THINK US

Millennials divided

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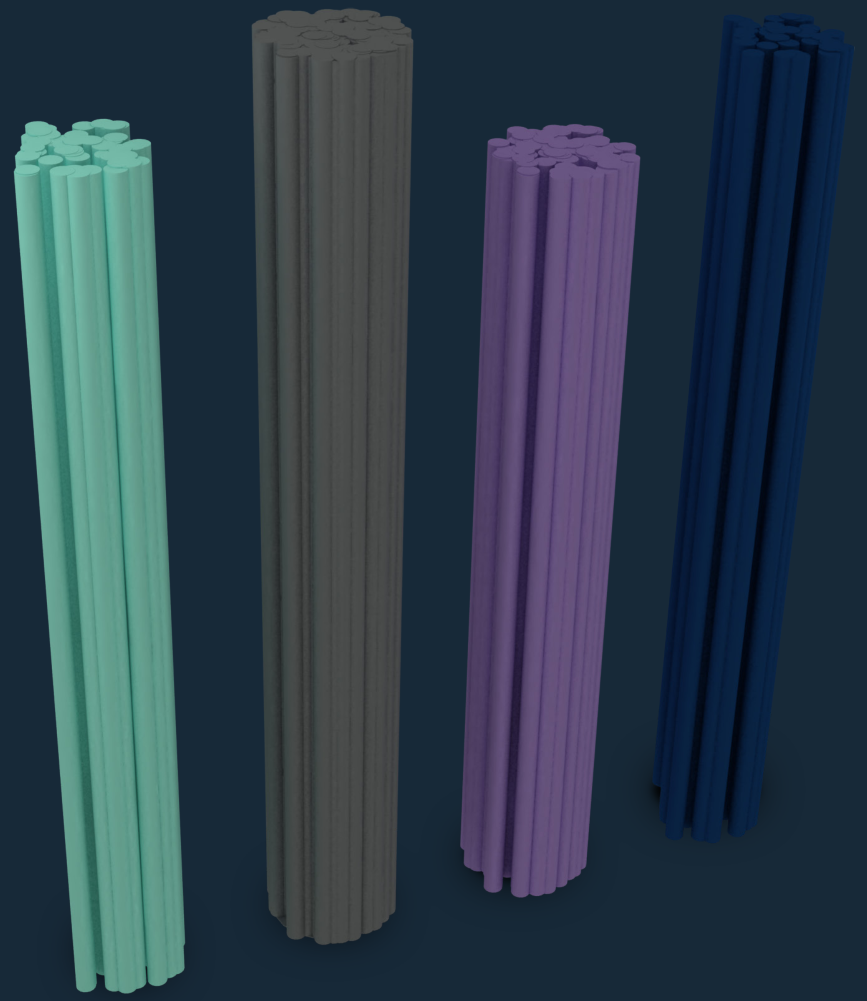

March 2018

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Data generating art

This image is an abstract representation of Fig.1 which illustrates the comparative populations of Generation Z, Millennials, Generation X and Baby Boomers.

Introduction

Using data to study the movement and behavior of people can help identify Tomorrow's Cities, those best positioned to benefit from megatrends such as urbanization, technology, and growing millennial populations. As the largest generation on record (see Fig.1), millennials have had considerable influence on commercial real estate during this economic cycle. This includes shifts towards smaller rental units in urbanized locations, creative office space, highly amenitized student housing, and "last mile" industrial to facilitate same day delivery.

In the coming decade, this generation could reshape real estate markets in cities such as Charleston and Orlando if, as we anticipate, these cities experience an influx of millennials looking for high quality jobs and a lower cost of living. At the same time, we expect some millennials currently living in major cities will migrate to the suburbs, reimagining the office and retail in these locations.

Why the dichotomy? The youngest millennials, still in their teens, are in a very different stage of life compared to older millennials in their 30s. Distinct behaviors within this generation will impact commercial real estate in ways that vary by location and property type and thus shouldn't be ignored. Our analysis divides the generation into two cohorts in order to dig deeper into the potential impacts.

Millennials are the largest generation on record and their preferences and behaviors are impacting every aspect of commercial real estate. Understanding them is critical for anticipating how real estate will be reshaped in the future. However, such a large population shouldn't be painted with broad strokes. We dug deeper into the data to analyze older and younger subsets of millennials and have identified distinct opportunities based on their differences.

Shannon Wright
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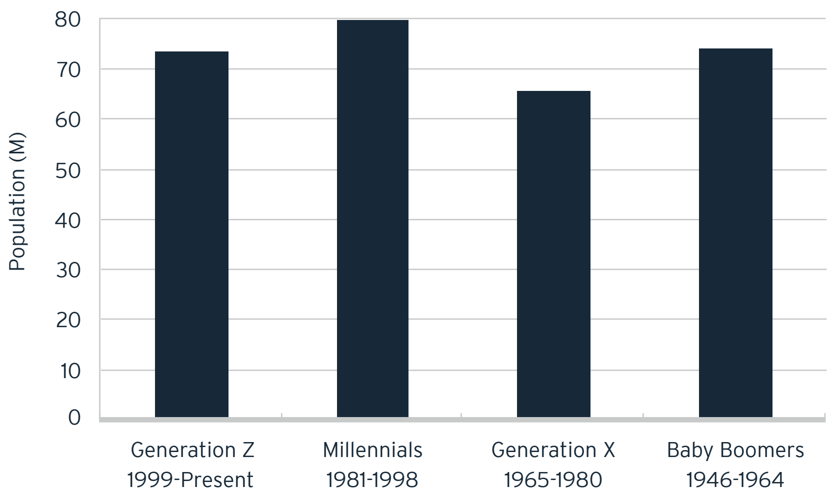
Fig.1: Generations defined



Sources: TH Real Estate Research; Bureau of the Census; Moody's Analytics as of December 2016

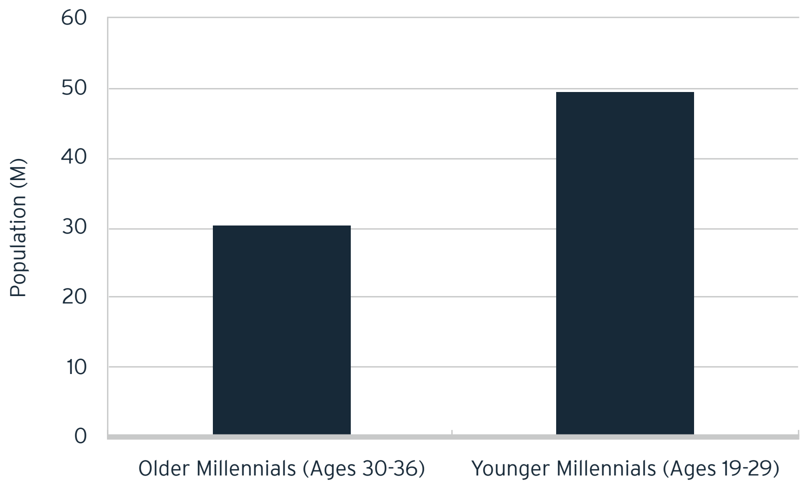
Generalizations of a generation

Although there are many misconceptions and over-generalizations, data confirm several important patterns among millennials. Compared to earlier generations, millennials are more likely to attend college, live at home for longer periods of time, and delay major life decisions.[1] To put this into context, current data indicate that the average age at first marriage is 27 for women and 29.5 for men and the average age for a woman's first birth has risen to 27.[2] The median age of a first time home buyer in 2015 was 42, compared to 34 in 2001.[3]

Reasons for this extend beyond preferences. The Great Recession created barriers to homeownership as banks tightened lending standards in response to increased regulation and oversight after the Great Recession. Down payment requirements remain an impediment to homeownership, particularly with millennials' record amounts of student debt. Accordingly, the share of first time home buyers under the age of 30 declined to 15% in 2015 from 29% back in 2001.[4] When millennials do buy homes, however, National Association of Realtors data indicate that the majority still purchase single-family homes. Taken together, we believe this means most millennials will eventually migrate to the suburbs of either the metros they currently live in, or to the suburbs of more affordable metro areas with favorable job growth prospects in order to buy a home.

In this analysis, we divide the millennials into older and younger cohorts. The older millennials (OMs) are roughly 30-36 years old and we believe have largely married, started families, and are likely to buy homes within the next few years. The younger millennials (YMs), aged 19-29, are in a different stage of life and are just beginning their careers and are likely to continue, or begin, renting. Fig.2 shows the population breakdown of older and younger millennials.

Fig.2: Millennials divided



Source: Bureau of the Census; Moody's Analytics as of December 2016

[1]Source: Council of Economic Advisers, '15 Economic Facts about Millennials', October 2014
[2]US Census Bureau, 2017; National Center for Health Statistics, National Vital Statistics Reports, 2015
[3]Brookings Institute, 'Who is the New Face of American Homeownership', October 9, 2017
[4]Ibid

Older millennials

In order to assess the older millennials' impact on the US commercial property market, we have made a number of assumptions about this cohort. In our view, OMs:

- Are well-established in their careers, having benefitted from a long period of steady job growth since the recession ended
- Are largely renters, perhaps in urbanized areas
- Have recently made major life decisions such as marriage and first child, and are likely considering homeownership

Several characterizations have also influenced these assumptions. First, although millennials have delayed the decision to marry and have families, being a good parent and having a successful marriage were identified as top priorities in their lives.[5] Similarly, although they have rented for longer than previous generations, homeownership is still an important goal.[6]

In our view, the eight central cities shown in Fig.3 are at greatest risk of losing OM renters to suburban homeownership. Each city experienced strong post-recessionary job growth, which contributed to an influx of 25-29 year olds in particular during that time period. In these eight "flight to suburbs" metro areas, there are currently around three million OMs, a number that represents 14% of the total US population in that age group.

[5]Source: Pew Foundation, 'Millennials, a Portrait of Generation Next', February 2010
[6]Ibid

Fig.3: "Flight to Suburbs" Metros

Characteristics
Job growth ('11-'16) > 2.5%
Pop growth (ages 25-29; ('12-'17)) > 1.5%
2016 home ownership rate < = 62%
2017 affordability index <130
% of Millennials > 22.0%

Source: TH Real Estate, Bureau of Labor Statistics, Census Bureau, Bureau of Economic Analysis, National Association of Realtors, Moody's Analytics

Investment opportunity: following the older millennials

In order to evaluate the impact OMs will have on commercial real estate in these "flight to suburb" metros, we have made additional assumptions related to their expected homeownership decisions. As mentioned, we assume that most OMs are currently renters given the relative lack of home affordability in these areas. We also assume that most are living in urbanized areas, as indicated by the maps of New York City and Seattle shown in Fig.4 and 5. Despite the high cost of living, we assume that most OMs are in a stable enough financial position to afford a home in their current metro areas, having worked roughly ten years at this point.

Our analysis of mobility data from the Census Bureau indicates that most adults that move remain in the same metropolitan area as opposed to relocating to a new metropolitan area.[7] We have assumed 70%, or 2.1 million of the three million OMs in these eight cities will stay in their current metro area as they marry and have children. Homeownership rates among 35-39 year olds increase considerably compared to 30-34 year olds.[8] Based on this, we have assumed a 60% homeownership rate among the OMs, which corresponds to roughly 1.3 million at risk to flee to suburban locations and purchase a single family home.

The other 30% of OMs (close to one million) are likely to seek out more affordable locations in the US such as those identified in Fig.6 given how expensive housing is in places like San Francisco, New York City, San Jose, and Los Angeles.

Investment opportunity

For older millennials that are able to afford suburban homeownership in these eight metros, we believe several key factors will influence their decision making when purchasing a home. A CBRE survey of more than 13,000 millennials revealed strong preferences for convenience and short commutes.[9] Amenities such as walkable retail, dining, and entertainment options, as well as close proximity to a train station are highly important. While many OMs are likely to continue commuting to central city-based jobs, we believe that suburban office properties in these metro areas could represent a compelling investment opportunity, as they attract the OMs that desire a better commute in order to prioritize family life. Well-located shopping centers with the market dominant or specialty grocer, along with high-quality lifestyle and power centers are also likely to benefit.

Fig.4: Older millennial population clusters: NYC

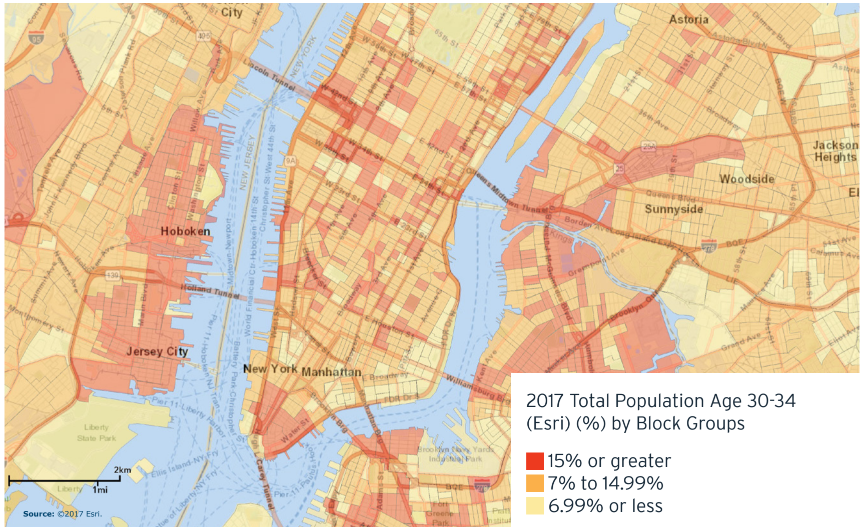
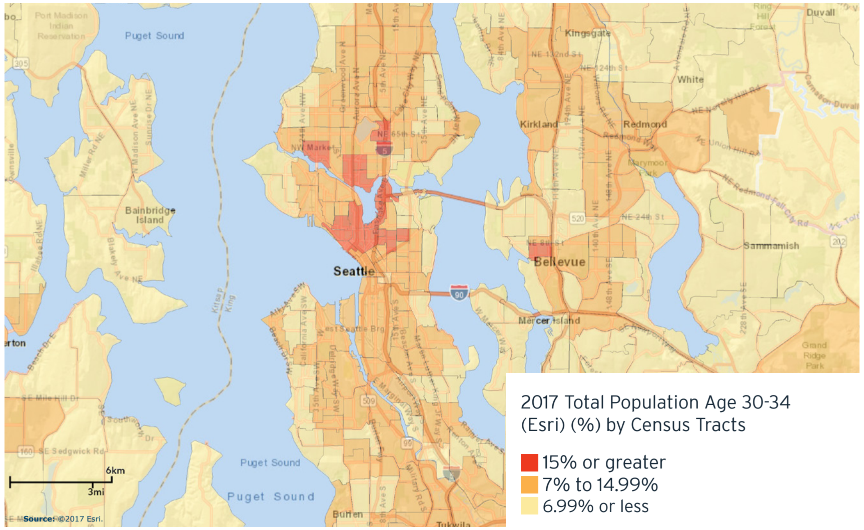


Fig.5: Older millennial population clusters: Seattle



[7]64% as compared to 18% between metro areas. [8]The current homeownership rate among 35-39 year olds is 55.6% per the Census Bureau as compared to 45.9% for 30-34 year olds.
[9]Source: CBRE, Millennials: 'Myths and Realities', 2016
Source: ESRI; 7% represents the US average share of 30-34 year olds out of the total population

The younger millennials

As noted, the older cohort has already made a considerable impact on commercial real estate. The younger cohort are largely in their 20s and are just beginning to exert their influence. In order to assess the impact this group of nearly 50 million could have as they come of age, we have made the following assumptions:

- Younger millennials (YM) have more recently attended college and are looking for their first job, or upgrading to a second job
- As they start to seek independence and feel more financially secure, most will begin upgrading their living situations, potentially moving out from their parents' homes or student housing
- In the earlier stages of their careers, they are likely to be attracted to areas with the strongest job prospects
- The majority will rent for the next seven to ten years, and will likely be more cost-conscious, at least initially, and will avoid the more recently built higher end rental units

Millennials have consistently indicated a preference for working at tech-driven firms such as Microsoft, Google, Facebook, Apple, and Amazon.[10] We expect that preference to continue and have identified the metros which stand to benefit as a result. The impact on commercial real estate, and in particular the multifamily segment, varies. Affordability is a key differentiator among the tech markets we have identified. The apartment markets in each of these metros will undoubtedly benefit from the growth in tech and influx of YMs. However, rental demand in some may have a shorter shelf life as homeownership will be achievable at a younger age, to the extent it is desirable. Many of the "next millennial magnets" are less urban in nature, and multi-family demand could be more limited to specific highly-amenitized locations that would be attractive to YMs. Beyond multi-family, we believe there is likely to be an additional benefit to the retail and office sectors throughout these metros. Office nodes with synergies to research, tech, health, and education will be particularly attractive.

[10]Source: Universum, 'The Most Attractive Employers', 2017

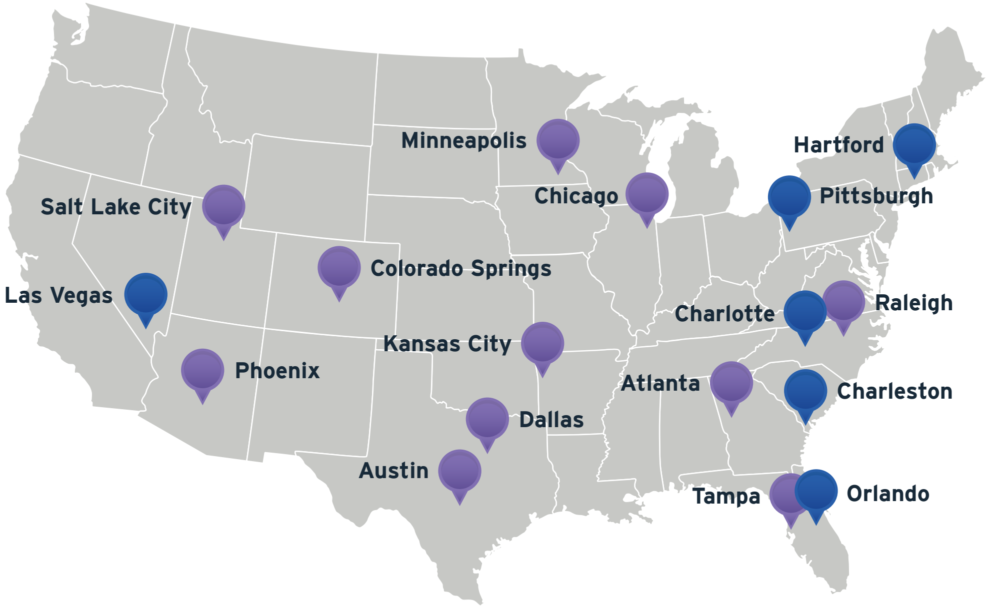
The next millennial magnets

Following the millennials and tech job growth, we have identified a group of established, but affordable tech hubs (Fig.6). Tech jobs already represent a sizeable component of the local economies (7.2% on average) and forward looking prospects are favorable. Other industries beyond tech drive growth in these areas as well. For example, health care and higher education often have strong ties to the tech sector, which is particularly evident in places like Raleigh and Austin. Corporate headquarters drive growth as well. Austin is home to Whole Foods, Minneapolis to Target, and Atlanta to Coca-Cola, UPS, Delta, and Home Depot. Finance and professional and business services play a large role in Phoenix, where favorable costs of doing business have supported tech-related expansions and relocations, particularly those related to the region's significant aerospace industry. In the Midwestern metros, big name tech firms play a key role in local growth. Garmin and Sprint, or example, are major employers in Kansas City while downtown Chicago has benefitted from burgeoning tech hubs and corporate defections from suburban areas. Google, Peapod, and Siemens have all established significant presence downtown in recent years.

A few wildcard contenders were also revealed in our analysis. In most of these metros, the share of tech employment is marginally below the national average of 4.9%, but growth has been strong and is expected to continue at a well-above average pace going forward. Aside from the commonality of smaller, but rapidly expanding tech sectors, the local economies of each are quite differentiated, offering unique opportunities for investors. Pittsburgh's economy is driven by the education, medical, and research synergies created by Carnegie Mellon and the University of Pittsburgh Medical Center. Orlando is driven by entertainment and hospitality. Disney is the largest employer in Orlando, and consistently ranks in the top ten desirable employers among millennials. Charlotte's competitive advantage in the banking industry is creating growth opportunities for financial technology. Charleston is becoming known as "Silicon Harbor" and a haven for tech start-ups. Despite having the smallest tech presence (2.4% of the total labor force), Las Vegas screened well for overall job prospects, strong growth in the tech sector, and population growth among millennials. Internet retailer Zappos.com is headquartered in Las Vegas and has invested significant capital in the city's urban core to attract new talent.

Fig.6: Next millennial magnets

Emerging wild cards	Established tech hubs
High tech job growth (F) = > 1.3%	High tech job growth (F) = > 1.3%
Recent high tech job growth ('12-'17) > 2.5%	High tech share of emp (2022F) > 5.0%
High tech share of emp (2022F) = 4%-5%	Affordability index (2022F) > 130



Source: TH Real Estate, Bureau of Labor Statistics, Census Bureau, Bureau of Economic Analysis, National Association of Realtors, Moody's Analytics

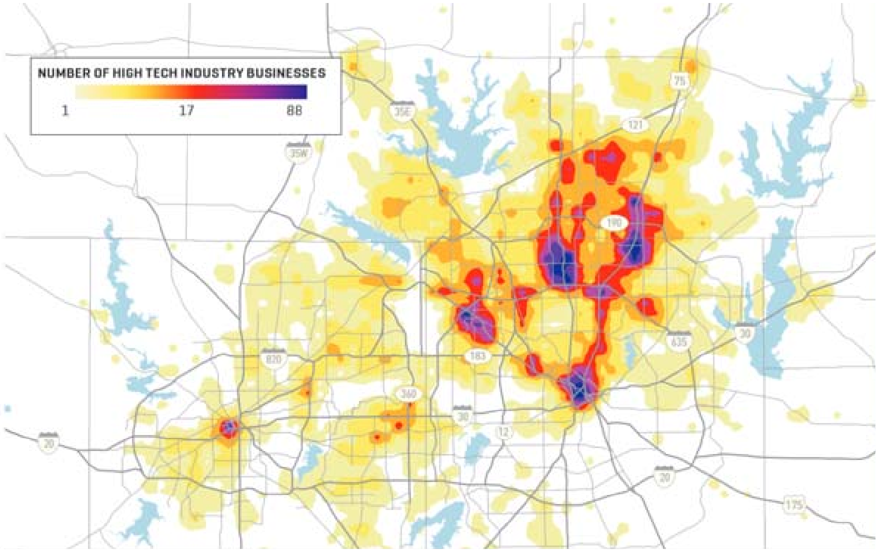
Investment opportunity: following the younger millennials

We believe that growing tech sectors will attract young millennials to the next millennial magnets. However, as noted, each of the metro areas is relatively affordable with higher home ownership rates. Multi-family opportunities, particularly among higher-end luxury properties, will be more limited. Exceptions are Atlanta, Austin, and Dallas where both middle- and higher-income groups are more likely to rent versus the national average. Among the other metros, core to core-plus multi-family properties could still represent potential opportunity on a selective basis due to the cost burdens of homeownership for younger workers. We believe exciting and emerging/redeveloping neighborhoods in some of these metros could prove particularly attractive to younger millennials in the next five to ten years.

Additionally, the presence of older millennials, either those already living there, or potentially some of the defectors from the expensive cities discussed previously will create investment opportunity as well. Tech-related employment nodes in these metro areas offer interesting opportunities for office and shopping center investment. Fig.7 highlights the geographic dispersion of tech hubs in Dallas, for example. The traditional car-dependent suburban tech cluster of Research Triangle Park in Raleigh/Durham shown in Fig.8 is slated to undergo a redevelopment into an urbanized science park in recognition of the need for retail, restaurant, and housing options in order to attract young talent.[11]

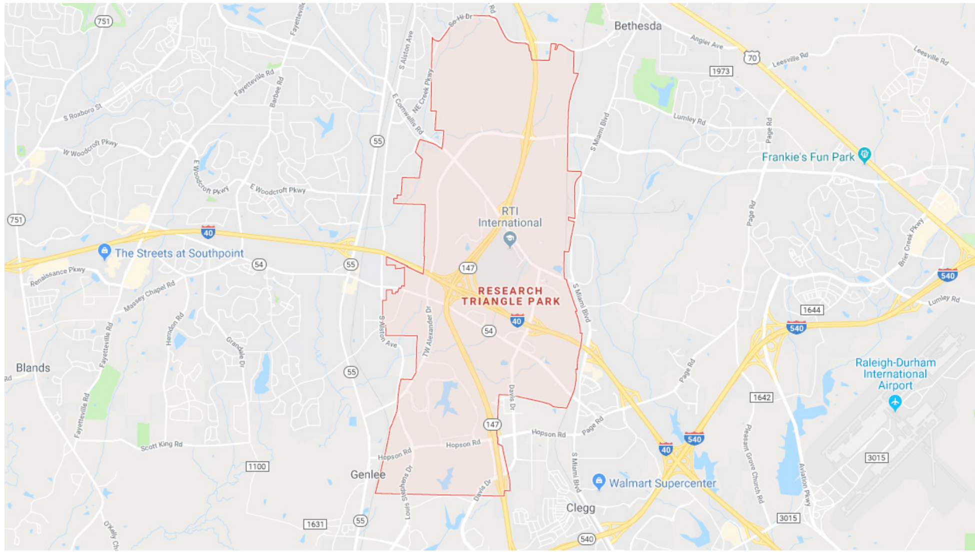
[11]Source: Brookings Institution, 'The Rise of Innovation Districts: A New Geography of Innovation in America', May 2014

Fig.7: Dallas tech hubs



Source: Dallas Regional Chamber, Dallas Economic Development Guide

Fig.8: Research Triangle Park, Raleigh/Durham



Source: Google Maps

Investment opportunity: tech super hubs

Finally we have identified a small group of established, but expensive tech "super hubs", shown in Fig.9. These metro areas were chosen because they have an above-average share of, and favorable growth expectations for, tech-based employment. Job growth of at least 1.3% per year through 2022 is above the national average of 1.2% during this time period. The absence of San Francisco and San Jose from this list may seem surprising, but expected growth in the tech sector did not meet the threshold at average to below average. Costs have risen so substantially in Silicon Valley that both employers and workers have been seeking more affordable alternatives. Hiring among tech firms there has slowed considerably as a result. We believe this will negatively impact property demand in the near-term.

We expect stronger tech-related job growth in Boston, Denver, New York, Portland, Seattle, and Washington, DC relative to other tech super-hubs to continue to attract the YM population. In addition, the high cost of living in these cities makes homeownership for a younger worker prohibitively expensive. For example, the rentership rate among higher income workers in New York is 31%, well above the 19.9% national average. We expect the next wave of young millennials to rent over the upcoming seven to ten year period, and most likely in the city center. Select office submarkets and high street retail in the urban core will also continue to benefit.

Fig.9: Tech super hubs; Cornell Campus in Roosevelt Island New York City

Tech super hubs
High tech job growth (F) = > 1.3%
High tech share of emp (2022F) > 5.0%
Affordability index (2022F) < = 130

Source: TH Real Estate, Bureau of Labor Statistics, Census Bureau, Bureau of Economic Analysis, National Association of Realtors, Moody's Analytics

Conclusion

The millennial generation has had considerable influence on commercial real estate in today's world, and will continue to exert influence in tomorrow's. Broad generalizations and characterizations have been made about the generation, some of which are underpinned by data, and some of which are anecdotal in nature. Most likely they are not so different from Gen X, but have been shaped by the prevalence of technology and coming of age during the greatest financial crisis in nearly 100 years. It is important to remember that the generation spans nearly twenty years, and distinctions should be made between the younger and older segments of the cohort, each in different life phases.

The older cohort has already considerably shaped trends in office space, shopping, and where and how they choose to live. They are now reaching, or have reached, the age at which most are facing typical "grown up" life decisions. The younger millennials, on the other hand, have arrived and will drive demand for apartments, office, retail, and even warehouse space in potentially different ways that bears watching. While aging and often overlooked cities such as Hartford, Pittsburgh, and Kansas City may offer more limited investment opportunities, we argue that following the millennials and technology growth affords investors a unique opportunity for revitalization and redevelopment.

Longer term, we look to Generation Z, who are largely the children of the smaller Gen X. Research on this generation is only just beginning, but indications of divergent preferences as compared to millennials are emerging, which will further impact commercial real estate as soon as five years from now when the youngest leave college and begin entering the workforce.

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