# New York City

Market Report
First Quarter 2018

Avison Young's 2018 First Quarter Manhattan Market Report includes our insights on office leasing, investment sales, debt & equity, valuation & advisory and retail leasing activity. While several factors including the economy, tax reform and rising interest rates have influenced the New York City real estate market to varying degrees, optimism remains. In the following pages, we highlight our observations and conclude that opportunity still exists throughout the Manhattan market to satisfy the different needs of occupiers, owners and investors of real estate.

For the Manhattan office leasing market, positive growth in office-using demand translated into a mixed bag of performance. While overall leasing volume ended down for the quarter due partly to the reduction in government related activity Downtown, gains seen in other markets were supported by the financial services, insurance and real estate (FIRE) sector, as well as other tenants in search of new construction or renovated space.

Activity continued to pick up among co-working and technology occupiers. In Midtown South, these entity types drove volume for both office leasing and investment sales. For the latter, we saw the largest acquisition by a tenant-user with Google's $2.4 billion purchase of the Chelsea Market building located at 75 Ninth Avenue. While this transaction contributed to the uptick in investment sales activity during the first quarter, it boosted institutional trade volume (characterized by Avison Young for sales from $150 million and greater), representing early signs of a rebound year. Also, tax reform related to favorable treatment of "pass-through" income for real estate businesses, as well as 1031 exchange rules that remain intact, adds to greater optimism for the industry as a whole.

Renewed activity was also experienced in the debt and equity environment. With rising interest rates and a corresponding increase in the 10-year Treasury yield, some owners across various property types decided to take action to either refinance or sell existing assets. These actions are deemed positive as long as the referenced Treasury yield remains below the 3.0 percent level.

In regards to looking at an automated approach to price real estate, our valuation and advisory team examined a statistical algorithm to complement the appraisal process for underwriting residential assets. This technological innovation, as demonstrated by our colleagues, could help improve the overall asset pricing process.

Trends in innovation also bode well for the retail sector. Despite an increase in store closures and the supply of available retail space in Manhattan that continues to outweigh demand, technology and the emergence of alternate uses of vacant space will help keep the sector active. Accordingly, our retail team anticipates new concepts to support a true omni-channel user experience.

As several opportunities remain that favor the New York City real estate market, we will continue to monitor any potential headwinds. We encourage you to reach out to any of our Avison Young service lines to help assist you in your strategic real estate decisions.

Best,

A. Mitti Liebersohn
President and Managing Director, NYC Operations

Marisha Clinton
Senior Director of Research, Tri-State

First Quarter 2018 / New York City

# Office Leasing

## Market Facts

**40%+**

Percentage of FIRE leasing activity in 1Q18

**25%+**

Year-over-year increase in 1Q18 Midtown South leasing volume

**13%**

Percentage of co-working leasing activity in Manhattan for 1Q18

**10.4%**

First quarter vacancy rate, Manhattan overall in equilibrium

*At Avison Young, we track office properties that are 20,000 square feet and greater

# Preference For New Product and Co-Working Activity Bode Well For Manhattan Office Leasing Market

### Top Office Employment Sectors, Including Financial Services Keep Manhattan Market in Equilibrium

For 2018, private-sector employment growth for New York City remains positive year-over-year and is up 2.0 percent through February and above state and national levels of 1.2 percent and 1.8 percent, respectively. Employment gains were the greatest in educational and health services, professional and business services, as well as financial services. While employment is a lagging indicator, yet a good sign of office-using demand, the above activity has so far translated into a mix bag of performance across the Manhattan office leasing market. By the end of the first quarter of this year, the Midtown South market outperformed year-over-year, while Midtown was soft and Downtown experienced a large reversal of prior year gains. What was evident was that tenants among the financial services, insurance and real estate (FIRE) category (which constituted over 40.0 percent of leasing activity for the first quarter), as well as others in search of newer space, exhibited an uptick in activity and helped to keep the overall Manhattan leasing market in equilibrium with the total vacancy rate at 10.4 percent by the end of the quarter. Watch for owners to put more capital towards building improvements in an effort to capture a greater share of such tenant demand.

### First Quarter Recap

### Midtown Remains the Target For Large Leases and the Greater Preference Toward Newer Product

First quarter leasing activity for Midtown was down less than 15.0 percent, however, the market remains the target for large-block tenants across a broad range of industries in search of new space even beyond Hudson Yards. A total of 11 of the 15 large leases this quarter in excess of 100,000 square feet were in Midtown. The largest of these transactions was a 418,241-square-foot new office lease executed by JP Morgan Chase for the remaining available space at 390 Madison Avenue in the Grand Central submarket, a building which is currently under renovation and slated for delivery this summer. In addition, the law firm of Latham & Watkins made progress on their execution of a nearly 400,000-square-foot new agreement at 1271 Avenue of the Americas, which is also undergoing a top-to-bottom renovation that is expected to be completed in 2019. Other tenants flocking to sizable new construction include NYU Langone Medical Center's announced 200,000-square-foot occupancy of the entire 159 East 53rd Street property in the Plaza District still under development until 2019, as well as the law firm of Greenberg Traurig's agreement to secure 133,000 square feet at One Vanderbilt Avenue also located in the Grand Central submarket, upon completion of the building's construction in 2020. Some of this pre-leasing activity, coupled with less space coming online than a year ago, attributed to the 70-basis point annual decline in the Midtown vacancy rate to 10.3 percent from 11.0 percent. In regards to pricing, while concessions are higher, the overall average asking rent of $83.49 for the first quarter is down 5.0 percent from one year ago and down 3.0 percent from the prior quarter driven partly by the older space that is being left behind.

### Co-Working Tenant Activity Drives Positive Year-Over-Year Volume Growth for Midtown South

In addition to growth by technology, advertising, media and information (TAMI) firms, real estate companies that have a focus on co-working (such as WeWork and Knotel) continue to bolster leasing activity in Midtown South. This activity resulted in positive year-over-year volume growth in excess of 25.0 percent for the period, representing the best first quarter performance for the market since 2015. The two large-block transactions in Midtown South during the quarter were executed by WeWork (167,000 square feet at 18 West 18th Street and 122,000 square feet at 154 West 14th Street – both in the Chelsea submarket, with the latter to potentially house a large corporate tenant). While Facebook and Google both executed leases in the 70,000 to 78,000 square foot range (Facebook – 78,000 square feet at 770 Broadway and Google – 70,000 square foot expansion at Pier 57), the majority of the remaining new leasing activity was for deals that closed under 35,000 square feet across a broad range of sectors (with Knotel activity falling in the 10,000 to 24,000 square-foot range with a total of eight new leases, inclusive of the entire building at 40 Wooster Street). Despite strong leasing activity, the overall vacancy rate for Midtown South of 8.3 percent is up 50 basis points from 7.8 percent a year ago, primarily due to an excess of 145,000 square feet of sublet space that came back on the market at 61 Ninth Avenue when Aetna was acquired by CVS Health (the current under construction building was initially fully leased by Aetna). The overall average asking rent for the period of $78.00 is up over 7.0 percent from one year ago and the prior quarter, driven in part by the higher asking rent for the available sublet space referenced.

### Prior Gains in Leasing Volume Reduced for Downtown; Absence of Government-Related Transactions

The Downtown office market experienced a reversal of the strong prior year leasing activity, with volume down over 70.0 percent year-over-year for the first quarter of 2018. This decline is partly attributed to the absence of the significant number of government/public administration tenant transactions, which made up four

## MARKET DATA POINTS

### Manhattan Overall

| Indicator | 1Q17 | 1Q18 |
|---|---|---|
| Vacancy | 10.80% | 10.40% |
| Rent | $79.74 | $77.67 |
| Absorption | (2,882,572) SF | (821,867) SF |

### Midtown Overall

| Indicator | 1Q17 | 1Q18 |
|---|---|---|
| Vacancy | 11.00% | 10.30% |
| Rent | $88.07 | $83.49 |
| Absorption | (831,970) SF | (164,282) SF |

### Midtown South Overall

| Indicator | 1Q17 | 1Q18 |
|---|---|---|
| Vacancy | 7.80% | 8.30% |
| Rent | $72.50 | $78.00 |
| Absorption | 36,804 SF | (443,771) SF |

### Downtown Overall

| Indicator | 1Q17 | 1Q18 |
|---|---|---|
| Vacancy | 12.80% | 12.30% |
| Rent | $64.42 | $64.28 |
| Absorption | (2,087,406) SF | (213,814) SF |

## Largest Blocks of Contiguous Space Currently Available

| Address | Square Feet | Market |
|---|---|---|
| 3 World Trade Center | 1,537,065 | World Trade Center |
| 330 West 42nd Street | 661,960 | Times Square/West Side |
| 1 World Trade Center | 435,631 | World Trade Center |
| 1250 Broadway | 286,250 | Penn Plaza/Garment |
| 9 West 57th Street | 278,200 | Plaza District |

## Notable Lease Transactions

| Tenant | Address<br>Submarket | Size<br>Lease Type |
|---|---|---|
| JP Morgan Chase | 390 Madison Avenue<br>Grand Central | 418,241 SF<br>New lease |
| Simon & Schuster | 1230 Avenue of the Americas<br>Sixth Avenue/Rockefeller Center | 300,150 SF<br>Renewal |
| Omnicom Group | 195 Broadway<br>Financial District | 288,000 SF<br>Renewal |
| NYU Langone Medical Center | 159 East 53rd Street<br>Plaza District | 200,000 SF<br>New lease |
| Bank of America | 225 Liberty Street<br>World Trade Center | 189,127 SF<br>Renewal |

of the nine large-block deals in the first quarter of 2017 compared to none of the two in the first quarter of 2018. The two large-block deals signed in the market this quarter were renewals executed by Omnicom Group (TAMI tenant – 288,000 square feet at 195 Broadway in the Financial District submarket) and Bank of America (FIRE tenant – 189,127 square feet at 225 Liberty Street in the World Trade Center submarket). In addition to this activity, the remaining transactions were also fewer in number and significantly less in size, with the majority of them being new leases under 15,000 square feet. In terms of vacancy, the rate for Downtown of 12.3 percent declined by 50 basis points from 12.8 percent a year ago partly due to a reduction in availability within the World Trade Center submarket. The overall average asking rent for Downtown of $64.28 for the period is relatively flat with the prior year and quarter.

Suitable leasing options remain available throughout Manhattan for all tenant types. For those that favor newer product in or outside of Hudson Yards, in some cases such properties are being quickly pre-leased by the larger, less price sensitive tenants. We expect more landlords and owners of office real estate to allocate more capital for building improvements in order to provide a more competitive offering to a growing broader range of tenants.

**Marisha Clinton**
Senior Director of Research, Tri-State
marisha.clinton@avisonyoung.com
212.729.1193

## Trends to Watch

- Watch for an increase in capital improvements by various buildings owners in an effort to offer more competitive product.
- Watch for increases in vacancy in those submarkets that lack new and efficient product. This in turn could put downward pressure on those asking rents for older space being left behind.
- Watch for co-working tenant activity to further boost leasing volume in Midtown South and beyond.

## Markets by the Numbers

| Submarket | Inventory (SF) | Direct Vacant (SF) | Sublet Vacant (SF) | 1st Quarter 2018 Overall Vacancy Rate | 1st Quarter 2018 Net Absorption (SF) | Current Under Construction (SF) | Overall Average Asking Rent Class A | Overall Average Asking Rent Class B |
|---|---|---|---|---|---|---|---|---|
| Midtown | | | | | | | | |
| Grand Central | 54,819,358 | 5,108,648 | 951,017 | 11.1% | (170,889) | 1,733,000 | $73.03 | $58.46 |
| Penn Plaza/Garment | 19,969,798 | 1,470,693 | 665,117 | 10.7% | (187,842) | 0 | $69.02 | $61.33 |
| Hudson Yards/ Manhattan West | 5,519,295 | 226,781 | 5,992 | 4.2% | (232,773) | 7,483,000 | $104.92 | N/A |
| Plaza District | 77,531,806 | 6,205,510 | 2,121,094 | 10.7% | 649,148 | 200,000 | $98.76 | $64.05 |
| Sixth Avenue/ Rockefeller Center | 55,985,260 | 4,797,562 | 906,391 | 10.2% | (440,804) | 0 | $87.67 | $63.46 |
| Times Square South | 24,964,930 | 2,090,973 | 614,595 | 10.8% | (145,801) | 0 | $73.30 | $59.62 |
| Times Square/West Side | 37,362,312 | 2,709,424 | 520,013 | 8.6% | 364,679 | 0 | $82.74 | $62.91 |
| **Total** | **276,152,759** | **22,609,591** | **5,784,219** | **10.3%** | **(164,282)** | **9,416,000** | **$87.41** | **$60.92** |
| Midtown South | | | | | | | | |
| Chelsea | 22,780,301 | 1,272,980 | 573,784 | 8.1% | 51,869 | 138,900 | $147.01 | $60.59 |
| Hudson Square | 13,865,383 | 1,185,925 | 805,794 | 14.4% | (726,224) | 0 | $90.37 | $67.14 |
| Gramercy Park | 30,743,242 | 1,401,909 | 442,073 | 6.0% | 217,061 | 0 | $66.30 | $64.24 |
| SoHo/NoHo | 8,743,981 | 530,893 | 141,504 | 7.7% | 13,523 | 0 | $99.85 | $70.87 |
| **Total** | **76,132,907** | **4,391,707** | **1,963,155** | **8.3%** | **(443,771)** | **138,900** | **$99.27** | **$64.90** |
| Downtown | | | | | | | | |
| TriBeCa/City Hall | 19,351,851 | 917,095 | 231,945 | 5.9% | 83,216 | 0 | $61.19 | $55.63 |
| Financial District | 53,199,740 | 5,472,629 | 1,087,513 | 12.3% | (287,208) | 0 | $60.03 | $50.94 |
| World Trade Center | 26,459,533 | 3,947,350 | 557,537 | 17.0% | (9,822) | 0 | $76.07 | $48.00 |
| **Downtown Total** | **99,011,124** | **10,337,074** | **1,876,995** | **12.3%** | **(213,814)** | **0** | **$66.27** | **$51.03** |
| **Manhattan Overall Total** | **451,296,790** | **37,338,372** | **9,624,369** | **10.4%** | **(821,867)** | **9,554,900** | **$81.77** | **$60.81** |

*Data as of 4/3/2018*

AVISON YOUNG

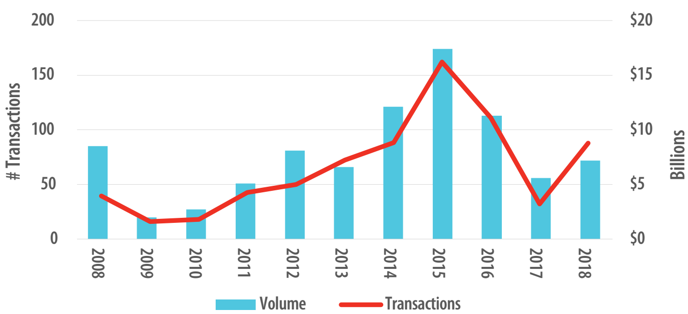
First Quarter 2018 / New York City

# Investment Sales

## Early Signs of a Rebound

At the close of the first quarter of 2018, the trends suggest that we are in the opening act of a strong year – perhaps reminiscent of 2016, but not quite the prosperous period of 2015 nor the slide of 2017. At the onset of 2018, dollar volume increased by 175.3 percent and transaction count saw a 28.6 percent rise over last year. The $8.8 billion dollars that traded is the fourth highest of any first quarter in the last 10 years – even when excluding the huge $2.4 billion trade of 75 Ninth Avenue to Google. Although technically below the decade average, the 72 transactions during this quarter were still above the median for the last 10 years. Together, and especially with the recent memory of 2017's lackluster tallies, 2018 is poised to be the rebound year which could mean an extension of the current cycle.

### Comparative Historical First Quarter Investment Sales




### Ranking a Decade of First Quarter Performance

| Rank | Year | Transactions |
|---|---|---|
| 1 | Q1 2015 | 174 |
| 2 | Q1 2014 | 121 |
| 3 | Q1 2016 | 113 |
| 4 | Q1 2012 | 81 |
| 5 | Q1 2018 | 72 |
| 6 | Q1 2013 | 66 |
| 7 | Q1 2017 | 56 |
| 8 | Q1 2011 | 51 |
| 9 | Q1 2010 | 27 |
| 10 | Q1 2009 | 20 |

| Rank | Year | Dollar Volume |
|---|---|---|
| 1 | Q1 2015 | $16,206,294,919 |
| 2 | Q1 2016 | $11,126,879,080 |
| 3 | Q1 2014 | $8,818,808,986 |
| 4 | Q1 2018 | $8,794,709,731 |
| 5 | Q12013 | $7,235,346,858 |
| 6 | Q1 2012 | $4,985,958,650 |
| 7 | Q1 2011 | $4,274,598,351 |
| 8 | Q1 2017 | $3,194,876,031 |
| 9 | Q1 2010 | $1,781,982,601 |
| 10 | Q1 2009 | $1,596,987,643 |

## Tailwinds and Headwinds in the Macro-Economy

**Tailwinds:** Throughout 2017, the Manhattan real estate market experienced lackluster growth in what was otherwise a strong year for the U.S. economy. As 2018 began, many macroeconomic unknowns have become known, which has led to increased investor confidence.

Significant uncertainty abounded in the early days of the current administration in regards to the direction the Federal Reserve would take regarding interest rates, let alone if President Trump would reappoint then-Chairwoman Yellen to a second term, or move the Fed in a dramatically different direction. Today, with the appointment of Fed Chair Jay Powell and his general continuation of former Chair Yellen's fiscal policy, worries regarding interest rates have cooled and investors have baked interest rate growth into their long-term strategy.

Underpinning the market enthusiasm was the belief that the Republican-controlled Congress would deliver a significant tax cut during 2017. As this began to take shape, rumors floated regarding a number of provisions that could have had adverse effects on the commercial real estate industry – most notably, the tax deductibility of interest and the 1031 exchange. Today, with the enactment of the Tax Cut and Job Act and its implementation, the commercial real estate industry is confident in knowing our favorite tax laws went unchanged. In fact, the changes to the pass-through income tax rate and the doubling of the standard deduction, which dramatically altered the incentive to buy or rent a home in favor of renting, were a significant boon to the commercial real estate industry as a whole.

Finally, in August and September of last year, the Chinese government took significant steps to limit the flight of Chinese capital into foreign investments. As these rules were set in motion, U.S. investors, aware of the extent to which Chinese money powered the big gains of 2015, were uncertain the direction the government would move into the future. Today, as the announcements of 2017 have been detailed by the Chinese government, U.S. investors have fully adjusted their expectations and buyers and sellers are much closer when it comes to pricing expectations.

Further, with the drop in Chinese money, foreign investment may have lost its luster, but as a percentage of total capital investment in real estate, it reverted simply to the 10-year mean. Taking the place of Chinese money, the Germans, Canadians, Singaporeans, and English have invested significant capital into Manhattan real estate. Additionally, Chinese money may have slowed, but it still makes up a significant percentage of capital flowing in to Manhattan properties.

These macroeconomic uncertainties that tempered the 2017 market have today become known. Therefore, the removal of this uncertainty combined with a generally healthy growth in GDP and jobs point to positive growth for the Manhattan real estate market.

Headwinds: All things considered, 2018 has the potential to be a better year for Manhattan real estate. However, this market's strong fundamentals are forced to share the stage with a slew of macroeconomic factors that complicate long-term decision-making and contribute to sidelining a significant amount of capital and key players.

First, the market remains rocked by evolving trends that shape how Americans live their lives every day. Technology, through companies such as Amazon, AirBnb, and others, is keeping investors on their toes and they attempt to divine the future of the American lifestyle. While we haven't seen the oft-prophesied "retail apocalypse," online retail does continue to grow as a percentage of all shopping in the U.S., and while Amazon makes moves into brick and mortar retail by buying stores such as Whole Foods, macro trends suggest that the experience for the American consumer will look different in the future. The question on every investors mind is "how"?

Recently, investors have added into their mental calculations the uncertainty surrounding the Trump Administration's trade policies. With already-announced U.S. tariffs levied against foreign steel and aluminum, and the introduction of retaliatory tariffs by the Chinese as of this writing, few, if anyone, knows where these tariffs could lead. Further, given the breath of various elements tied to commercial real estate–such as business performance, employment, retail inventories, imported non-final goods, and construction costs, to name a few–the potential impact these could have on multiple segments of the real estate market is a major factor weighing on investors' minds

With every new year comes new opportunities and challenge- and 2018 is no exception. What may be different is the magnitude of the uncertainty regarding the direction of these changes, altering what may be little uncertainty into marginally more. Only time will allow us to divine what the results of these trends will be, and how they will affect our industry moving forward.

### You Get Nothing If You Wait For It

In response to this tale of two macroeconomics, investors are for the most part looking on the bright side and moving forward with trading properties. Although the $2.4 billion Google deal was the third largest ever for a single asset and the largest ever acquisition by a tenant-user, the real optimism in the market is evidenced by the number of trades in the quarter. Further, the data does suggest that investors are playing smart and focusing on properties that are more likely to remain stable over the long run.

This quarter, similarly to previous ones, approximately 75.0 percent of trades were either office or residential units, and the majority of dollars went to office properties. This trend, though consistent with the Manhattan market in general, has been intensifying over the past five years, as these real estate food groups took a disproportionate share of the market trades and volume – rising from 62.0 percent of the first quarter trades to roughly 75.0 percent of all trades. Asset classes losing ground are the hotel and retail sectors – two of the property types facing the largest changes in fundamentals.

Given expectations for a strong market coupled with some uncertainty, these outcomes were expected and are likely to continue as the economy continues the long recovery and even still today as macroeconomic uncertainty remains a major issue.

Since the 2015 peak, the direction of the market has been murky as the velocity dropped to a low volume of 56 trades and $1.5 billion in transactions in the first quarter of 2017. The rebounding market is evident in the trends which indicate a stabilizing market that should perform at or around 2016 levels in terms of trade quantity and dollar value. Buyers and sellers previously on dramatically different pages are more closer today to humming the same tune, which will result in higher trade counts. Assuming no dramatic changes occur that throw the economy off course, this level of economic activity should emerge as the new normal.

### The Market: In Parts

The Manhattan sales market, as tracked by Avison Young, includes closed transactions greater than $10 million and comprises of the middle market subsection for deals $10 million to less than $150 million and an institutional market from $150 million and greater. In this first quarter of 2018, both the middle market and institutional trade volume rose over the previous year, with 61 middle market trades and 11 institutional trades.

However, the major force powering the overall relative success of 2018 over the previous year is the institutional trades. Between the end of the last quarter and the end of this one, while total transactions declined from 78 trades to 72, the number of institutional transactions actually rose from 9 to 11 trades. Similarly, the market saw an uptick in the number of institutional transactions this year over the first quarter of 2017, with output almost tripling.

In terms of volume, the middle market held relatively steady, over performing relative to the first quarter of 2017, though under performing relative to the end of last year.

On the institutional volume front, the historic Google closing powered an above-average $6.7 billion this quarter, with the Google transaction alone responsible for approximately one third of that total amount. However, relative to historical first quarters, this was nevertheless a strong quarter for institutional sales volume. Whether it's a trend or not is yet to be determined.

### Construction Questions Emerge

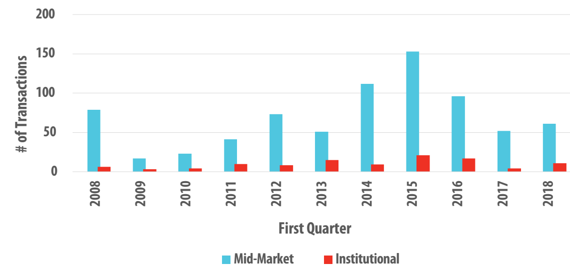
A story emerging in the last few weeks has been the extent to which tariffs will impair the ability of the New York City construction market to adequately match demand with supply if prices of core goods such as steel rise dramatically in either a tariff spat or in the worst case a global trade war. A slowly-reacting supply could lead to unsatisfied demand on the part of space users and building owners, ratcheting up demand and therefore prices in the short term. In the long-term, this could lead to an aging of the supply and overinflated costs, if we assume that the tariffs would not represent a new normal.

**Ethan Bidna**
Analyst
Capital Markets Group
ethan.bidna@avisonyoung.com
212.230.5993

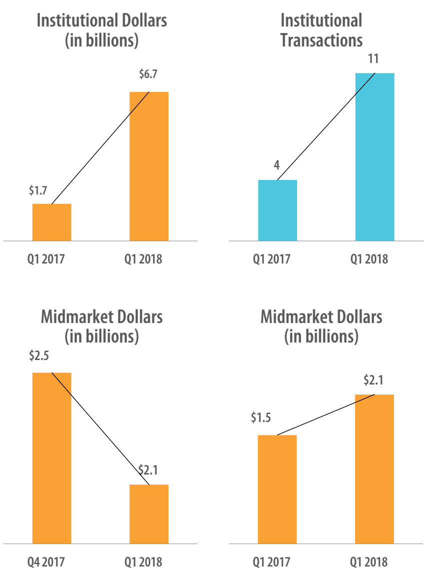
## Top First Quarter 2018 Sales

| Buyer<br>Address<br>Seller | Size<br>Type | Price<br>Price/SF |
|---|---|---|
| Alphabet Inc.<br>**75 Ninth Avenue**<br>Jamestown | 1,200,000 SF<br>Office | $2.4 billion<br>$2,000/SF |
| Oxford Properties Group,<br>CPP Investment Board<br>**340 West Street**<br>Atlas Capital Group, Westbrook Partners | 1,200,000 SF<br>Office | $700.0 million<br>$583/SF |
| Altmark Group, Blenden Group,<br>W Brothers Realty<br>**1700 Broadway**<br>James Rice | 626,000 SF<br>Office | $453.0 million<br>$724/SF |
| Manhasset Bay Associates<br>**330 Hudson Street**<br>Winther Investment | 466,000 SF<br>Office | $385.0 million<br>$826/SF |
| HAP Investments<br>**1180 Sixth Avenue**<br>Waterbridge Capital | 384,000 SF<br>Office | $305.0 million<br>$794/SF |

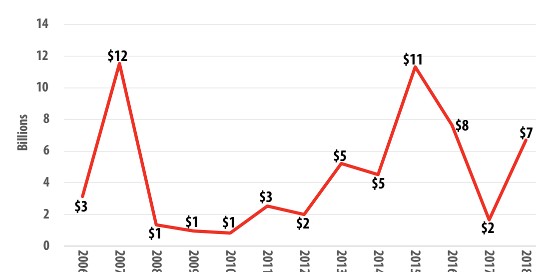
## Mid-Market vs. Institutional Transactions in the First Quarter




## Q1 2018 vs Q1 2017 Institutional Trades




## Institutional Total Dollar Trades in the First Quarter




## Trends to Watch

- The more big bets that we see investors taking, the more certain we can be that we are pointing toward strong fundamentals and a positive investor outlook
- Watch the government's actions on tariffs as they apply to CRE construction needs
- Will the strength of this quarter lead to similar success in the second?

First Quarter 2018 / New York City

# Debt & Equity

## Glimmers of Hope to Begin 2018

Last quarter, we discussed the dismal drop in real estate sales transaction volume which came with a decline for Manhattan from $80 billion in 2015 to $35 billion in 2017. While cap rates and per square foot prices held up in 2017, though there was a 5.0 percent drop in property values, the fear is that volume dried up as a result of seller's unwillingness to accept market clearing prices. Low interest rates and a lack of distress has allowed prospective sellers to simply hold onto properties longer. While there may still be many cases that qualify under that supposition, there are signs that the market has begun to pick up at the start of 2018. As new first quarter listings have yet to be recorded as closed transactions, however, much of the evidence is anecdotal. But without exception, every owner, lender and broker that we have spoken to has reported a flurry of activity that was not apparent at any time during 2017. Of course, we will have to see if such listings convert into actual sales, which would serve as positive confirmation of the latter trend.

## The Cause of the Potential Resurgence

A combination of factors are the cause for this renewed activity. Rising interest rates (the 10-year Treasury has risen from roughly 2.0 percent around Labor Day to almost 2.9 percent today) has caused owners to take action either through refinance or consideration of a sale. The perception that we are on borrowed time – the cycle has lasted much longer than average – has caused owners to think about taking chips off the table. As a result, listings are up. Meanwhile, newly formed investment funds are taking the opportunity to deploy capital and buy value-add assets on any signs of even the smallest dip in pricing. Still, others are keeping their powder dry and are waiting for an anticipated larger drop. This "cash on the sidelines" will help buffer any larger drop in pricing, as such buyers await to deploy their capital.

## Impact on Retail

Retail has taken a step back with the Toys "R" Us bankruptcy. While this was not a shock to the market, it casts a pall over the sector as everybody wonders, "Who's Next?" Other retailers ready to step up and fill vacant stores left behind by Toys "R" Us are not plentiful. The end result will clearly be a buyers' market. Prior to the Toys "R" Us bankruptcy, cap rates on retail were already 100 and 200 basis points wider than office and multi-family, respectively. This gap should widen further as the market attempts to absorb this news and potential buyers either back away or lower their bids. On the debt side, all retail properties with Toys "R" Us in the center are being impacted and as a result, B-piece buyers could potentially take a hit. This will in turn make them more skittish on buying more B-pieces of a retail-heavy securitization.

## Outlook for the Construction Environment

While traditional lending remains robust for stabilized and cash-flowing assets, construction lending remains a challenge. Banks still in the construction lending business favor only 50.0 percent LTV loans, with a preference for lending only to existing customers or well-heeled borrowers. In regards to product type, such banks favor either multifamily rental or pre-leased commercial assets. For the developers building hotels, condos or any type of speculative development, the only financing choice are the hard money lenders. In this case, with interest rates starting at 9.0 percent, the borrowers have to pay a huge premium. This in turn will start to crimp new construction going forward.

**Dan E. Gorczycki**
Senior Director
Capital Markets Group, Investment, Investment Management
dan.gorczycki@avisonyoung.com
212.729.7087

## Trends to Watch

- While sales transaction volume was dismal in 2017, there have been glimmers of hope pointing to a pick up already at the start of 2018. Watch for further signs to potentially support a greater increase in activity.
- Some buyers that have recently raised new funds are deploying capital to take advantage of the mild dip in pricing. Meanwhile, others are keeping their powder dry in anticipation of a larger price reduction.
- Interest rates are a concerning factor, as they have risen 1.0 percent in the last six months. Watch for signs of an eventual impact on cap rates.

# Determinants of Real Estate Prices: How Automation Could Have an Impact on Real Asset Valuation

## Introduction

In this article we discuss a more novel way of looking at value. The text presented consists of excerpts from an econometric research paper authored by Jonathan Panzures, an Associate in Avison Young's Valuation Advisory Services group. It was titled *Determinants of Real Estate Prices – Hedonic Valuation and Time Series Analysis Across the New York Metropolitan Area*. This work was also published in *The Economics Review at NYU*. For the purpose of this quarterly update, the focus is solely on the analysis of the hedonic pricing model.

In this work, various factors were examined to accurately determine residential real estate prices in New York City, across the boroughs of Manhattan, Brooklyn and Queens. In doing so, the data spanned 24 neighborhoods within the New York Metropolitan Area. Some factors were structural, while others were environmental. The goal was to build a valuation model with these variables and be able to define their exact marginal effects. The collected data was then used to price a sample of single-family residential assets, as such properties have far less variability that affect price relative to commercial buildings.

As society has become increasingly more reliant on technology, there has been a rise in the various forms of labor being augmented by automation. In addition, the ever-increasing demands of corporations to become more efficient has led to a greater reliance on technological innovation. Accordingly, automation will continue to have a more profound importance in real estate. The question is how, and to what degree? The following text is intended to play on this idea, while highlighting how a firm could implement a simple algorithm to help complement the valuation process for underwriting real assets.

## The Cross Sectional Study

The price of a residential real asset is the summation of a bundle of components and their respective marginal values; these components are physical characteristics and environmental information that help describe a property and its surroundings. This reality is the fundamental idea behind real estate valuation; finding the minimum error function that relates a given set of factors to a corresponding price.

$$V_i = \boxed{\quad ? \quad}$$

If the value of residential property "*i*" is the area of this square, how is this square divided up? What proportion of its area is dependent on the properties' physical characteristics, and what proportion is dependent on the features of its surrounding environment? Which factors belong inside this square to create a robust model of the true value, and which factors are excessive, leading to inaccuracy? How much of it is devoted to the unmeasurable variability in consumer preferences, or geographic locality? These are, very generally, the questions attempted to be answered with our valuation model.

## The Process

Residential real assets were examined in New York City across the three previously referenced boroughs. The locational scope of this study was 24 randomly selected neighborhoods, defined by zip codes j ε J, which represents a subset of the entire sample. The sole physical characteristic ultimately examined was the ***square footage*** of each property. Other factors incorporated were the ***number of violent crime occurrences*** in each neighborhood along with the ***number of loud noise complaints*** in 2015, and the ***2016 inflation adjusted median household income*** for each neighborhood in 2014. Statistical analysis was utilized to relate these four independent variables to the relevant dependency factor, which was the list price of each residential property ***i***.

The goal was to build and refine a model that derives the marginal values of each of the four variables and assess the statistical significance of each attribute in explaining the price. From these results we were able to estimate the degree of the societal cost and benefit of each of these attributes and then use the marginal values of the statistically significant factors to value a property i for each zip code j. Post analysis, a comparison between the model price and the list price was calculated to define the degree of error in each valuation. This process provided us with a sense of the model's accuracy. The variability of the degrees of error based on various model specifications was also considered.

### The Model – A True Statistical Approach

The pricing model utilized for a specific property i in each neighborhood j ε J, was:

$$V_{i,j} = \beta_1 Sqft_{1i} + \beta_2 Noise_{2i,j} + \beta_3 Crime_{3i,j} + \beta_4 MedInc_{4i,j} + \epsilon_{i,j}$$

This model derives the degree to which each of the four characteristics contributes to the overall price of each property i. Our expectation (based on the existing data for a single-family residential asset) was that square feet would contribute positively to price. The more relative living space a respective property has, the higher its inherent value should be, especially given the density of an urban metropolis like New York City. Similarly, we suspected median household income would also be a positive attribute. Areas with high neighborhood incomes will likely have higher levels of prosperity than low income areas. This reality may be a proxy for the overall quality level of properties in each neighborhood j ε J. Additionally, we hypothesized that noise complaint frequency and violent crime occurrence would both be negatively correlated with a property's price; we expected that with each additional incident of violence or additional noise complaint, a locality's respective residencies should lose some degree of value.

### Results

After accounting for a variety of statistical errors, and regressing square feet, noise, crime, and median income on price, we attained all of our expected prior signs. With an increase in square footage and median income, there was a beneficial and positive effect on a property's valuation. Conversely, with increased incidents of noise and crime in a neighborhood, as expected there was a greater discount imposed on a respective property's median value. Noise and crime proved to have a negative relationship with price.

Overall, our individual variables for square feet, noise, crime, and median income were quite significant. Square feet proved to be most significant with a t-value of roughly 22, while noise and crime had t-values of approximately -5 and -6, respectively. Median income had a t-value of 9. A t-value is an indicator of a variable's significance. All of these variables were significant at the 1.0 percent level.

To test this valuation model's overall strength, we performed an F-test. This model had an observed F-statistic of 2020, on 4 and 2607 degrees of freedom. With this data at hand, when calculated, the model's critical F-statistic was 2.375, at the 5.0 percent significance level. Since F-observed was far greater than the critical value, this result shows that the overall model was quite robust. Moreover, the model had a relatively high adjusted R-squared of .7557; suggesting that ***square feet, noise, crime, and median income explain 75.57 percent of a property's price***. These results proved to be very interesting. ***By utilizing merely one structural variable and three environmental variables, we saw a higher degree of explanatory power within the model***.

**Linear Hedonic Model Results**

| | Estimate Std. | Error | T-value | Pr(>\|t\|) | |
|---|---|---|---|---|---|
| **Square Feet** | 1,790.84 | 83.08 | 21.55 | < 2.2e-16 | *** |
| **Noise** | -958.80 | 194.14 | -4.93 | 8.36E-07 | *** |
| **Crime** | -6,888.77 | 1,185.47 | -5.81 | 6.97E-09 | *** |
| **Median Income** | 9.73 | 1.07 | 9.03 | < 2.2e-16 | *** |
| **Signif. Codes:** | 0 '***' | 0.001 '**' | 0.01 '*' | 0.05 '.' | 0.1 ' ' |
| **Residual Standard Error: 2,677,000 on 2607 degrees of freedom** | | | | | |
| **(1309 observations deleted due to missingness)** | | | | | |
| **Multiple R-squared: 0.7561** | | | **Adjusted R-Squared: 0.7557** | | |
| **F-Statistic: 2020 on 4 and 2607 DF, p-value: < 2.2e-16** | | | | | |

### Coefficients and Price Forecasting: A Field Test

We were able to use the model to forecast individual residential real estate properties' pricing throughout all 24 of our randomly selected New York City neighborhoods.

Post regression, the hedonic valuation model's slope coefficients proved to display interesting relationships between our independent variables and property price. In regards to square footage, it was discovered that ***for every one square foot increase of a subject site's size, the price of that residential property should increase in value by approximately $1,790***. It is also important to note that ***for every increase in average noise complaint frequency, a property will experience a discount***

***of -$985***. Similarly, for crime, ***for every one-unit increase in a neighborhood's average number of violent offenses, a property will decrease in value by $6,888***. This finding was of great value, as it confirmed our expectation that crime proved to be more detrimental to a property's overall valuation than noise. Finally, it was discovered that ***every $1.00 increase in a neighborhood's median household income led to a $9.73 increase in property value***.

After gaining a better understanding of this model, it was used to price a randomly selected property in each of the 24 neighborhoods. This process was done by having the algorithm automatically input a subject property's square footage, along with its respective neighborhood's average noise, crime, and median income levels into the hedonic valuation model. The results were then compiled to obtain a comparison between our forecasted values and the broker's listed prices for each assessed asset.

### Summary and Conclusions

Although a more robust model would be necessary, this simple study shows how technology could complement the field of valuation. Through running our own "field test", we used our hedonic model to simultaneously estimate and price a randomly sampled series of 24 individual properties, across all of our respective zip codes in the study. The results were intriguing, and the model had a seemingly strong overall ability to value properties across an eclectic range of neighborhoods, all with their own unique characteristics. Ultimately, these results showed that by using merely four variable factors, in combination with a more automated form of statistical analysis, one could almost match the broker's listed price for many of the sampled properties. Keeping up with modern technological trends is becoming increasingly more important, as these movements provide firms with a competitive edge. It will be interesting to see if commercial real estate companies will start implementing more automated means of analysis, similar to that which was presented in this work. If so, what affect will this technology have on valuation specialists? Will it truly complement these skilled laborers, or eventually deem them routine and anachronistic?

**Jonathan Panzures**
Associate
Valuation Advisory Services
jonathan.panzures@avisonyoung.com
212.858.0476

**Hedonic Valuation Model (Adjusted for Heteroscedasticity)**

| Borough | Neighborhood | Listed Price | Hedonic Valuation | Difference | % Change |
|---|---|---|---|---|---|
| Manhattan | Central Harlem | $1,421,000 | $1,578,181 | -$157,181 | -0.10 |
| | Chelsea | $2,395,000 | $2,633,875 | -$238,875 | -0.09 |
| | FIDI | $5,285,000 | $4,963,032 | $321,968 | 0.06 |
| | Gramercy Park | $2,650,000 | $3,323,276 | -$673,276 | -0.20 |
| | LES | $2,315,000 | $1,920,239 | $394,761 | 0.21 |
| | SoHo | $3,000,00t0 | $3,025,082 | -$25,082 | -0.01 |
| | UES | $5,500,000 | $5,397,276 | $102,724 | 0.02 |
| | UWS | $4,995,000 | $4,822,758 | $172,242 | 0.04 |
| Brooklyn | Bay Ridge | $260,000 | $428,368 | -$168,368 | -0.39 |
| | Brooklyn Heights | $1,999,000 | $2,838,326 | -$839,326 | -0.30 |
| | Brownsville | $1,100,000 | $3,791,923 | -$2,691,923 | -0.71 |
| | Bushwick | $995,000 | $2,629,222 | -$1,634,222 | -0.62 |
| | Canarsie | $4,995,000 | $4,883,270 | $111,730 | 0.02 |
| | Coney Island | $579,000 | $764,032 | -$185,032 | -0.24 |
| | Crown Heights | $3,449,000 | $3,240,533 | $208,467 | 0.06 |
| | DUMBO | $5,995,000 | $5,821,424 | $173,576 | 0.03 |
| | Flatbush | $829,000 | $359,708 | $469,292 | 1.30 |
| | Park Slope | $780,000 | $894,669 | -$114,669 | -0.13 |
| | Williamsburg | $1,825,000 | $753,269 | $1,071,731 | 1.42 |
| Queens | Astoria | $999,000 | $1,582,368 | -$583,368 | -0.37 |
| | Bayside | $1,798,000 | $4,760,715 | -$2,962,715 | -0.62 |
| | Corona | $249,000 | $168,508 | $80,492 | 0.48 |
| | Forest Hills | $1,679,000 | $3,582,413 | -$1,903,413 | -0.53 |
| | South Jamaica | $479,000 | $1,808,457 | -$1,329,457 | -0.74 |

## Trends to Watch

- Watch out for commercial real estate firms implementing more automated valuation techniques. Will firms and banks look towards automation to cut corporate costs?
- Keep in mind the potential costs and benefits that automated analysis will have on valuation specialists. Will cost saving techniques ultimately lead to shifts in employment?
- Keep in mind the competitive advantage new valuation techniques can provide a firm.

AVISON YOUNG

First Quarter 2018 / New York City

# Retail Leasing

## Drivers of Retail Leasing

New York City Tourism is one of the biggest drivers of retail leasing. By the end of 2017, there was a total of 62.8 million visitors to Manhattan, which represents an increase of 2.3 million visitors from the prior year. Of the nearly 63 million visitors for 2017, 49.7 million were domestic and 13.1 million were international. In addition, an increase in Asian and South American visitors helped offset declines in the city's European traveler base. Worth noting is that in addition to driving retail, the increase in tourism bodes well for hospitality and led to a record 36.4 million hotel room nights booked in New York City, representing a 4.5 percent increase from 2016.

## National Store Closures on the Rise

At the national level, U.S. store closures year-to-date through the end of the first quarter of 2018 reached 3,164, while the number of store openings reached 1,699 for the same period. The latest companies to file for bankruptcy include Toys "R" Us with the announced closure of 740 U.S. stores over the coming months, Claire's and its closing of 92 stores and Signet Jewelers with its closing of close to 200 stores.

While there have been increases in the number of companies filing for bankruptcy along with store closures, there have been retailers that have benefited from wage stagnation and the rising cost of essentials for Americans with lower income who seek out lower cost, value driven options. Such beneficiaries include Dollar General, Aldi and Ross Stores, which make up the top three national retailers that are currently expanding.

## Notable First Quarter New York City Retail Transactions

There has been much conversation surrounding the growth of retailers that emphasize food. However, beyond food, there have been numerous transactions that have taken place in Manhattan beyond quick service restaurants. Such transactions include L'Occitane en Provence, which signed a 3,378 SF lease for a flagship store of multi-level retail space at 555 Fifth Avenue. In doing so, the retailer will be relocating from its existing location at 610 Fifth Avenue. Casper opened its first standalone store at 627 Broadway in Noho, and T.J. Maxx extended it lease by 19,000 square feet at 250 West 57th Street at Columbus Circle, bringing its total occupancy to 47,000 square feet.

## Over Supply of Space

The supply of available retail space in Manhattan continues to outweigh demand. As a result, landlords are receptive to lowering rents and offering more incentives. Accordingly, asking rents continue to come down by 20.0 to 30.0 percent to reflect market conditions. Overall, the majority of completed transactions and the most active user groups throughout Manhattan continue to come from quick service food operators, restaurants, physical fitness and walk in medical facilities.

### From Clicks to Bricks

Online retailers continue to look to create an offline presence to support related existing customers and to gain new ones. On the flip side, brick and mortar retailers are focusing on developing or increasing their online presence in order to create a healthy and profitable balance. Putting this all into perspective, however, a total of 91.0 percent of all nationwide retail sales last year were still transacted in a brick and mortar location. Also, even with the growth in online shopping, it has been predicted by *Forbes* that more than 80.0 percent of all retail sales will still likely be done in actual physical stores in the year 2025.

### Looking Ahead

For some, change instills fear. For others, it stimulates creativity and creates opportunity. As an example, while Toys "R" Us declared bankruptcy, KB Toys re-emerged and plans to re-enter the market and open new stores. While Claire's also filed for bankruptcy, online retailers such as Indochino and Jack Erwin announced new brick and mortar stores. These are challenging, yet exciting times in the world of retail. There are those brands and retailers that will learn how to navigate and survive this tumultuous period and those that will not. That being said, the future is bright and filled with new innovative ideas, technology and retail concepts, as well as a sense of creative energy not seen in this sector for many years. Retailers are putting technology to work to connect with customers by providing an easy, pleasurable experience when visiting a retail location. Shop and shop concepts, fast scanning products, touch scanners and digital tools such as iPads and handhelds are now being deployed to educate, assist and entertain consumers.

As the saying goes, "change is good." To sum it up and as Winston Churchill stated, "This is not the end. It is not even the beginning of the end, but perhaps, the end of the beginning."

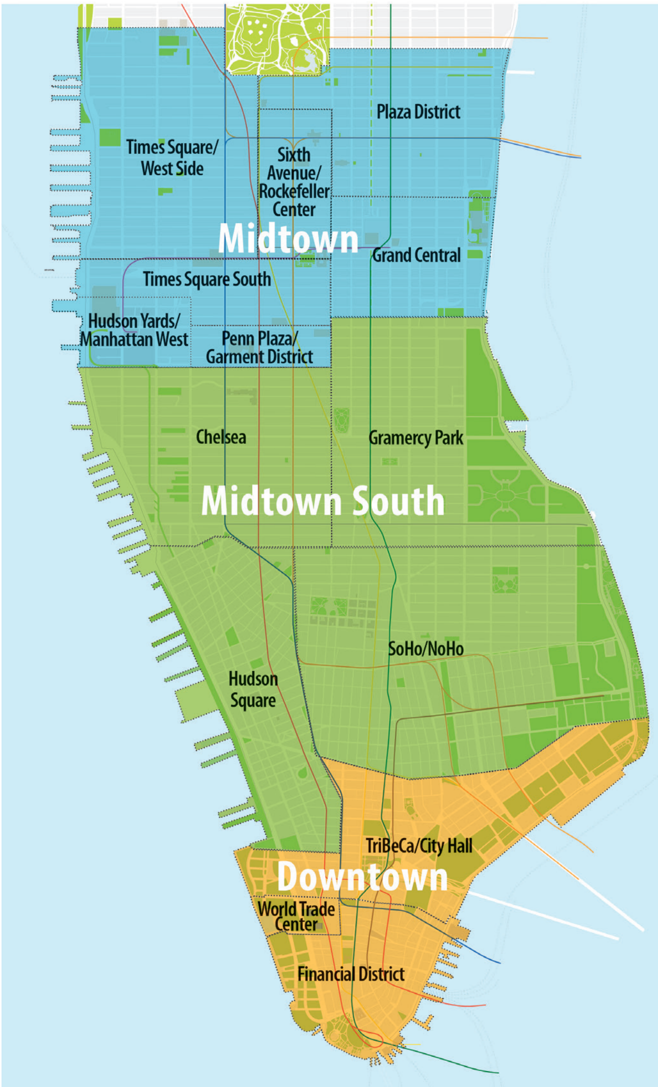
The factors influencing the retail leasing environment are many and exciting times are ahead. Avison Young's experienced retail leasing team has successfully helped numerous clients with their valuable retail real estate decisions.

**Jedd Nero**
Principal, Executive Managing Director
New York City Retail
jedd.nero@avisonyoung.com
212-729-3019

## Trends to Watch

- Customer expectations will continue to push retailers to be on top of their game at all times. Technology, if implemented and deployed properly will be effective in meeting those demands.
- While we will continue to see Chapter 11 scenarios and store closures throughout the country in 2018, new retail concepts, online retailers and existing traditional merchants will emerge with new stores and new exciting concepts.
- As long as supply continues to outweigh demand, the pop-up scenario will continue to be available for those looking to test the waters.
- The speed of technological advances is going to take us to unimaginable places in a very short period of time. The years ahead are going to reshape the way we shop, work and live our daily lives. We are entering unchartered territory and anything is possible. How exciting is that?

## About the Market




## Midtown

**Plaza District:** Borders East 62nd and West 59th Streets on the north, Seventh Avenue on the west, East 47th and West 56th Streets on the south and the East River on the east (includes prior Park Avenue submarket)

**Grand Central:** Borders East 47th Street on the north, Fifth Avenue on the west, East 35th Street on the south and the East River on the east

**Sixth Avenue/Rockefeller Center:** Carved out section that borders West 56th Street on the north, Seventh Avenue on the west, West 41st Street on the south and Fifth Avenue on the east

**Times Square/West Side:** Borders West 64th Street on the North, the Hudson River on the West, West 41st Street on the South and Fifth Avenue on the East (includes Columbus Circle)

**Times Square South:** Borders West 41st Street on the north, the Hudson River on the west, West 36th Street on the south and Fifth Avenue on the east

**Penn Plaza/Garment District:** Borders West 36th Street on the north, the Hudson River on the West, West 30th Street on the South and Fifth Avenue on the East

**Hudson Yards/Manhattan West:** Carved out section that borders West 36th Street on the North, the Hudson River on the west, West 30th Street on the south and Ninth Avenue on the east

## Midtown South

**Chelsea**: Borders West 30th Street on the north, the Hudson River on the west, West 12th Street on the south and Fifth Avenue on the east (includes prior Flatiron submarket)

**Gramercy Park**: Borders East 35th Street on the north, Fifth Avenue on the west, East 12th Street on the south and the East River on the east (includes prior Union Square/Madison Square/Park Avenue South submarkets)

**Hudson Square**: Borders Morton Street on the north, the Hudson River on the west, Chambers Street on the south and Sixth Avenue/Avenue of the Americas on the east

**SoHo/NoHo**: Borders East 12th Street on the north, Sixth Avenue/Avenue of the Americas on the west, Canal Street/East Broadway on the south and the East River on the east (includes Greenwich Village)

## Downtown

**Tribeca/City Hall:** Borders Canal Street/East Broadway on the north, West Street on the west at Warren Street, Ann Street on the south and the East River on the east (all of upper-lower Manhattan); (includes prior insurance submarket)

**World Trade Center:** Borders Vesey Street on the north, the Hudson River on the west, Albany Street on the south and Church Street/Trinity Place on the east

**Financial District:** Borders Albany and Ann Streets on the north, the Hudson River on the west, South Street on the south and the East River on the east (rest of lower Manhattan)

# New York City

Market Report
First Quarter 2018

AVISON YOUNG
Intelligent Real Estate Solutions

avisonyoung.com



For more information, please contact:

A. Mitti Liebersohn
President and Managing Director, NYC Operations
212.729.7734
mitti.liebersohn@avisonyoung.com

Corey Deslandes
Research Manager
212.729.6973
corey.deslandes@avisonyoung.com

Marisha Clinton
Senior Director of Research, Tri-State
212.729.1193
marisha.clinton@avisonyoung.com

1166 Avenue of the Americas
15th Floor
New York, NY 10036
212.729.7140