortality Files; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office, 1968; Arias E. United States Life Tables
Note: Source did not include 1955 and 1965 data points. These were interpolated as the average of prior and forward decennial figures.

As the "empty nester" years are elongated, more years of potential apartment renting or owning exist. Similarly, the delay of marriage creates more years of likely apartment dwelling in the early years of adulthood. In short more demand in pre-marriage years and more demand in empty nester years should spur demand for apartment rich urban satellites.

[20] This represents a slight decline since the 78.9 years recorded in 2012. The decline is attributed to "diseases of despair including drug overdoses, suicides and alcoholism — as well as small increases in deaths from heart disease, strokes and diabetes.

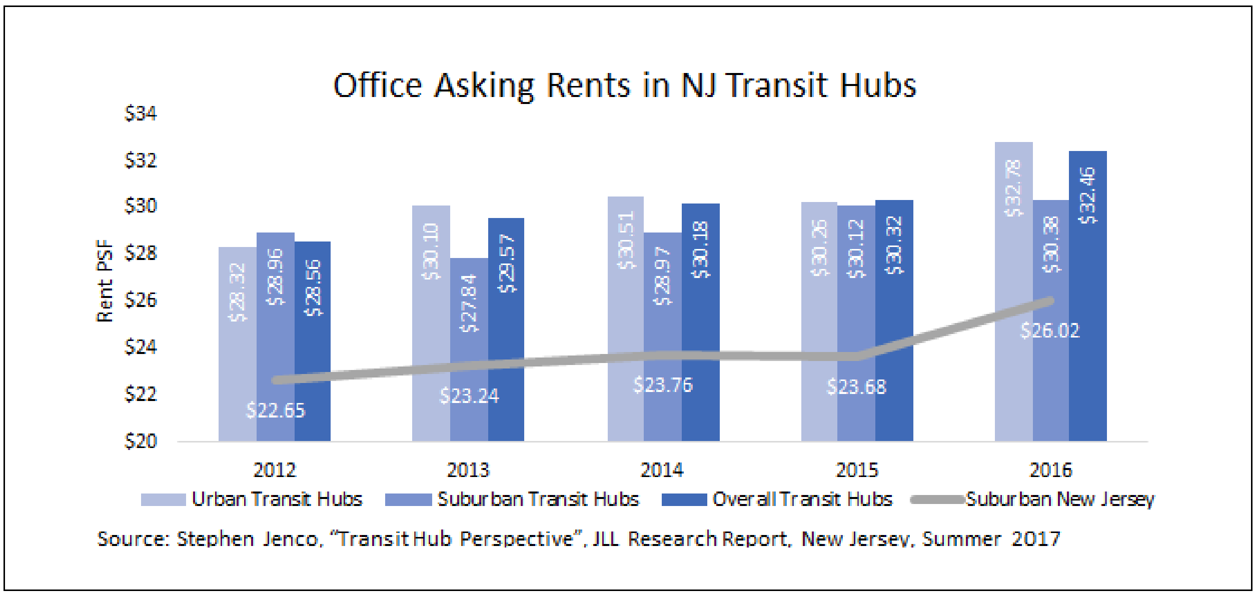
Office Buildings in Urban Satellite Transit Hubs Perform Better

A recent JLL report revealed that submarkets with public transportation access have significantly stronger office fundamentals compared to those without transit. Vacancy in transit-accessible submarkets is 370 basis points lower than in non-accessible ones, while rents are 79.5% higher[21]. According to Jones Lang LaSalle (JLL) Transit-accessible submarkets represent roughly 37.3% of the national office market; excluding New York, their share drops markedly to 29.5%[22]. The same report noted that transit-accessible submarkets had a 12.2% vacancy rate compared to 15.9% elsewhere. An amazing 47.9% of new construction is taking place in transit-accessible submarkets[23].

This bias towards transit hubs is not limited to the urban core as urban satellites that have access to good public transportation outperform suburban areas that do not. Office properties in suburban areas show a rent bias toward those that are within transit hubs.

For example, New Jersey's transit proximate office hubs exhibited superior performance as compared with typical suburban office. The chart below details the premium for New Jersey transit hubs including Jersey City [24].

Table 7



Nassau County's *Central Nassau submarket* transit hub of Garden City- Mineola has outperformed. The Central Nassau transit hub market boasts a 2.0% overall vacancy rate, in comparison to a 12.2% rate in the surrounding suburban office product[25]. Garden City's working age population and general population grew 7.1% and 3.5% between 2010 and 2016 while Nassau County's working age population and general population grew 2.4% and 2.1% between 2010 and 2016.

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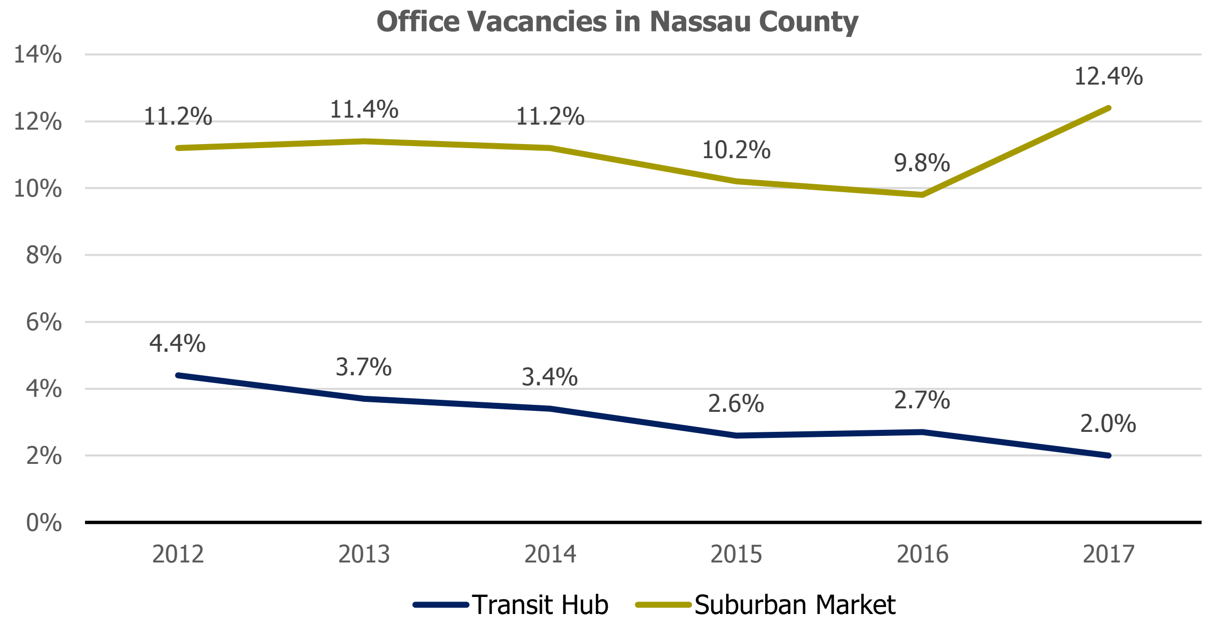
[21] "Transit-served submarkets are outperforming the broader office market and poised for long-term success", JLL, Winter 2017.
[22] "Transit-served submarkets are outperforming the broader office market and poised for long-term success", JLL, Winter 2017.
[23] IBID
[24] Stephen Jenco "Transit Hub Perspective, On Track: Green Signals and Clear Tracks ahead for state's transit hub markets", JLL, Spring 2016.
[25] Sarah Bouzarouata "Transit Hub Market Analysis-Central Nassau", JLL, July 2017.

Table 8



Source: Stephen Jenco, "Transit Hub Analysis", JLL Research Report, Central Nassau, July 2017

The Boston suburb of Somerville is a good example of transit fueled growth. Federal Realty Trust has transformed a 45-acre industrial site into a neighborhood with housing, offices and restaurants along pedestrian friendly streets. Public spaces throughout the development bump up against the Mystic River shoreline. According to Chris Weilminster, the president for the mixed-use division of the developer Federal Realty Investment Trust, A new Massachusetts Bay Transportation Authority subway station was crucial to bringing Partners HealthCare to a new 825,000-square-foot office building at the Assembly Row complex last year.

There are urban satellites all over the US, but this paper will present New York, Washington, and San Francisco area case studies[26]. New York, Washington, and the San Francisco Bay Area have experienced outsized population, rent, and value increases and accordingly the urban satellites in their orbit are of particular significance and interest.

New York's Urban Satellites

New York has reached an unsurpassed population level and is still growing. Large diversified, walkable urban areas such as Manhattan have witnessed heightened interest and commensurate price acceleration for all types of assets. However, New York has a safety valve as it is blessed with suburbs that were originally their own urban areas. In the New York Area, suburbs include urban areas such as Jersey City, Stamford, White Plains. In addition, even within the city border itself are areas that were once independent municipalities such as Brooklyn and former industrial zones such as Long Island City that have functioned as lower cost Manhattan alternatives and attracted working age residents and new construction.

New York urban satellites of Jersey City, Brooklyn, Long Island City, New Rochelle, White Plains, Stamford and Norwalk have experienced substantial working age population growth and residential construction.

[26] This is not an exhaustive list of all urban satellites in New York and Washington.

Table 9 – New York Area Population Trends

		Total Population					Working Age			
County, State		**2010**	**2016**	**Chg (#)**	**Chg (%)**		**2010**	**2016**	**Chg (#)**	**Chg (%)**
Hudson, New Jersey		622,123	668,526	46,403	7.5%		393,334	429,085	35,751	9.1%
Bergen, New Jersey		896,482	930,310	33,828	3.8%		519,806	536,221	16,415	3.2%
Passaic, New Jersey		496,204	507,204	11,000	2.2%		282,201	288,064	5,863	2.1%
Nassau, New York		1,329,083	1,356,801	27,718	2.1%		746,111	763,985	17,874	2.4%
Suffolk, New York		1,482,548	1,498,130	15,582	1.1%		850,379	855,880	5,501	0.6%
Westchester, New York		939,406	969,229	29,823	3.2%		529,767	544,994	15,227	2.9%
Bronx, New York		1,365,725	1,436,785	71,060	5.2%		758,981	814,007	55,026	7.2%
Kings, New York		2,466,782	2,606,852	140,070	5.7%		1,442,538	1,554,946	112,408	7.8%
Richmond (SI) , New York		463,450	473,324	9,874	2.1%		271,211	274,057	2,846	1.0%
Queens, New York		2,199,169	2,310,011	110,842	5.0%		1,341,595	1,413,302	71,707	5.3%
New York, NY (Manhattan)		1,583,345	1,634,989	51,644	3.3%		1,050,294	1,083,361	33,067	3.1%
Essex, New Jersey		780,872	792,586	11,714	1.5%		451,165	460,991	9,826	2.2%
Fairfield, Connecticut		905,342	941,618	36,276	4.0%		514,978	535,534	20,556	4.0%
		Total Population					**Working Age**			
City, State		**2010**	**2016**	**Chg (#)**	**Chg (%)**		**2010**	**2016**	**Chg (#)**	**Chg (%)**
Jersey City, New Jersey		243,257	261,666	18,409	7.6%		154,804	170,716	15,912	10.3%
Hoboken, New Jersey		47,384	53,136	5,752	12.1%		36,322	40,450	4,128	11.4%
Newark, New Jersey		274,674	280,139	5,465	2.0%		161,144	166,304	5,160	3.2%
Stamford, Connecticut		120,907	127,410	6,503	5.4%		76,077	78,110	2,033	2.7%
White Plains, New York		55,881	57,925	2,044	3.7%		33,712	34,703	991	2.9%
New Rochelle, New York		75,823	79,299	3,476	4.6%		40,279	44,300	4,021	10.0%
Garden City Combined		25,908	26,806	898	3.5%		12,680	13,576	896	7.1%
Norwalk, Connecticut		84,611	87,930	3,319	3.9%		52,841	53,539	698	1.3%
Mount Vernon, New York		67,073	68,217	1,144	1.7%		38,392	39,981	1,589	4.1%
Yonkers, New York		194,880	199,725	4,845	2.5%		110,782	112,917	2,135	1.9%
New York City		*8,078,471*	*8,461,961*	*383,490*	*4.7%*		*4,864,619*	*5,139,673*	*275,054*	*5.7%*
		Total Population					**Working Age**			
State		**2010**	**2016**	**Chg (#)**	**Chg (%)**		**2010**	**2016**	**Chg (#)**	**Chg (%)**
Connecticut		3,545,837	3,588,570	42,733	1.2%		2,030,660	2,051,345	20,685	1.0%
New Jersey		8,721,577	8,915,456	193,879	2.2%		5,038,705	5,141,513	102,808	2.0%
New York		19,229,752	19,697,457	467,705	2.4%		11,147,476	11,455,563	308,087	2.8%
United States		303,965,272	318,558,162	14,592,890	4.8%		173,241,833	180,707,800	7,465,967	4.3%

Jersey City, NJ

Jersey City is the second-most-populous city in New Jersey, after Newark[27]. It is the seat of Hudson County government as well as its largest city. Jersey City has direct access to Manhattan via the PATH rail system and ferry service. The commute from downtown Jersey City to Midtown Manhattan is generally less than 20 minutes and even less to downtown Manhattan. Jersey City population increased 7.6% between 2010 and 2016, while its working age population increased 10.3% over the same time period. This is faster than outperforming Hudson County (7.5%, 9.1%), the state of New Jersey (2.2%, 2.0%) and legacy, principally suburban, counties such as Bergen (3.8%, 3.2%) and Passaic (2.2%, 2.1%).

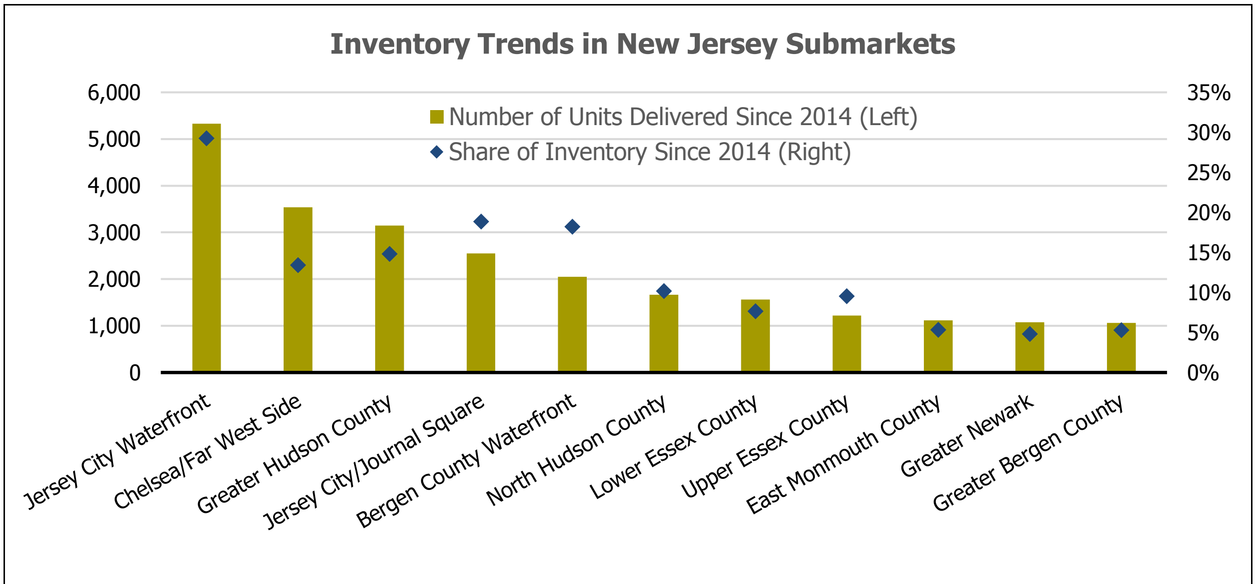
The Jersey City waterfront, a former industrial area of rail yards and factories, started being redeveloped in the 1980s with the Exchange Place Financial District. Currently, Jersey City includes 18,000,000 square feet of office space, while the greater Hudson Waterfront submarket has a total of 29.9 million square feet and a vacancy rate of 11.1% according to CoStar. Jersey City has over 4,000 apartment units

[27] However, only 12.5 percent of Newark residents have a college or advanced degree compared with 41.5 percent in Jersey City The median household income in Jersey City is $58,000. In Newark, it’s $34,000. Newark has great infrastructure including excellent rail, bus, highways, and other transportation linkages

under construction — more than any other city in the state. Since 2014 the Jersey City waterfront and Jersey City Journal Square area have added 5,325 and 2,547 units respectively which represent 29.2% and 19.0% of their respective inventory total. Another 2,708 units are under construction representing 15.0% of inventory at the Jersey City waterfront and another 1,458 units are under construction representing 11.0% of inventory at Journal Square.

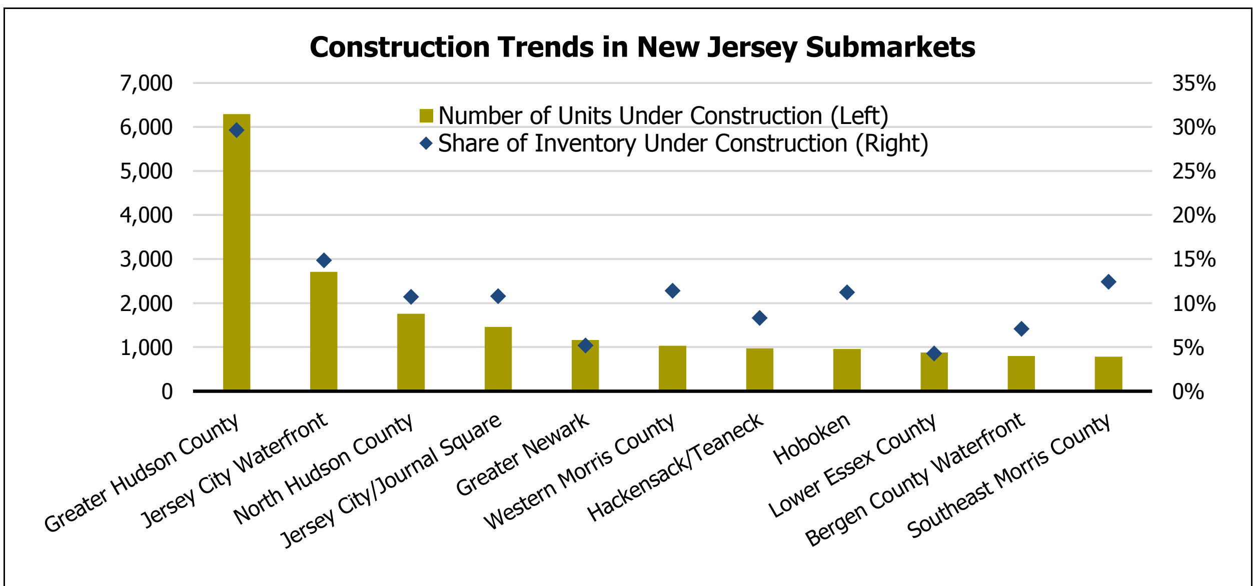
Jersey City is encouraging development in around Journal Square. The city introduced a new tax abatement program, rewarding only developments around Journal Square with the maximum tax abatement of 30 years. The city also created special zoning variances on the parcels attached to the Journal Square Transportation Center, which drastically cut down the density restrictions and removed height restrictions and parking requirements.

Table 10 - New Jersey Inventory Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

Table 11 - New Jersey Construction Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

Jersey City has developed in to an important urban satellite for New York. It's a lower cost urban alternative with easy access to the metropolitan core. Initially almost all most of the development was at the waterfront away from Jersey City's center, over time development spread in the area around the Grove Street PATH station. The past five years has witnessed development in the Journal Square area in the center of Jersey City which represents a significant turn of events in the revitalization Hudson County's largest city.

Downtown Brooklyn/DUMBO, NY

Brooklyn was an independent incorporated city until 1898, when, it became one the five boroughs of New York City. Kings County (Brooklyn) experienced a 5.7% population increase and a 7.8% working age population increase between 2010 and 2016 outpacing Manhattan (3.3%, 3.1%).

Downtown Brooklyn is the third largest central business district in New York City and is located in the northwestern section of the borough of Brooklyn. Prior to a 2004 rezoning that allowed for denser residential development, Downtown Brooklyn was primarily a commercial and civic center. Since the rezoning, the area has witnessed the construction of condominium towers and townhouses as well as office conversions. Downtown Brooklyn (including DUMBO) has an inventory of 24.1 million SF of office space and has a vacancy rate of 7.5% as of Q4 2017. The traditional office product is primarily situated along the public transportation corridor running from the Brooklyn Bridge to Atlantic Terminal. MetroTech is a key business and education center in Downtown Brooklyn. It hosts major companies and organizations like JPMorgan Chase, the New York City Fire Department, National Grid, NYU Tandon School of Engineering, MakerBot, the Brooklyn Nets and back office functions for several financial services firms

DUMBO (Down Under the Manhattan Bridge Overpass) is located adjacent to downtown Brooklyn between the Manhattan and Brooklyn Bridges and continues east from the Manhattan Bridge to Vinegar Hill. The area was originally a ferry landing, improved with industrial and warehouse buildings. With the deindustrialization of the area, Dumbo began to become primarily residential as many of its former industrial buildings were converted into luxury residential lofts. Some of the facilities were converted for office use such as 117 Adams Street now used as the corporate headquarters for e-commerce retailer Etsy.

Since 2014 Downtown Brooklyn/DUMBO has added 5,241 apartment units that amount to 37.0% of its inventory total. Another 1,970 units are under construction representing 14.0% of inventory[28].

Long Island City, NY

Long Island City (LIC) is situated in the western section of Queens, NY across the East River from Manhattan. Queens County experienced a 5.0% population increase and a 5.3% working age population increase between 2010 and 2016 outpacing Manhattan (3.3%, 3.1%). The central district of Long Island City[29] has experienced a 5.4% population increase between 2010 and 2015.

Due to its central location, LIC has historically attracted many factories and bakeries that have mostly left the area. Creative reuse has led to the former Silvercup Bakery being transformed in to the home of Silver Cup Studios. Other businesses and institutions that have taken over former industrial space include LaGuardia Community College, the Isamu Noguchi workshop and the Noguchi Museum. Online grocery company FreshDirect took advantage of the area's central location for its warehouse distribution system. JetBlue Airways relocated and consolidated in LIC. The most prominent structure, other than Queensboro Bridge, is the 658-foot Citicorp Building built in 1989. Long Island City is home to a large concentration of art galleries, art institutions, and studio space as well as an artistic community.

Deindustrialization accelerated throughout the 1970s and 1980s resulting in the rezoning of the area in 2001 to include residential uses. Developments such as Hunter's Point South were built. Residential towers include Queens West and the 42-floor Citylights which, opened in 1998. Others have been completed since then and more are being planned or under construction. High-rise housing is being built on a former Pepsi-Cola site on the East River.

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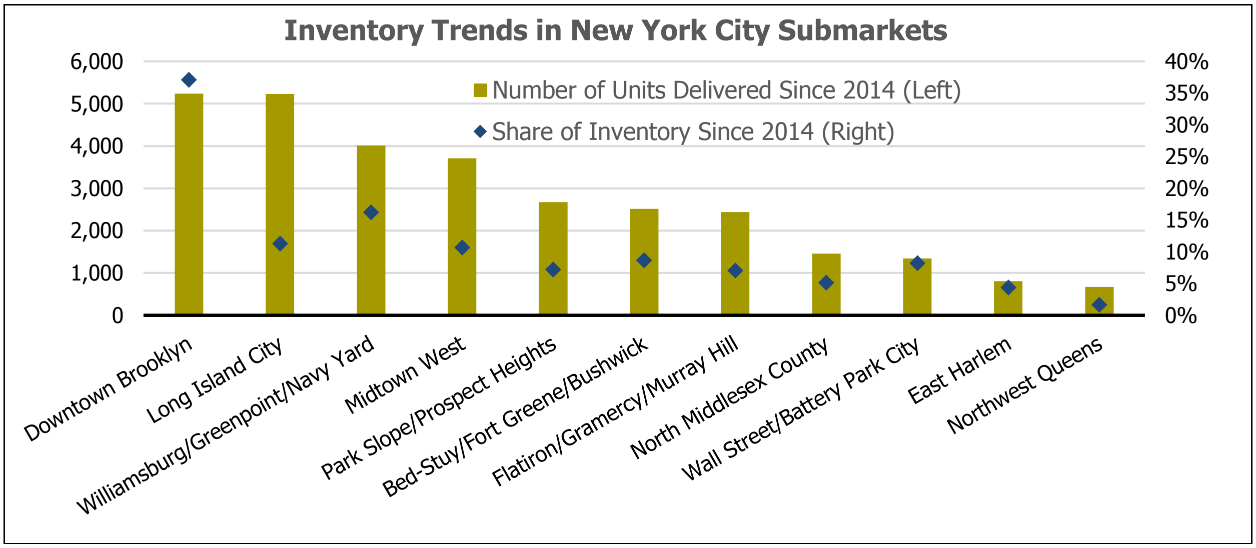
[28] CoStar Portfolio Strategy
[29] According to Long island city partnership. Central district includes 11101, 11109, and 11120 zip codes.

Since 2014 Long Island City has added 5,230 units that amount to 11.3% of its inventory total. Another 7,920 units are under construction representing 17.1% of inventory. That's more than in any section or submarket of any other city in the country. In terms of construction as a share of existing inventory, LIC exceeds every metro area in the US and in terms of gross units added, LIC alone outperformed all but 24 American metro areas.

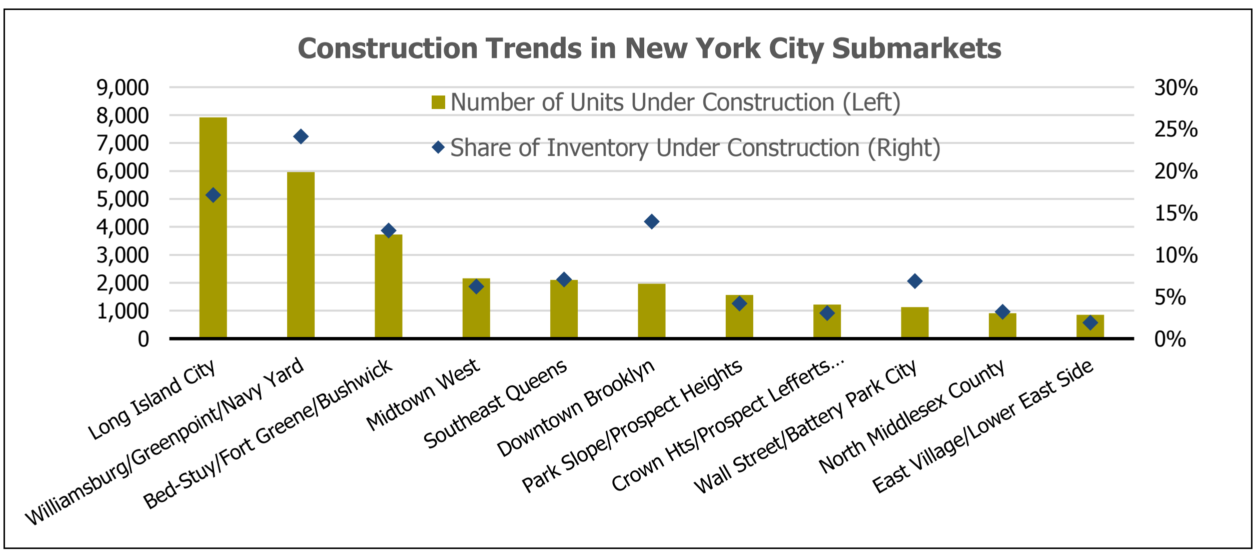
The Northwest Queens office market, which includes Long Island City, has 16.3 million SF of office inventory, an additional 1.2 million under construction, and a vacancy rate of 14.3% as of Q4 2017. Class A traditional office towers are centered in the Court Square area and industrial redevelopment office space are primarily in the Sunnyside Yard area. The area has excellent transportation linkages to Manhattan with numerous train lines, ferry service, and roadways providing access. Not only is Long Island City one stop from Manhattan on several train lines, it has a connection to the 7 line which connects to several legacy Queens neighborhoods.

Table 12 - Brooklyn Queens Inventory Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

Table 13 - Brooklyn Queens Construction Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

Fairfield County, CT and Westchester County, NY

Stamford is located in Fairfield County in south Connecticut on the New Haven Line on the Metro-North Railroad, which provides access to New York's Grand Central Station. Stamford is the third busiest station on the Metro-North system and serves as a major transfer point for local trains.

Since 2010, Stamford has been the fastest-growing city in Connecticut -- and will probably soon surpass New Haven to become the second largest (after Bridgeport). Stamford's 5.4 percent growth from 2010 through 2016 outpaced the country as a whole (4.8 percent), and even outperformed New York City (4.7 percent). Its working age population has grown 2.7%, slower lower than New York City's 5.7% but greater than the state of Connecticut which grew 1.0% of its working age population between 2010 and 2016. Since the last recession, much of the growth has been spawned by young professionals looking for affordable pedestrian- and transit-friendly living.

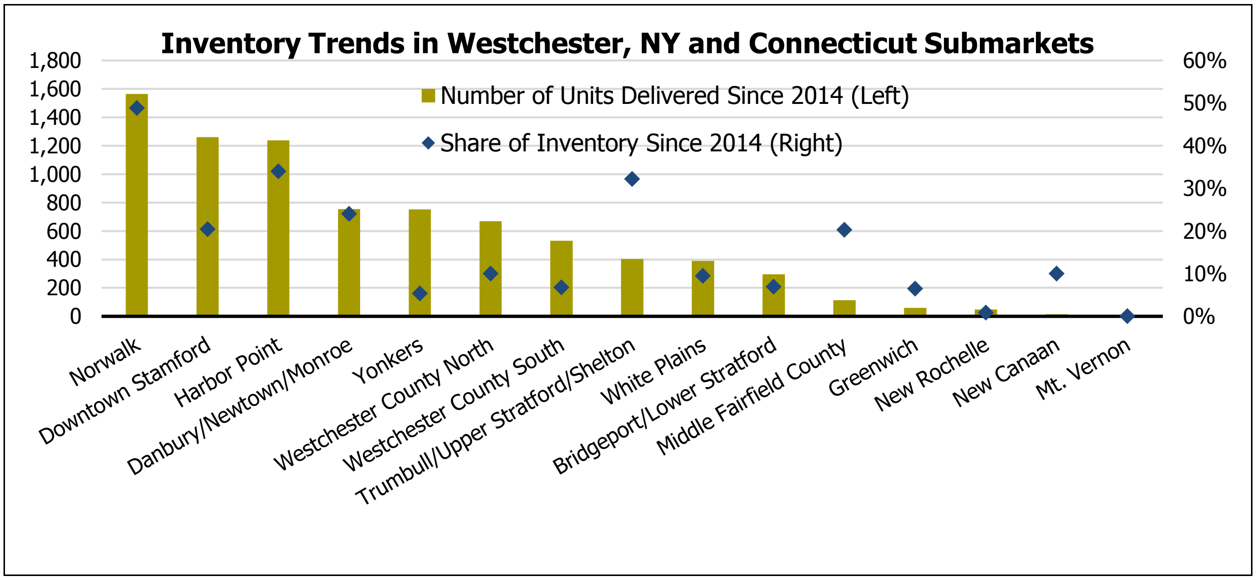
The Stamford office market has historically functioned as a lower cost alternative to Manhattan. In 2017, Stamford still had four Fortune 500, nine Fortune 1000, three Forbes Global 2000, and one Fortune Global 500 company. The Stamford office market has 20 million SF, asking rent of $37/SF and a 20.0% office vacancy rate as of Q4 2017 and has witnessed an exodus of office using jobs.

Nevertheless, office buildings within one half mile of the Stamford train station have generally outperformed with significantly lower vacancy rates and higher asking rents. Charter's new headquarters will be a 500,000-square foot, 15-story facility at the Gateway Harbor Point site anticipated to be ready for employees to begin occupying in 2019. The Company has engaged BLT to construct the build-to-suit facility at 406 Washington Blvd with an option to expand the site into a 2-building campus. The Gateway Harbor Point site benefits from its proximity to mass transit as well as its easy access to Interstate 95. The new headquarters is set to become the first commercial facility with direct access to the Stamford train station platform.

In contrast to the fortunes of its office market, Stamford is in the midst of a residential transit-oriented housing boom. Since 2014 Downtown Stamford has added 1,260 units that amount to 20.4% of its inventory total. Another 659 units are under construction representing 11% of inventory. The Harbor Point development, located in Stamford's South End, has attracted nearly half of Stamford's apartment construction since 2014 and accounts for the majority of units under construction. Since 2014 the Stamford's Harbor Point Section has added 1,238 units that amount to 34.0% of its inventory total. Another 1,045 units are under construction representing 29% of inventory.

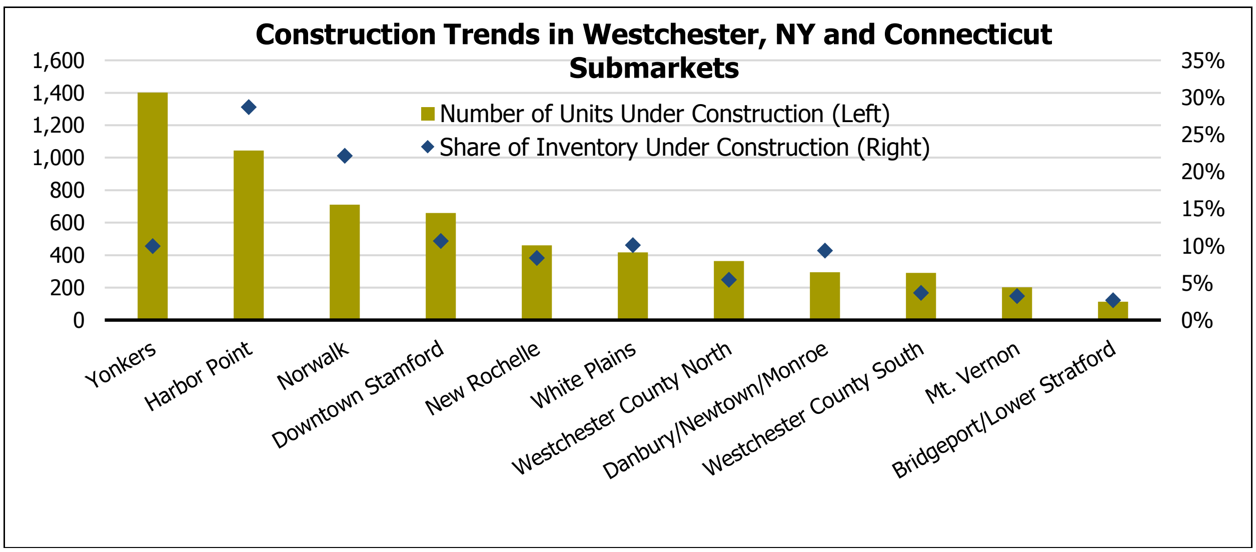
Norwalk is located north east of Stamford in southwestern Connecticut. Its population grew 3.9% between 2010 and 2016 to 87,930 while the working age population grew 1.3% compared to Connecticut (1.2%, 1.0%). The Metro-North Railroad has three stops in Norwalk and connects to Grand Central Terminal in New York City. Since 2014 Norwalk has added 1,564 units that amount to 49% of its inventory total. Another 710 units are under construction representing 22% of inventory.

Table 14 - Westchester and Connecticut Inventory Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

Table 15 - Westchester and Connecticut Construction Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

White Plains, New Rochelle, Mt. Vernon, and Yonkers

The Westchester county cities of White Plains, New Rochelle, Mt. Vernon, and Yonkers have also attracted their share of new residential construction. This is part of a master plan designed to revitalize the Westchester County city's downtowns to appeal to new residents including millennials. The draw is more moderately priced units in a walkable downtown within proximity to cultural offerings, restaurants, bars and a train link to the rest of the metro area.

White Plain's population grew 3.7% between 2010 and 2016 to 57,925 while the working age population grew 2.9%. New Rochelle's population grew 4.6% between 2010 and 2016 to 79,299 while the working age population grew 10.0%. Mt. Vernon and Yonkers experienced population growth of 1.7% and 2.5% and working age population growth of 4.1% and 1.9%.

Since 2014 Yonkers, Mt. Vernon, New Rochelle, and White Plains added 753, 0, 48, and 389 units representing 5.4% 0% 1%, and 9.5% of inventory respectively. However, there are currently 1,401, 202, 461, and 416 units representing 10.0%, 3.3%, 8.4% and 10.1% of total inventory under construction in Yonkers, Mt. Vernon, New Rochelle, and White Plains.

In the past six years, developers have built or proposed 50 Westchester County residential projects within half a mile of a Metro-North station, to add 11,231 apartments, according to the Westchester County Association[30].

Washington's Urban Satellites

The population of Washington, DC has risen 12.8% over the past six years (2010-2016) while the working age population has risen 14.8% during the same time period. This compares favorably to the US (4.8%, 4.3%), the state of Virginia (6.0%, 4.8%) and the state of Maryland (4.6%, 4.0%). The population and working age population of urban satellites in Washington, DC's orbit increased significantly.

Tysons Corner increased 34.7%, 29.7%, Rockville 11.8%, 10.9%, Silver Spring 11.0%, 10.1%. This compares favorably to Fairfax County VA 8.0%, 4.9%, and Montgomery County 8.4%, 6.3%.

Table 16 – Washington Area Population Trends

	Total Population				Working Age			
County, State	**2010**	**2016**	**Chg (#)**	**Chg (%)**	**2010**	**2016**	**Chg (#)**	**Chg (%)**
Fairfax, Virginia	1,048,554	1,132,887	84,333	8.0%	649,138	680,773	31,635	4.9%
Montgomery, Maryland	947,230	1,026,371	79,141	8.4%	565,298	601,065	35,767	6.3%
Washington, District of Columbia	584,400	659,009	74,609	12.8%	368,239	422,864	54,625	14.8%
	Total Population				**Working Age**			
City, State	**2010**	**2016**	**Chg (#)**	**Chg (%)**	**2010**	**2016**	**Chg (#)**	**Chg (%)**
Rockville Combined	58,300	65,171	6,871	11.8%	35,216	39,055	3,839	10.9%
Silver Spring, Maryland	61,623	68,415	6,792	11.0%	41,003	45,137	4,134	10.1%
Tysons Combined	17,087	23,008	5,921	34.7%	11,751	15,236	3,485	29.7%
Gaithersburg, Maryland	58,169	66,104	7,935	13.6%	36,615	40,010	3,395	9.3%
State	**2010**	**2016**	**Chg (#)**	**Chg (%)**	**2010**	**2016**	**Chg (#)**	**Chg (%)**
Maryland	5,696,423	5,959,902	263,479	4.6%	3,337,633	3,471,615	133,982	4.0%
Virginia	7,841,754	8,310,301	468,547	6.0%	4,601,265	4,821,501	220,236	4.8%
United States	303,965,272	318,558,162	14,592,890	4.8%	173,241,833	180,707,800	7,465,967	4.3%

Tysons (Tyson's Corner), VA

The fastest growing Washington, DC urban satellite is Tysons (formerly referred to as Tysons Corner). The working age population increased 29.7% in Tysons Corner between 2010 and 2016 while the overall population gained 34.7%. Famous for its two super regional malls (Tysons Corner Mall and Tysons Galleria), the area is undergoing a transformation. This is not an accident, but rather part of the Fairfax County plan for the urbanization. In conjunction with the extension of the Silver Line Metro in 2014, Tysons is undergoing a dramatic transformation from a suburban market into a live, work, play neighborhood. The Silver Line Metro phase-I extension opened four new stations in Tysons, including McLean Station (Tysons East District), Tysons Corner Station (Tysons Central 123 District), Greensboro Station (Tysons Central 7 District) and Spring Hill Station (Tysons West District). Tysons currently has a total of 49.2 million square feet of commercial space. By 2050, the inventory is anticipated to double and be transformed into a walkable, vibrant urban center with over 100,000 residents and 200,000 jobs (vs its current 20,000 residents and 93,000 jobs). Approximately 75% of this planned development will be located within a half mile of the metro stations. The Silver Line has spawned office development, including the extension of Reston Town Center and the urbanization of Tysons Corner.

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[30] David Levitt "NYC's Northern Suburbs Get Urban Makeover With Apartment Towers", Bloomberg, July 27, 2017.

The county plan authorized 45 million SF of new development provided it is near new metro stations, a town square, four new metro stations in Tysons, metro adjacent residential, retail, more sidewalks and bike paths new street grid with smaller more walkable blocks. The concept of the urbanized suburb is not new. In 1969 Lakewood, CO Incorporated and developed a downtown that they heretofore did not have and proceeded to urbanize the former suburb. Since 2014 Tysons has added 2,814 units that amount to 35% of its inventory total. Another 1,999 units are under construction representing 25% of inventory.

Rockville, Silver Spring, Gaithersburg, MD

On the Maryland side of the capital region, Rockville and Silver Spring benefit from rail access to DC. Montgomery County, MD envisions urbanized suburbs in Rockville and Silver Spring. The White Flint Sector Plan involves converting a section of Rockville Pike into a mixed-use hub centered on the White Flint Metro station by 2030. The pike would be converted to a walkable thoroughfare with wide sidewalks and trees. And similar to Tysons, a new public street grid would knit together office buildings, retail and residential.

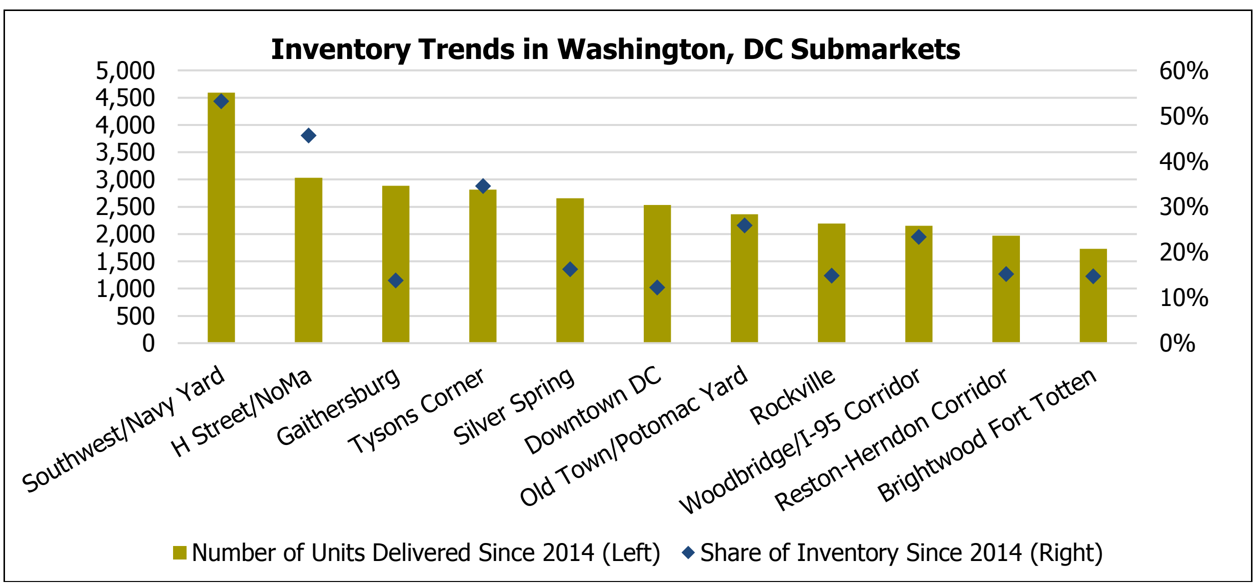
The area has already witnessed increased development. Pike & Rose, a new development on Rockville Pike is an example of recent urbanization as it includes apartments, condominiums, stores, and restaurants in nine walkable square blocks. The project is proximate to the White Flint Metro station and includes hotel rooms, a theater, and 7 fitness and well-being centers. The demolished White Flint Mall 45-acre site holds enormous potential as a redevelopment project.

Rockville, Silver Spring, and Gaithersburg have office inventories of 10.9 million, 7.3 million, and 7.01 million impacted by vacancy rates of 10.8%, 10.8% and 7.2% respectively.

Rockville's, working age population increased 10.9% between 2010 and 2016 while the overall population gained 11.8%. Silver Spring's, working age population increased 10.1% between 2010 and 2016 while the overall population gained 11.0%. Gaithersburg had an estimated population of 66,104 in 2016 up 13.6% since 2010 while the working age population increased 9.3% during the same time. This contrasts to Montgomery County (8.4%, 6.3%) and the state of Maryland (4.6%, 4.0%).

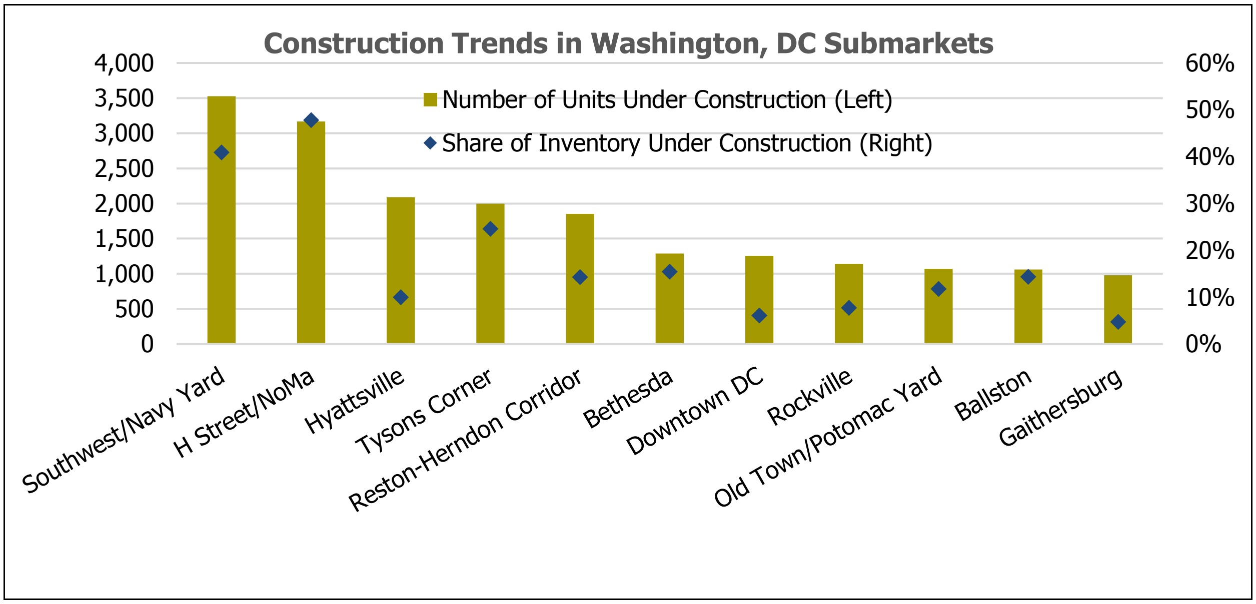
Since 2014 Rockville has added 2,190 units that amount to 15% of its inventory total. Another 1,140 units are under construction representing 8% of inventory. Since 2014 Silver Spring has added 2,655 units that amount to 16.3% of its inventory total. Another 753 units are under construction representing 5% of inventory. Since 2014 Gaithersburg has added 2,885 units that amount to 14% of its inventory total. Another 980 units are under construction representing 4.7% of inventory.

Table 17 -Washington, DC Area Inventory Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

Table 18 -Washington, DC Area Construction Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

San Francisco's Urban Satellites

The population of San Francisco, CA has risen 7.7% over the past six years (2010-2016) while the working age population has risen 7.9% during the same time period. This compares favorably to the US (4.8%, 4.3%) and the state of California (5.5%, 6.1%). The working age population of urban satellites in San Francisco's orbit increased even more substantially. While the population of Oakland increased 6.5%, its working age population soared 9.2%, reflecting its appeal to a younger demographic group. The city of San Jose experienced a population increase of 9.1%, while its working age population increased 9.0%. This compares to Alameda County, CA 8.6%, 9.6%, and Santa Clara County, CA 8.4%, 8.2%.

Table 19 – San Francisco Bay Area Population Trends

	Total Population				Working Age			
County, State	**2010**	**2016**	**Chg (#)**	**Chg (%)**	**2010**	**2016**	**Chg (#)**	**Chg (%)**
Los Angeles, California	9,758,256	10,057,155	298,899	3.1%	5,669,041	5,944,647	275,606	4.9%
Alameda, California	1,477,980	1,605,217	127,237	8.6%	894,581	980,486	85,905	9.6%
Contra Costa, California	1,024,809	1,107,925	83,116	8.1%	592,371	636,665	44,294	7.5%
East Bay, California	2,502,789	2,713,142	210,353	8.4%	1,486,952	1,617,151	130,199	8.8%
Santa Clara, California	1,739,396	1,885,056	145,660	8.4%	1,043,886	1,129,692	85,806	8.2%
San Francisco, California	789,172	850,282	61,110	7.7%	540,534	583,343	42,809	7.9%
	Total Population				**Working Age**			
City, State	**2010**	**2016**	**Chg (#)**	**Chg (%)**	**2010**	**2016**	**Chg (#)**	**Chg (%)**
Oakland, CA	386,909	412,040	25,131	6.5%	238,635	260,641	22,006	9.2%
San Jose (San Jose City), CA	925,188	1,009,254	84,066	9.1%	556,732	607,011	50,279	9.0%
State	**2010**	**2016**	**Chg (#)**	**Chg (%)**	**2010**	**2016**	**Chg (#)**	**Chg (%)**
California	36,637,290	38,654,206	2,016,916	5.5%	21,013,047	22,288,370	1,275,323	6.1%
United States	303,965,272	318,558,162	14,592,890	4.8%	173,241,833	180,707,800	7,465,967	4.3%

Oakland, CA

Oakland is the largest city in the East Bay region and the third largest city overall in the San Francisco Bay Area. The Oakland downtown has 18.1 million FS of office space and a vacancy rate of 9.1%. The city is home to several major corporations including Kaiser Permanente, Clorox, and Dreyer's ice cream, and retailer Cost Plus World Markets and tech companies such as Ask.com and Pandora Radio as well as many start-up high tech and green energy companies in the downtown neighborhoods of Uptown, City Center, Jack London Square and Lake Merritt Financial District.

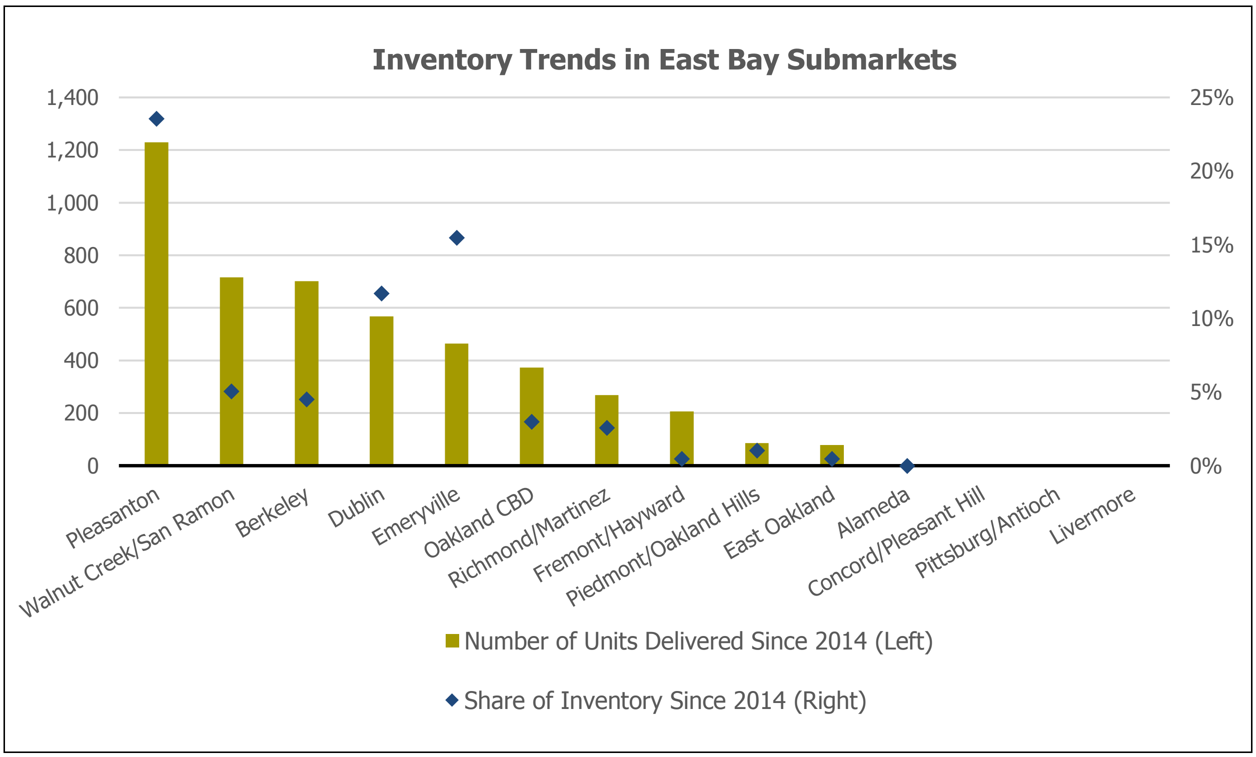
Healthcare, however, continues drive demand as Kaiser Permanente continues to maintain a large presence, occupying almost 300,000 SF of office space and Blue Shield plans to move its 1,200 employees from San Francisco when their new offices complete in 2019. In addition to its indigenous employment base, the Oakland CBD is proximate to San Francisco. The submarket is serviced by three BART lines via four subway stations, with the 19th and 12th street stations the most heavily trafficked. One can commute via BART, from Oakland to San Francisco in 15 minutes.

Downtown Oakland has an assortment of restaurants bars music venues and nightclubs. The Paramount Theater features headlining musical tours and productions, while Fox Oakland Theatre draws various musical genres.

Downtown and Jack London Square have experienced a significant amount of new construction as a result of the Broadway/Valdez District Specific Plan which was adopted in the summer of 2014 and streamlined zoning and approvals for that area. Construction costs in Oakland remain less than San Francisco due to lower development fees, much lower thresholds to include low income units, and a much more certain entitlement process through developer friendly city government and less community opposition.

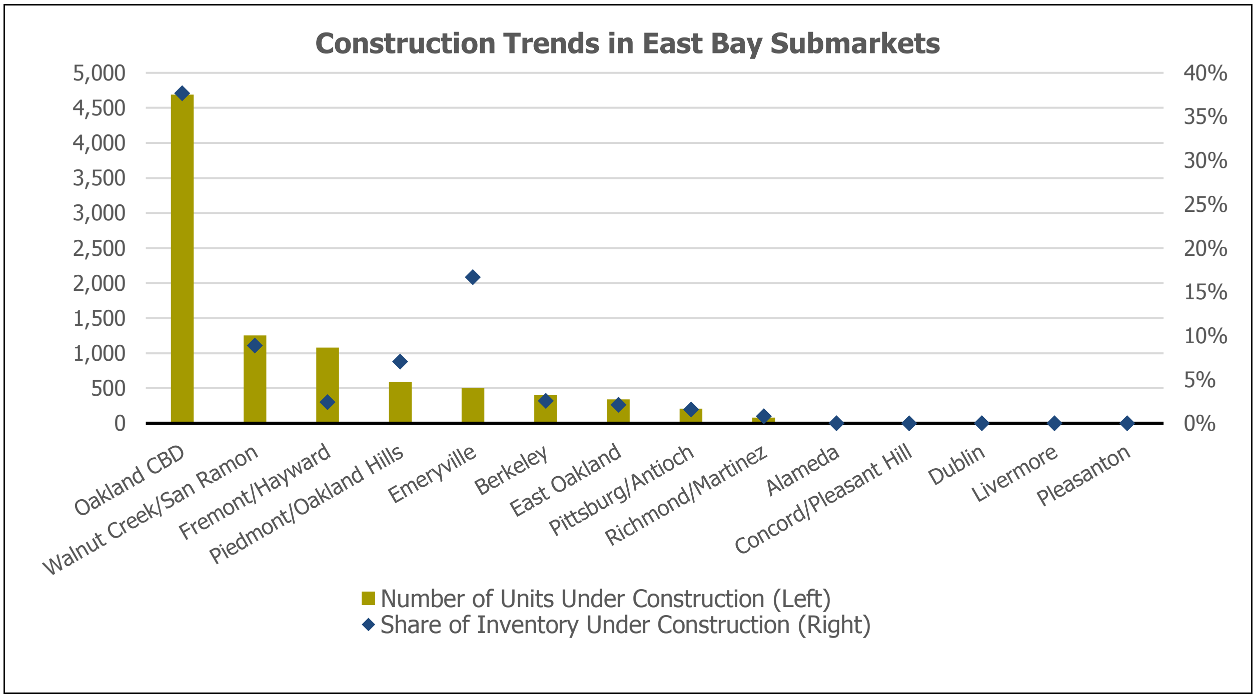
Since 2014 the Oakland CBD has only added 373 units that amount to 3% of its inventory total. However, another 4,691 units are under construction representing 38% of inventory. Most of the development is in the Uptown submarket of the CBD. The City of Oakland has also clarified height limits and zoning around areas like the Lake Merritt BART station with the Lake Merritt Station Area Plan.

Table 20 - San Francisco - East Bay Area Inventory Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

Table 21 -San Francisco - East Bay Area Construction Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

San Jose City, CA

San José, is the economic, cultural, and political center of Silicon Valley and the largest city in Northern California. The Downtown San Jose office market includes tenants such as Adobe and Oracle. The Downtown-East submarket has an office inventory of 10.5 million SF and vacancy rate of 11.5% while the Downtown-West submarket has an office inventory of 3.7 million SF and vacancy rate of 8.6%

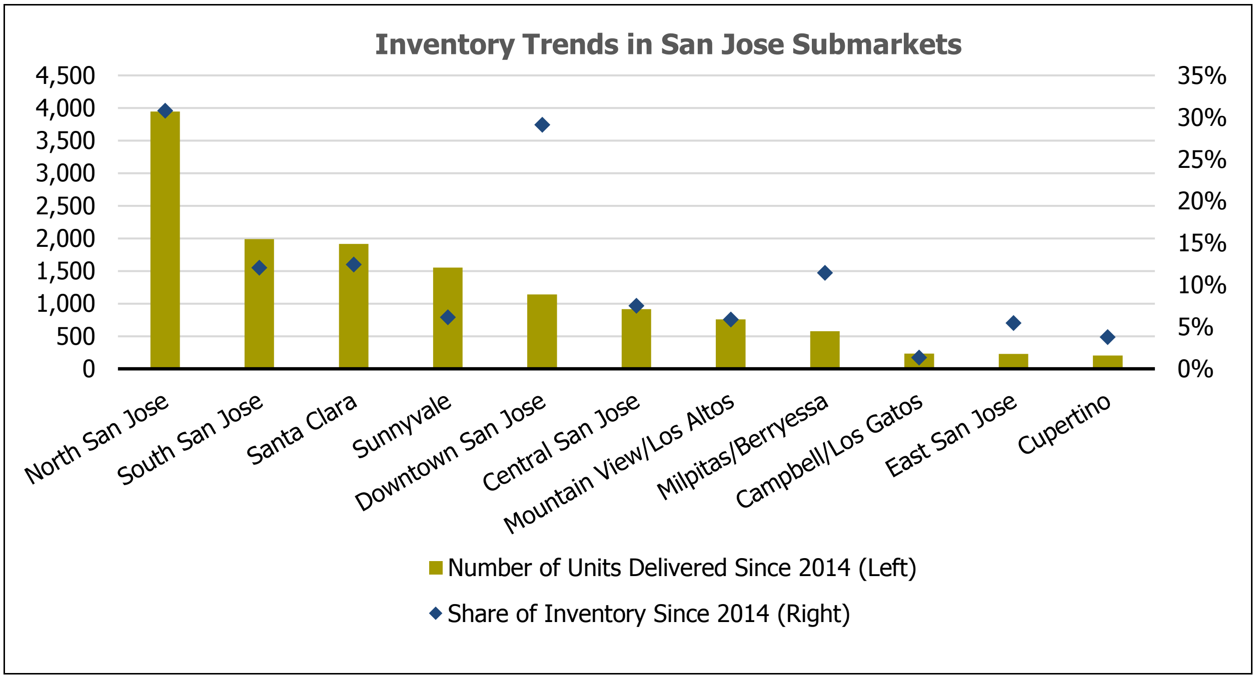
Nevertheless, it exists within the orbit of San Francisco and because of recent transportation linkage improvements has become an urban satellite. Most notable is the “Baby Bullet” train, Caltrain's express service. Baby Bullet trains stop at only a handful of stations along the Peninsula to reduce travel times to about an hour between San Francisco and San Jose. An additional factor is that many younger professionals prefer living in an urban area and have been reverse commuting from San Francisco to Silicon Valley. As San Jose’s downtown has become more desirable attracting trendy and upscale restaurants, bars and other amenities, it has become a work proximate alternative to San Francisco.

San Jose Diridon is the central passenger rail depot for San Jose, California. It also serves as a transit hub for Santa Clara County and Silicon Valley. The station is served by Caltrain, ACE, VTA light rail, and Amtrak. It is to have Bay Area Rapid Transit service when the Silicon Valley BART extension is complete and is to be preceded by a Downtown San Jose BART station. The San Jose Diridon station is planned as a future stop on the California High-Speed Rail line and Phase 2 of San Jose BART extension in Santa Clara County. If these plans are completed, Diridon Station would offer connections between six agencies' rail services: ACE, Amtrak's Capitol Corridor and Coast Starlight lines, BART, Caltrain, CHSR, and VTA light rail. This would render this area very attractive for development.

Google purchased a collection of land and former industrial lots in downtown San Jose to build a new corporate village adjacent to Diridon Station. “Google village” may end up stretching over 50 acres and being twice as large as Apple’s new HQ, accommodating 15,000 to 20,000 employees. Google’s plans may turn Diridon Station in to a concentrated and expanding transit hub. The development that may be completed by 2025, would spawn a more urbanized San Jose. Land near the edges of the Google campus, in neighborhoods such as Delmas Park, are already trading for more than double their assessed values.

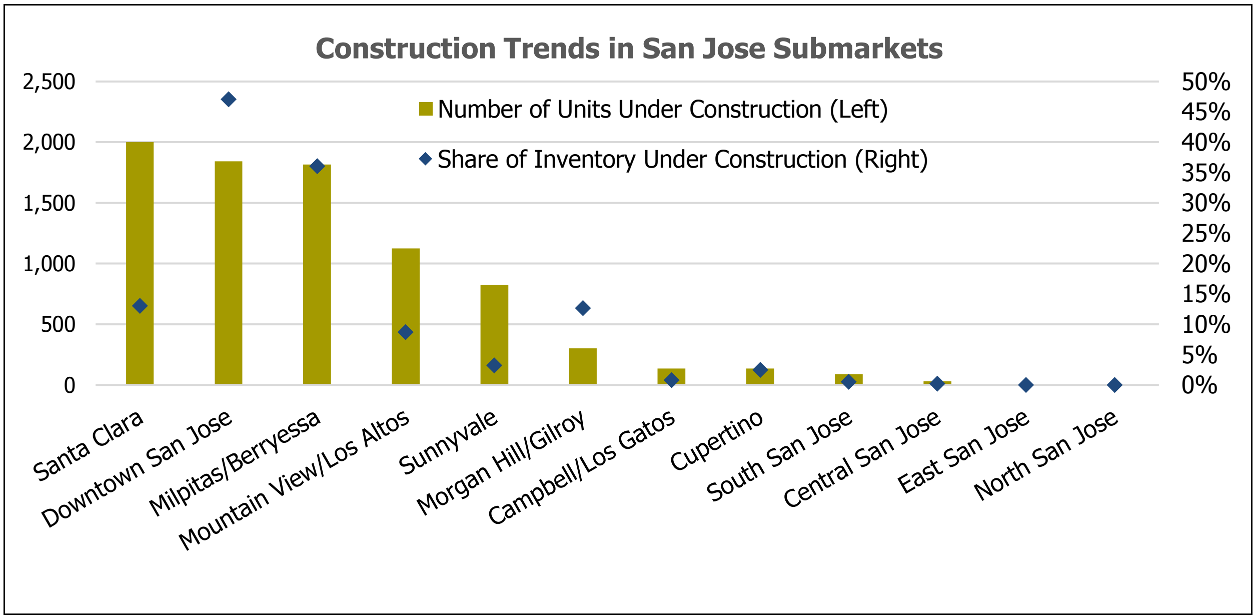
The city is generally divided into the following areas: Downtown San Jose, Central, West San Jose, North San Jose, East San Jose, and South San Jose. Many of these districts were originally unincorporated communities or separate municipalities that were later annexed by the city. Since 2014 San Jose has added 8,218 units distributed amongst North San Jose (3,944, 31% of inventory), Central San Jose (914, 7.5%), South San Jose (1,989, 12%), and East San Jose (230, 5.5%). Downtown San Jose experienced the second greatest growth as a share of inventory at 29.1% while adding 1,141 units. The 1,843 units under construction in Downtown San Jose accounts for almost all units under construction in the City and represents 47% of existing inventory.

Table 22 - San Francisco – San Jose Inventory Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

Table 23 - San Francisco – San Jose Construction Trends



Source: CoStar Portfolio Strategy. As of 4Q 2017

CONCLUSION

Urban satellites are growing in importance in the shadow of the shortage of successful American cities. As center cities become more desirable and expensive, suburban cities have surged in popularity. Other reasons for the recent popularity of urban satellites include women gaining higher paying jobs and singlehood becoming more widespread in all age categories.

Urban satellites have experienced substantial working age population growth and new apartment construction over the past six years. Urban satellites can take several forms including the Renaissance Suburban City, the Urbanized Suburb, the Urbanized Former Industrial Zone, and the Urban Satellite Island. Examples include Jersey City, Downtown Brooklyn, Stamford in the New York Area, Tysons, Rockville and Silver Spring in the Washington, DC area, and the Oakland CBD and San Jose in the San Francisco Bay Area.

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