Nancy Packes INC

SIGNATURE MARKETING SERVICES

XXXXX Long Island City, NY Analysis

JULY 31, 2019

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1. Introduction

At the request of the owner of XXXXX, Long Island City, New York (the "Property"), Nancy Packes Inc. ("NPI") completed, on the date hereof, this residential market analysis for the Long Island City market in which the Property is situated, and for a market-related analysis of the Property itself (collectively, the "Analysis"). The objective of the Analysis is to quantify, from the present through a forward-looking five-year time frame ending in in 2023 (the "Analysis Period"), the expected base rental/sale rate and annual growth for market-rate rental apartments or condominiums with respect to a potential development that would be built at the Property. Special consideration is paid to the likely effect on rents resulting from the very real decline of supply of residential units in the permitting and construction pipeline in Long Island City and from the significant employment surge expected to continue from the strong influx of New Economy workers streaming into greater New York City, as described later in this Analysis, and with the opening of new office buildings at Hudson Yards, a direct commute, just four subway stops from the Property. It is worth noting that the forward-looking parts of this Analysis require data regarding buildings that have entered the permitting process at the New York City Department of Buildings. Information in connection with the permitting of buildings to be completed beyond 2023, is not currently available. Accordingly, the Analysis Period concludes at year-end 2023.

Of particular background perspective and relevance, the reconstruction of the World Trade Centers (the "WTC") and its effect on rental rates in the Manhattan Financial District ("FiDi") and Downtown Brooklyn ("DoBro") during the recent period of 2014-2018 is utilized as a precedent case for the Analysis. The Analysis shows how the precedent of actual demand growth for residential rentals in Downtown Brooklyn, which resulted from the reconstruction of the WTC, also should be expected in Long Island City ("LIC") as a result of the even larger demand from the steady flow of employees coming to occupy Hudson Yards Offices ("HYO"). This demand growth will be reflected in new office buildings, either just receiving COO's or expected to receive COO's at a steady rate through 2023.

The Analysis further considers expected condo sales price per square foot, and shows LIC's faster rates of growth in comparison to Manhattan's and Brooklyn's during the same, recent 2014-2018 time period. Comparable condo properties are highlighted to demonstrate the LIC pricing possibilities of a best-in-class, fully amenitized condo offering with city views over the East River and a short, direct commute to Midtown Manhattan and Hudson Yards.

2. Executive Summary

This Analysis considers the current base rate and future growth rate for rental and condo pricing of the Property. There are several topics covered: (i) an analysis of the rental market and the expected effect from the lack of new buildings being placed into the development pipeline in LIC during the Analysis Period relative to the historic growth of 2016 to 2019; (ii) an analysis of the rental market and the expected effect on rental rate growth resulting from employment growth at Hudson Yards, (iii) a discussion of the Property's neighborhood character and local amenities, (iv) transit connectivity to Midtown East and Hudson Yards and recent capital improvements to the 7 train, (v) highly-rated local public schools which create a value premium because of families wanting to live nearby such schools, (vi) the proposed unit mix and rental pricing for the Property, and (vii) a condo market analysis.

Section **"3. Rental Market Analysis Structure"** gives an overview of the Rental Market Analysis detailed in the following Section 4. A description of each proposition and proof is given along with their respective evidence and location in the Analysis.

Section **"4. Rental Market Analysis"** details each of the propositions and proofs, including back-up data and detailed descriptions, explanations and implications as follows:

Proposition 1 uses data on past supply additions in Long Island City to derive an equation that accurately replicates past rent growth with only a 3% error rate. This demonstrates that rent growth can be accurately modeled as a function of supply changes.

Proof 1 utilizes the equation from Proposition 1 to project future rent growth by inputting data on known future supply additions through 2023, i.e. those buildings which have submitted a building permit with the Department of Buildings. The Analysis quantifies average rent growth of 7.9% per year through 2023. This rent growth is primarily due to a substantial 69% reduction of new supply to the market through 2023, as compared to the prior supply additions of 2016 to 2019.

Proposition 2 demonstrates that the effect of distance is the same between the major employment centers of the World Trade Center and Hudson Yards and their corresponding residential communities in the boroughs of Downtown Brooklyn and Long Island City, respectively.

Proposition 3 quantifies that rents in Downtown Brooklyn and the Financial District, adjacent to the World Trade Center, move together and share a common demand source of WTC employment.

Proof 2 comes from the establishment of both Propositions 2 and 3 and shows that rents in Long Island City will move in coordination with rents in residential areas surrounding Hudson Yards.

Proposition 4 establishes that employment growth from the World Trade Center caused rents in the Financial District to grow faster than other Core Manhattan locations during the period of rebuilding from 2014 to 2018. The Analysis quantifies a 1.8% rent growth premium in FiDi attributable to WTC employment growth over these five years.

Proof 3 shows that a rent growth premium was also experienced in DoBro as a result of WTC employment growth, as expected from the establishment of Propositions 3 and 4. The Analysis quantifies a 0.8% rent growth premium in DoBro attributable to WTC employment growth over the same five years.

Proposition 5 compares the number of jobs created at WTC, approximately 30,000, to a projection prepared by XXX ("XXX") of new jobs expected at Hudson Yards of approximately 108,000 total, of which 82,000 will be realized by 2023. The impact of Hudson Yards alone on residential rent growth will therefore be even greater than experienced from the WTC.

Proof 4 computes the expected rent growth premium in residential units around Hudson Yards, referred to in the Analysis as Hudson Yards Residential, by multiplying the ratio of job growth from Proposition 5 with the rent growth premium experienced in FiDi from Proposition 4. The Analysis quantifies a 4.9% rent growth premium in residential rents in Hudson Yards Residential attributable to local employment growth through 2023.

Proof 5 computes the expected rent growth premium in residential units in Long Island City by multiplying the ratio of job growth from Proposition 4 with the rent growth premium experienced in DoBro from Proof 2. The Analysis quantifies a 2.2% rent growth premium in residential rents in Long Island City attributable to Hudson Yards employment growth through 2023.

The ***Conclusio*n** combines Proofs 1 and 5 to project average annual rent growth of approximately 8.3% through 2023 due to the combined effect of the substantial reduction in new supply coming to the market over the next several years with the surge of employment growth at Hudson Yards, and elsewhere around greater New York City.

Section **"5. Local Amenities and Neighborhood Character"** discusses the waterfront parks, retail offerings, and overall ambiance that makes Long Island City a desirable residential neighborhood.

Section **"6. The 7 Train – The Positive Impact of Connectivity Improvements"** outlines the recently implemented signal improvements that have been installed on the 7 Train which are estimated to increase peak line capacity by 11% while at the same time, increasing on-time performance. A well-functioning subway line combined with short commutes to Midtown East and Hudson Yards only serve to bolster the neighborhood's many strengths.

Section **“7. School and Family”** describes the strong performance of the local public school system and points to past Nancy Packes research which proved that buildings in the capture area of highly rated schools command 10% rent premiums compared to otherwise equivalent buildings.

Section **“8. The Property – Assumed Program and Pricing”** identifies the top performing buildings in Long Island City and extrapolates an assumed unit mix and pricing for the Property. Units catering to family demographics are placed at the top of the potential Variance building at the Property, with smaller units below. The underlying assumption of the base rental price is $73 per square foot.

Section **“9. Condo Market Analysis”** concludes the Analysis with an evaluation of the condo potential of the Property. Recent new development comparables are listed including Skyline Tower, 21 India and The View. Additional Downtown Brooklyn and waterfront Brooklyn comps are also used to conform the Analysis between LIC and DoBro. The Condo Market Analysis concludes with a discussion of how pricing in new development condos in LIC has grown at a rate of 8.3% per year since 2012, outpacing both Core Brooklyn and Manhattan.

3. Rental Market Analysis Structure

	Description	Evidence	Page
Proposition 1	Past decline or increase in supply of residential units can be used to quantify past rental rates and their decline or growth	2013-2018 quantified LIC rents	7
Proof 1	Future rent growth can be forecasted as a function of known supply.	**Proposition 1** + assumption of equal demand	9
Proposition 2	Effect of Distance on Rent is the same in both Brooklyn and Queens.	Same rent gradient slope for 1 BR rents as function of distance	14
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Proposition 4	WTC Employment Growth caused a rent growth premium in FiDi.	2014-2018 FiDi to Manhattan rent comparison	17
Proof 3	WTC Employment Growth caused a rent growth premium in DoBro.	**Proposition 3 + Proposition 4**	18
Proposition 5	Hudson Yards employment growth will have more impact on residential rents in LIC than WTC employment growth had on DoBro because Hudson Yards Office ("HYO") magnitude of job creation is much larger than was WTC's.	Number of jobs in HYO compared to WTC	19
Proof 4	HYO employment growth will cause a rent growth premium in HYR	**Proposition 2 + Proposition 4 + Proposition 5**	20
Proof 5	HYO employment growth will cause a rent growth premium in LIC	**Proof 2 + Proof 3 + Proof 4**	20
Conclusion	Rent growth is forecast in LIC during the Analysis Period due to the combination of: (i) decline in residential supply; (ii) steady influx of advanced technology workers throughout NYC; (iii) employment surge at HYO.	**Proof 1 + Proof 5**	21

4. Rental Market Analysis

I. Proposition 1: The supply of newly constructed residential units during a given period, in the context of the demand experience during that period, can be used to closely quantify past rental rates and their decline or growth.

Rental rates are directly related to residential supply in the area during any given period. Our projection of future rent growth in LIC is based on an equation derived from recent rent growth and the major increase in supply of residential units for the period of 2013-2018. We then made adjustments to account for the difference in future supply. Our computation assumes a steady rate in the level of demand experienced over the same time period due to the reality of the New Economy Employment. However, this projection does not include the effect on rent growth of increased demand from jobs created at Hudson Yards - calculated below in Proof 5. Later in this Analysis, we use this base projection as the foundation to calculate future rent growth that is expected from the likely increased demand arising from job creation in new office buildings receiving their certificates of occupancy in Hudson Yards in the coming four years which is additive to the effect of declining supply of newly constructed residential units. There is simply a substantial reduction in the new-construction pipeline in LIC and paired with continued employment growth in NYC this leads to meaningful residential rent growth in LIC.

In the chart below, the sensitivity analysis shows the relationship between the percentage change in residential supply and the percentage change in rent growth in LIC for the period 2013 – 2018. The corresponding prior year percentage change in supply to subsequent year percentage change in rent, results in a highly accurate quantification of achieved rents.

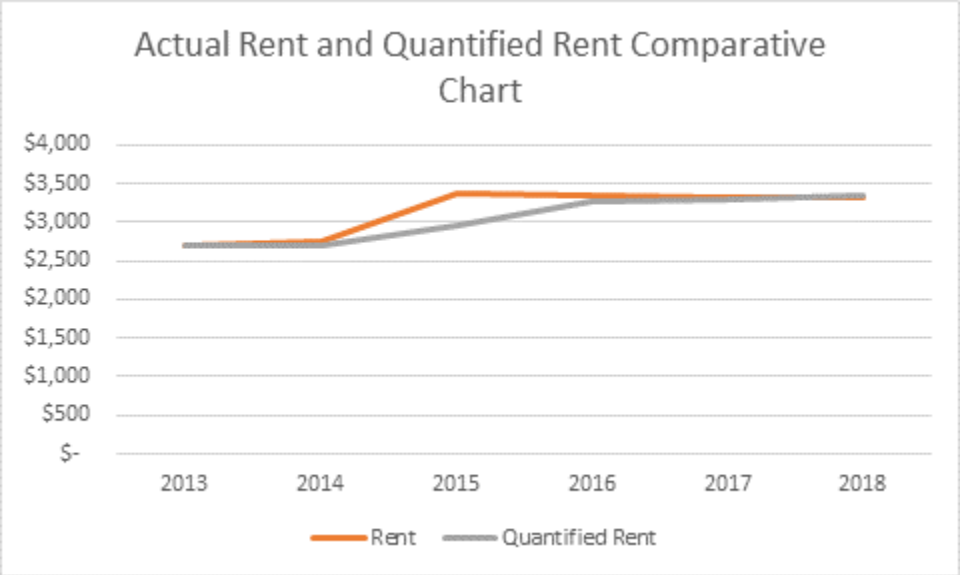
The value of this is that the equation can be used to project the percent change in rent when the percentage change in supply is known. To determine how well this correlation works, we used the historical rent data and applied the equation of the trend line in order to quantify historic rents and test the accuracy of the equation. When comparing quantified rent to actual rent, there was, on average, a 3.1% error rate for quantified rent relative to the actual historic, achieved values. The high level of accuracy of this equation (a 3.1% error rate is di minimis) helps us to prove that **past residential rent growth can be accurately modeled as a function of past residential supply [Proposition 1]**.

With such low error rates, we then proceeded to apply the equation of the trend line of residential rent growth to future supply. We utilized the NPDS Pipeline Database to compute the resulting projected rents in the chart below. It is important to note, that in the equation that we have used in this Analysis to calculate historic rents, the calculations consistently produced average calculated rent below actual rent. Thus projected future rents prove to be conservative.

Long Island City Rent Versus Supply Analysis*						
Historical Data					Quantified Rent Based on Historical	
	Supply[1]	Percent Change in Supply Compared to Prior Year	Rent[2]	Percent Change in Rent Compared to Prior Year	Quantified Rent	Percent Error
2012	807					
2013	2282	182.8%	$ 2,696		$ 2,696	
2014	1251	-45.2%	$ 2,739	1.6%	$ 2,688	-1.9%
2015	476	-62.0%	$ 3,373	23.1%	$ 2,959	-12.3%
2016	1273	167.4%	$ 3,345	-0.8%	$ 3,280	-2.0%
2017	2988	134.7%	$ 3,322	-0.7%	$ 3,293	-0.9%
2018	2862	-4.2%	$ 3,312	-0.3%	$ 3,355	1.3%
Annual Rent Growth				4.9%	Avg. Percent Error	-3.1%

1. Annual supply is a number of new market rate rental units delivered in the market in LIC during the year specified

2. Annual rent is average weighted rent for studios and one and two bedroom units in LIC during the year specified



*. Source: Nancy Packes Data Services

(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 2 titled Projection)

II. Proof 1: Future rent growth can be forecasted as a function of known supply coming to the market, assuming the same demand during the period from which the historic supply data was gathered.

Based on our proprietary methodology and on data collected, we have proven that **rent growth can be projected in LIC for the supply of newly constructed rental units that will come to market during the period of 2019 to 2023 [Proof 1]**. Please see chart below and attached pipeline data.

Long Island City Projected Rent Growth				
	Future Supply	Percent Change in Supply Compared to Prior Year	Projected Rent	Percent Change in Rent Compared to Prior Year
2019	1282	-55.2%	$ 3,584	8.2%
2020	1210	-5.6%	$ 3,961	10.5%
2021	101	-91.7%	$ 4,289	8.3%
2022	260	157.4%	$ 4,812	12.2%
2023	1158		$ 4,853	0.9%
Projected Annual Rent Growth				7.9%

* Source: Nancy Packes Data Services

(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 2 titled Projection.)

Long Island City experienced historic levels of new supply delivered to market in the past several years. Research points to it being the fastest growing neighborhood in the country, as measured by number of units delivered. Much of the recent supply spike experienced in 2017-2018 was the result of the expiration of the 421a tax abatement program in January 2016, which caused an artificial, short term spike in projects starting construction in order to qualify for the program. The higher than expected level of demand has absorbed all of that supply, and the large concessions of that period have all but evaporated. Moreover, all of the newly developed buildings improved the neighborhood and gained the attention of the renters in metropolitan New York. Accordingly, Long Island City now has the fastest growing demand of any submarket in New York (tied with Dumbo) at 9%, according to StreetEasy's Renter Demand Index.[1] As a result of steady demand for residential rentals in the Long Island City waterfront neighborhood, rents are expected to significantly outpace other areas of metro-New York in the coming years. The projected average annual rent growth of 7.9% shown above is largely the result of a significant drop in supply of newly constructed residential rental units during 2020 – 2023, in comparison to the supply in 2016-2019, an expected decrease of 69%. Given the amount of lead time required to construct high-rise

[1] https://www.crainsnewyork.com/real-estate/brooklyn-queens-neighborhoods-top-list-fastest-growing-rental-markets

residential rental buildings, combined with the limited number of sites available in the area, there is a low probability that a material influx of rental units, beyond what is currently in the pipeline, could be completed prior to 2023. Even in the unlikely scenario that twice as many units could be delivered prior to 2023, the decrease in newly-constructed residential supply would still equate to 37% of the new supply during the 2016-2019 period. As a result of steady demand for residential rental units in the Long Island City waterfront neighborhood, rents are expected to significantly outpace other areas of metro-New York in the coming years.

With respect to the assumption of constant demand, it is justified by well-recognized, long-term shifts in the U.S. economy, creating a dynamically different economy from the past (the "New Economy"). Growth in the economic base has shifted from industrial-type manufacturing, to a steep rise in information and other advanced technology companies and related employment, both in the national economy as a whole, and in the New York metro economy in particular. Companies in these technology-based, growth sectors demonstrate a strong preference for locating in urban centers. According to the Brookings Institute, "the digital economy is rewarding large global centers that are attracting innovative companies and educated workers."[2] Hence, there is a steady stream of the educated workforce that is entering these global centers in large numbers. New York is undoubtedly one of the leaders of these global concentrations of capital and talent, as the largest employment center in the United States and the recipient of the second most venture capital funding.

A key indicator of this shift of employment to advanced technology and the high level of demand for well educated people to do the necessary work, especially in the context of a continuous, impactful phenomenon, is that there are still large numbers of advanced-technology jobs that remain unfilled. Simply stated, the supply of well educated workers, cannot keep up with the demand. According to the Bureau of Labor Statistics, there are over 1.2 million open, high technology jobs in the Northeast United States alone (Pennsylvania to Maine).[3] Further, the unemployment rate of this talent pool continues to be extremely low.

Second and equally as important, women have increasingly joined the work force in the New Economy. It is now typical for both partners in a household to be employed for both financial and self-realization reasons. This factor, as much as urbanization of the economic base, has contributed to residential demand in the key gateway cities which provide a wide-range of employment opportunities and of which New York is the undisputed leader.

For these reasons, we can chart rent growth as a function of supply of residential units, with added assurance of steady demand for the residential units. Finally, that demand manifests itself in the linear relationship between job creation as described above, and rent (See the graph titled: *Gross Rent and Residential Supply for LIC*).

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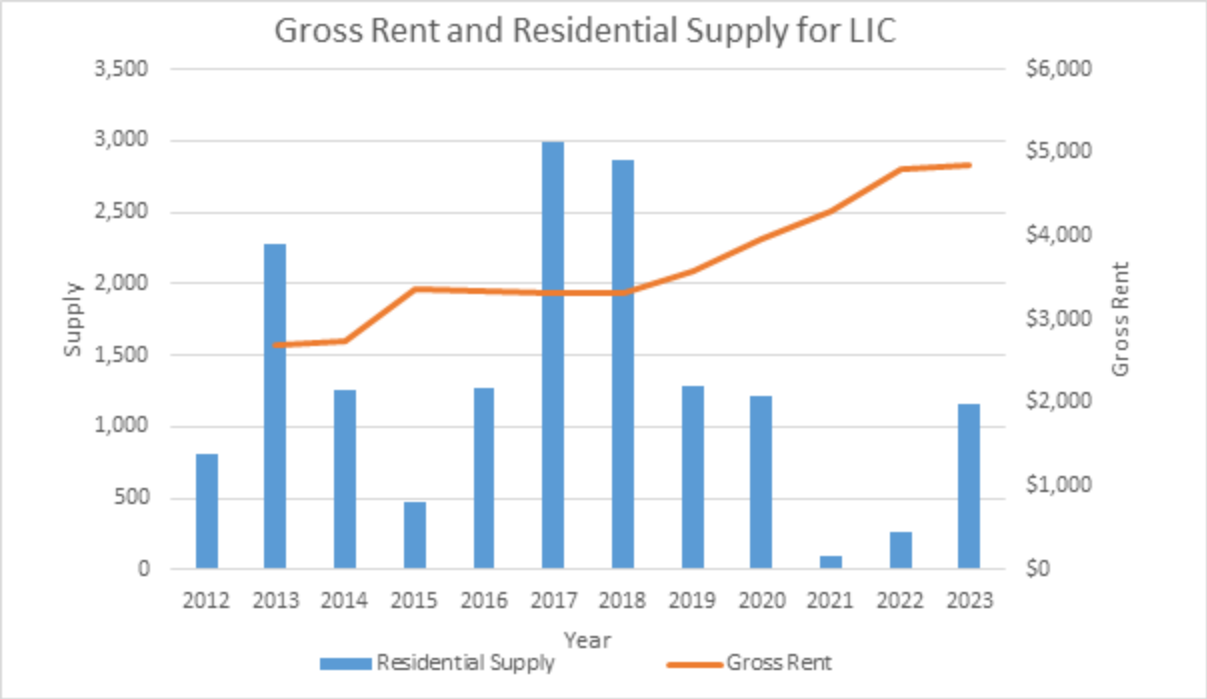
[2] https://www.brookings.edu/research/where-jobs-are-concentrating-why-it-matters-to-cities-and-regions/

[3] https://www.bls.gov/news.release/jolts.t01.htm



Timeframe	Number of Units Delivered
2016-2019	8,405
2020-2023	2,638
% Decline of Residential Supply from Period of 2016-2019 to Period of 2020-2023	69%

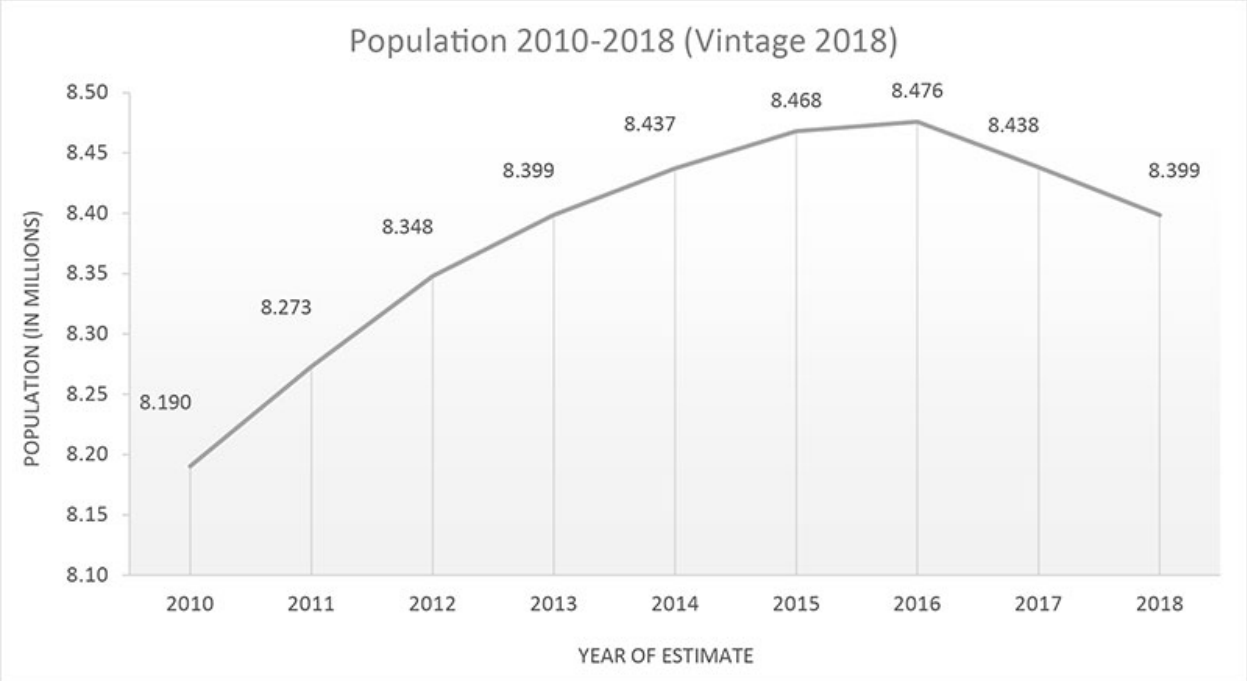
(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 2 titled Projection.)

Further to the issue of rent growth, as projected by the New York State Department of Labor, job creation is expected to continue in New York City through 2024, the furthest date currently projected. Current projections call for an increase of approximately 15% job growth, through 2024. The impact on rental rates is such that, these new jobs create not only new opportunities for individuals moving to the area to look for housing, but new income which in part must be directed towards housing. Additionally, historic trends have shown that job growth is one of the key factors in growth in the rental market. This point is supported by the WTC employment data cited above.

Following seven years of population growth, beginning in 2010 with the Decennial Census, the U.S. Census Bureau estimates that New York City saw its first population decrease in 2017 and 2018.[4] Actual population numbers will not be confirmed until the results of the 2020 Census are tabulated, and the current estimate has been challenged by New York City, citing a change in methodology.

[4] https://www1.nyc.gov/site/planning/planning-level/nyc-population/current-future-populations.page

Demographic projections consist of three components: (i) Natural Increase (difference between births and deaths); (ii) Net International Migration (difference between persons leaving for and coming from other countries); and (iii) Net Domestic Migration (difference between persons leaving for and coming from the 50 states). The City argues that changes in the methodology used to estimate immigrant migration have influenced the tabulation of the 2017 and 2018 numbers, citing a drastic 31% decrease in Net International Migration in 2017 compared to 2016. Even if one accepts that a population decrease is possible, the current estimate puts the annual decrease at approximately 40,000, a tiny fraction (.0047 or 0.47%) of the current 8.4 million population count. All other City tracked indicators suggest continued population growth at a slower rate than in the recent past, and put the City's population at 8.4M+.[5] This figure represents the historic peak population for New York City. The population in NYC previously peaked in 1950 at 7.9 million and vacillated up and down but below that level until the year 2000, when it reached 8.0 million for the first time ever.[6] Further, long term estimates predict the population's steady rise to 9.0 million over the next two decades.



It is important to also note that the period of growth since 2010 was characterized by three distinct migration patterns: (i) positive Natural Increase (births outpacing deaths) and (ii) positive Net International Migration (more people entering NYC from international locales compared to leaving for them), with (iii) negative Net Domestic Migration (more people leaving NYC for other US locales as compared to moving from them to the City). This third metric is a historic norm for NYC as the city serves as a place of first residence for those coming from outside the United States, who then

[5] https://www.nytimes.com/2019/04/18/nyregion/new-york-city-population.html
[6] https://www1.nyc.gov/assets/planning/download/pdf/planning-level/nyc-population/historical-population/nyc_total_pop_1900-2010.pdf

choose to leave for other parts of the country. Studies like the United Van Lines' Movers Study[7] point to this perennially consistent, negative Net Domestic Migration and the results from 2018 mimic the study's results since 1979. Not once in the Movers Study's 40 year history has there been greater inbound moves than outbound in New York.[8]

Estimates of the Components of Population Change for New York City and Counties: April 1, 2010 to July 1, 2018

Geographic Area	Total Population Change*	Natural Increase (Births-Deaths)	Net Migration		
			Total	Net Domestic Migration	Net International Migration
New York City	**223,760**	**511,558**	**-288,346**	**-768,306**	**479,960**
Bronx	47,529	96,065	-49,646	-157,720	108,074
Brooklyn	78,113	206,516	-127,883	-255,253	127,370
Manhattan	42,341	65,706	-22,964	-117,010	94,046
Queens	48,328	128,622	-80,804	-224,765	143,961
Staten Island	7,449	14,649	-7,049	-13,558	6,509

*Note: Population change was calculated using the 2010 Decennial Census (as opposed to the 2010 Estimates Base) and the 2018 Population Estimate. The estimated components of population change will not equal the numerical population change also because of a small residual after controlling to the national totals.
Source: Population Division, U.S. Census Bureau

However, it is far more relevant - and of value - to understand the fundamental proposition that job growth, rather than population growth, fuels the rental market in cities like New York. In such places, demand for housing comes from the creation of local jobs, an assertion that we prove through an analysis of the World Trade Center's impact on rental rates later in the Analysis. Private sector employment growth in NYC has been exceptionally strong since 2009, having grown by 2.2% per year[9] and the trend is not abating – private sector employment growth rose 2.4% over the 12 months ending in May 2019.[10] The high-income business services (lawyers, scientific researchers, marketing etc.) and technology sectors added the most jobs over this period and accounted for 24% of citywide gains while maintaining average salaries in the six-figures (please see references to New Economy employment described in this Section 4 titled: Rental Market Analysis).

New York City is now home to 4.55 million jobs, the highest level ever recorded, with a historically low unemployment rate of 4.1% and only 2.8% for those residents with at least a bachelor's degree. According to the Bureau of Labor Statistics, in the region of

[7] https://www.unitedvanlines.com/contact-united/news/movers-study-2018
[8] https://www.unitedvanlines.com/uvl/migration-map/
[9] https://www.osc.state.ny.us/osdc/rpt1-2020.pdf
[10] https://www.labor.ny.gov/stats/nyc/

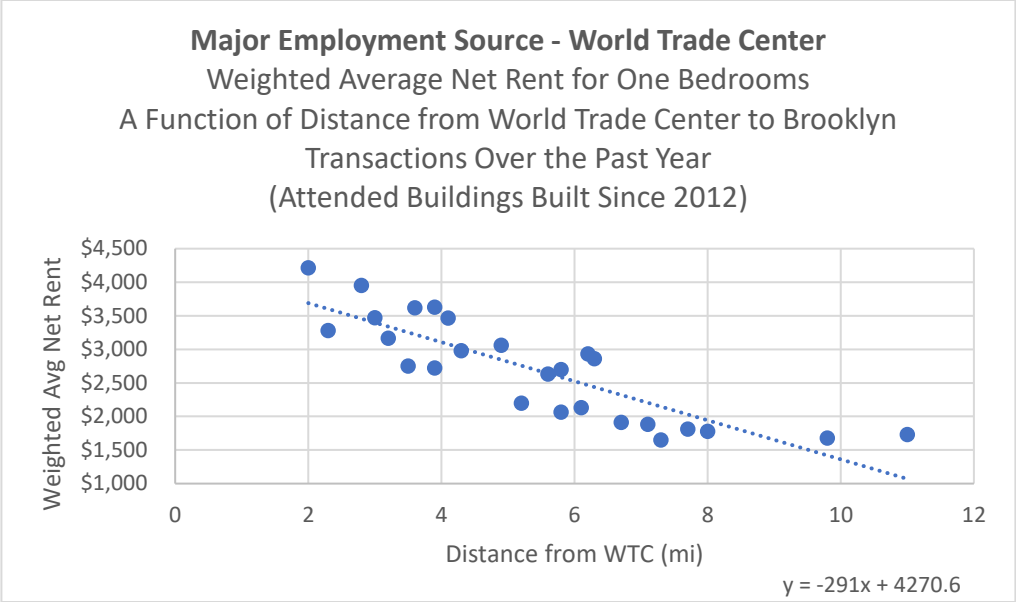
the United States from Philadelphia to Maine, of which New York City is at the epicenter of the population count, there are 1.2 million New Economy jobs that are unfilled. It is for these various reasons that we are confident in assuming that demand for rental apartments in the City will at least maintain the levels we have experienced over the past several years.

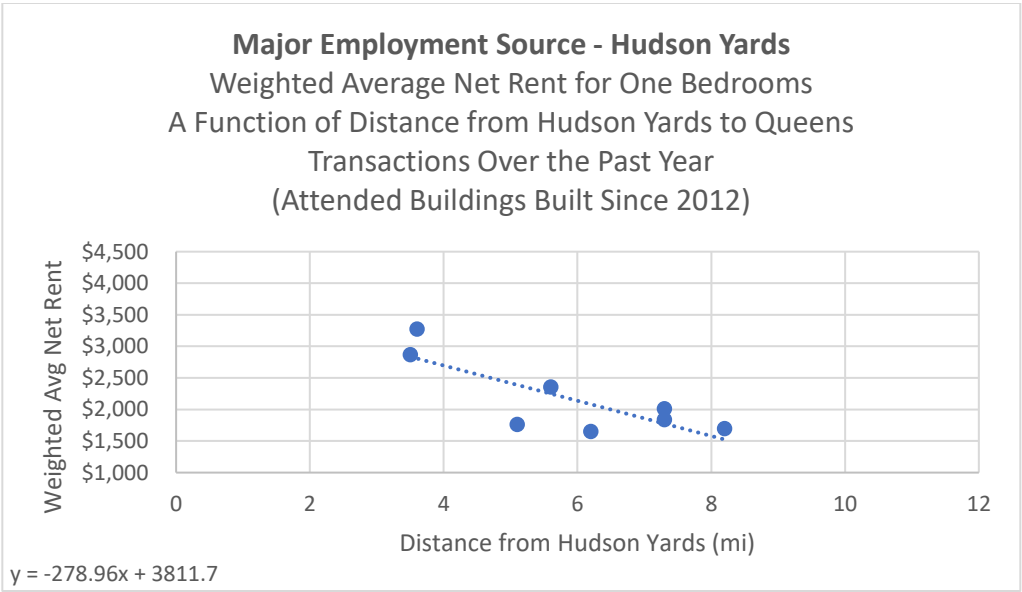
Part of the reason for the Long Island City growth rate outpacing Manhattan's growth rate lies in the striking contrast of the growth dynamic between Manhattan and Long Island City. As land prices continue to rise in Manhattan, the ability for developers to build rental buildings there will greatly diminish. Further, the ability to deregulate and convert formerly rent-stabilized apartments in already existing older buildings, into market-rate units, has been greatly restricted after the sweeping changes to the NYC Rent Law established in June 2019. These changes will effectively remove competition from these mid-market units and therefore exert additional upward pressure on market-rate rents. Thus, the development of new residential rental buildings marketed towards mid-level or even upper mid-level employees will now become the near-exclusive domain of the outer boroughs. As such, the interest, especially in Long Island City as compared with other neighborhoods, should remain strong due to the fact that existing Manhattan residents who are being priced out of Manhattan seek convenient housing and transportation to their jobs, whether in the form of new or existing employment particularly in neighborhoods like that of the Property which is aesthetically attractive and situated on the Long Island City waterfront. This has been the trend over the past 5+ years, and it will continue to be the trend, unabated, for the foreseeable future.

III. Proposition 2: Effect of Distance on Rent is the same in Brooklyn and Queens.

This Analysis further quantifies the proposition that, in the residential rental market, demand from workers in office districts is a primary driver of value, and that (i) distance between a residential neighborhood and related office districts and (ii) convenience of transportation, as a function of time and overall ridership experience, are key determinants of value.

Approximately twelve years ago, new large-scale residential development began its expansion from Manhattan into the outer boroughs. From the data generated since then, it is now possible to analyze how distance from the major office districts in Manhattan affects value in the outer borough neighborhoods of Brooklyn and Queens. The charts below represent the relationship of distance from Manhattan office districts to these outer borough neighborhoods, and the rent as a function of distance.





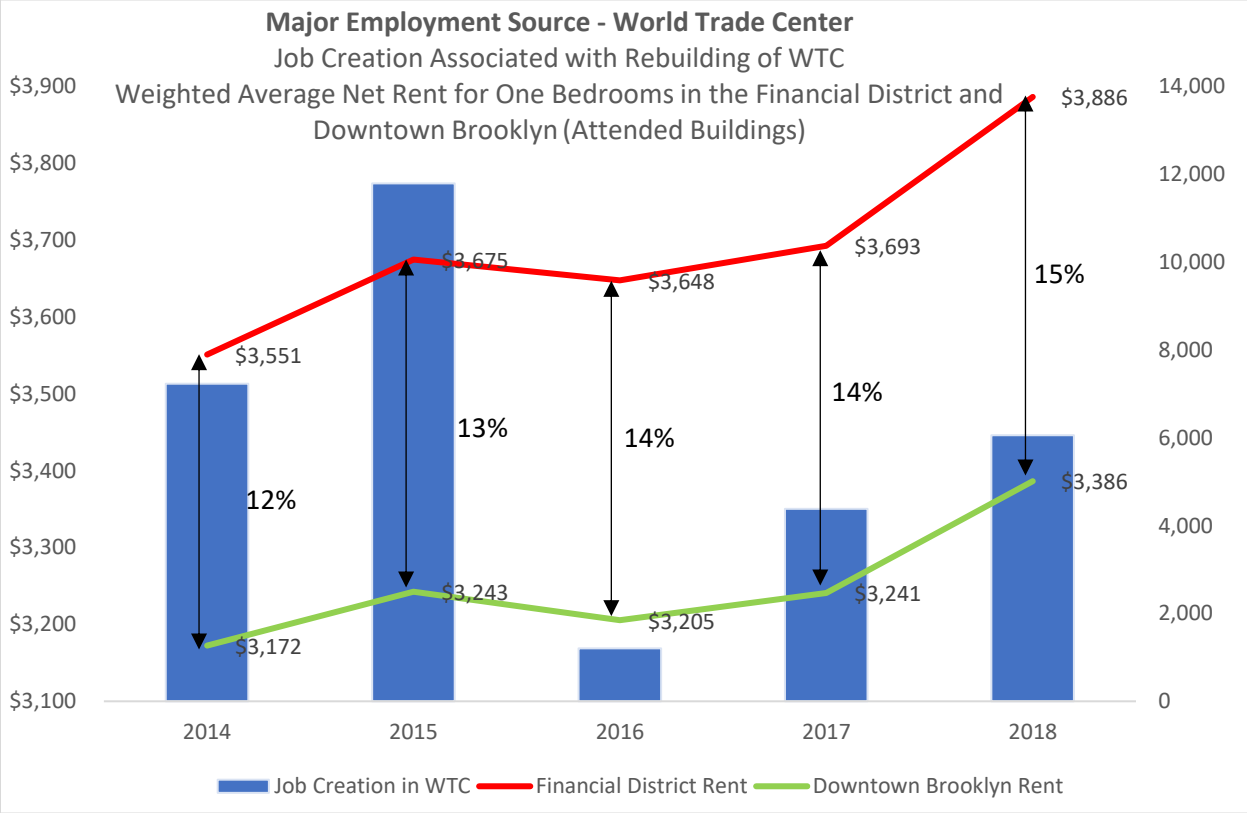
(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 1 titled Brooklyn Net Rent Price and Distance and Queens Net Rent Price and Distance.)

The charts above are plotted with the distances from the World Trade Center to Brooklyn and from Hudson Yards to Queens vs. the weighted average net rents for one bedroom units in those neighborhoods over the past year.

The slope for Brooklyn was -291 whereas for Queens was -279. This means that for every mile that one moves away from the employment center, rents drop $291 and $279 respectively. The extraordinary similarity of the slopes demonstrates that the **effect of distance on price is nearly identical between WTC to Downtown Brooklyn and Hudson Yards to Long Island City [Proposition 2].**

IV. Proposition 3: Rents in FiDi and DoBro Move Together.

As the World Trade Centers were rebuilt and opened for occupancy, residential rental values increased not only in Manhattan's Financial District ("FiDi'), but also in Downtown Brooklyn ("DoBro"). And, even though downtown Brooklyn is farther from the World Trade Center towers than the residential buildings in the Financial District, Brooklyn rents grew at virtually the same rate as Financial District rents did during the period since the first World Trade Center towers reopened.



Source: Rent Data from Nancy Packes Data Services. Employment Data from XXX.

(Please see corresponding attachment in the Exhibits folder contained in Sub-folder 2 titled Rent and Employment Analysis.)

The graph above shows average one-bedroom rents for the Financial District and Downtown Brooklyn during the period of 2014-2018. It also shows new jobs generated, by year, during the same period immediately following the reconstruction of the World Trade Center towers. Both rent curves are virtually identical, as noted in the consistent difference between the upward slope of the two annually. The virtually parallel lines of growth on the graph above demonstrates that **rents in DoBro move synchronously with rents in FiDi [Proposition 3]**. This graph clearly shows a common demand source for both neighborhoods. Furthermore, the two curves are equally responsive to annual job creation. When annual job growth is rising or falling, rent moves accordingly.

This is direct proof that the source of the common demand for both FiDi and DoBro neighborhoods was generated by the creation of jobs in the World Trade Center.

(Please see corresponding attachments in the Exhibits Folder contained in Sub-folder 2 including rent data from Nancy Packes, Inc. Data Services powered by REBNY Data, titled Rent and Employment Analysis and WTC job creation and data supplied by XXX, titled HY Office Stock Forecast.)

V. Proof 2: Rents in Hudson Yards Residential ("HYR") and LIC Move Together.

The above established World Trade Center precedent demonstrates that, as demand increases for space in a Manhattan office district, residential rents will rise in outer borough neighborhoods. The application of the World Trade Centers' precedent to Hudson Yards' Office is particularly appropriate because the existing relationship of distance to rent levels between the Financial District and Downtown Brooklyn and between Hudson Yards Residential and Long Island City is extremely similar [from Proposition 2]. It is also worth noting that the Financial District residential rental market has multiple subway connections to other neighborhoods whereas Hudson Yards has its own residential rental neighborhood but only the number 7 Train station to connect Hudson Yards to other Manhattan and borough neighborhoods. This means that rent growth premiums should be more concentrated along this line compared to others where a transfer, certainly a time-wasting inconvenience to riders, would need to be made. From Proposition 3 we have demonstrated that Downtown Brooklyn rents grew at similar rates to Financial District rents. Despite the merit that convenience has as a quality-of-life metric that positively impacts demand, we have not factored this into our rental growth computations, which is another reason for this Analysis to be viewed as conservative. Combining Proposition 3 with Proposition 2, we can conclude that **rents in Long Island City will move in coordination with Hudson Yards Residential rents [Proof 2].**

We fully expect the increase in demand from Hudson Yards job growth to flow through to Long Island City just as it does from the Financial District to Downtown Brooklyn. This relatively long period of expected, sustained, higher rent growth in the Financial District and Downtown Brooklyn supports the fundamental proposition that connection to increased job creation in Manhattan office districts promotes residential rent growth, not only in the residential neighborhoods immediately proximate to where the job growth occurs – in this case Hudson Yards Office with Hudson Yards Residential, but also in outer borough neighborhoods with convenient access to those office districts.

VI. Proposition 4: WTC Employment Growth Increased Rents in FiDi.

As an example of the effect of an increase in jobs in a given office district on residential rents, we can measure the increase in residential demand in FiDi over the years when the World Trade Centers were rebuilt and jobs were regained (2014 – 2018), and the rising effect on residential rental values in FiDi that resulted from the increasing WTC employment count.

In order to demonstrate this, we look at how rent growth in the Financial District during the period of WTC rebuilding, compared with rent growth in Manhattan below 96th Street during the same period (excluding the Financial District data).

Financial District Rents Compared with Manhattan Core Rents*		
	2014 - 2018 Change	Premium
Financial District	9.4%	1.8%
Manhattan Core w/o FiDi	7.6%	

*Source: Nancy Packes Data Services

(Please see corresponding attachment in the Exhibits folder contained in Sub-folder 2 titled Rent and Employment Analysis.)

The chart above compares rent growth in the Financial District to rent growth in Manhattan Core neighborhoods, not including the Financial District, during the period of reconstruction of the World Trade Center towers from 2014 through 2018. The difference between the two sets is an approximate 1.8% premium over the 5 year period resulting from the creation of jobs with the WTC towers reconstruction. This proves that the demand generated by **WTC employment growth increased residential rents in FiDi [Proposition 4].**

VII. Proof 3: WTC Employment Growth Increased Rents in DoBro.

During this same period, Downtown Brooklyn, which also benefits from direct transportation to FiDi, also experienced a rent growth premium. The chart below shows the comparative growth of Downtown Brooklyn compared to Brooklyn Core excluding any computation for Downtown Brooklyn. As expected, we see that Downtown Brooklyn outperformed Core Brooklyn during the period of job creation at WTC. The difference implies a 0.8% premium over 5 years resulting from the creation of jobs with the WTC reconstruction. This data backs up our Proof, from Propositions 2 and 3 that **WTC employment growth increased rents in DoBro [Proof 3].**

Comparative Growth Chart for Downtown Brooklyn Neighborhood for Periods Before WTC Reconstruction and After		
	2014 - 2018 Percent Change	Premium
Downtown Brooklyn	6.8%	0.8%
Brooklyn Core w/o DoBro	6.0%	

(Please see corresponding attachment in the Exhibits folder contained in Sub-folder 2 titled Rent and Employment Analysis.)

VIII. Proposition 5: Hudson Yards employment growth will be more impactful on residential rents in LIC than WTC employment growth was on DoBro because the HYO magnitude of job creation is much larger than at WTC.

Currently, two Manhattan districts, Hudson Yards and Midtown East, are undergoing major expansions in office space. The Midtown East office district is located near Grand Central Station, with access to many train lines and, and as a result, many residential districts are connected to it. However, Hudson Yards is served by a single train line, the Number 7 subway line (the "7 Train"). As such, we would expect LIC to disproportionately benefit from increased demand coming from HYO employment.

The chart below shows, over time, the addition of jobs in Hudson Yards estimated during the five-year Analysis Period: 2019 and 2023. According to XXX's research, job creation will continue to progress past 2023 for a total of over 108,000 total jobs created at Hudson Yards. However, for purposes of this Analysis, we have limited the timeframe to match the period of this study.

Projected Job Creation in Hudson Yards*	
Year	Number of Jobs Created
2019	33,663
2020	0
2021	0
2022	24,686
2023	24,429
Total	**82,778**

The 7 Train crosses Manhattan from west to east starting at Hudson Yards and with its first stop outside Manhattan in the Queens West/Hunters Point South Neighborhood section of Long Island City at Vernon Boulevard/Jackson Avenue (the "Vernon Jackson Stop") which is only 1.5 blocks from the Property.

While many workers in the new Hudson Yards office district will choose to live in and around Hudson Yards, or in other locations in Manhattan, still a disproportionate number will seek residence on the East River waterfront where the Property is located, at the edge of Long Island City nearest to Manhattan. In that area, the rents when compared to Manhattan are: (i) more economic; (ii) the commute to work is the shortest and most direct route due to the superior location of the Vernon Jackson Stop located just 1.5 blocks from the Property; and (iii) from the highest level of efficiency and reliability in all of New York City's mass transit system. This upgraded efficiency is due to new signal improvements that have recently been installed on the 7 Train, in the form of enhanced switching connectivity increasing the ridership capacity on the line by 11%. This outcome was accomplished by shortening intervals of space and time between trains along the subway line. Additional information on the timing and extent of the upgraded 7 Train service is found later in the report.

Finally, the relationship between rent growth and job creation in FiDi to Downtown Brooklyn is directly applicable to model the effect of rent growth in Long Island City resulting from job creation in Hudson Yards. As shown below, the relationship between rent growth caused by office employment in WTC and Hudson Yards office employment is evident as each job can be assumed to have an equivalent effect on rent growth.

Derived Premium for Hudson Yards Residential and Long Island City, as a Result of Job Creation in Hudson Yards Office Development		
Number of Jobs Created in WTC Towers	Total Premium in FiDi Over 5 Years Due to Job Creation [Proposition 4]	Total Premium in DoBro Over 5 Years Due to Job Creation [Proof 3]
30,663	1.8%	0.8%
Number of Jobs To Be Created in Hudson Yards	Imputed Premium In Hudson Yards Res. Over 5 Years Due to Job Creation [Proof 4]	Imputed Premium In LIC Over 5 Years Due to Job Creation [Proof 5]
82,778	4.9%	2.2%

The above chart demonstrates the relationship between the number of jobs created in the reconstruction of World Trade Center towers and the resulting rent growth premium, above the general rent growth the market saw during this period, in both Fidi and DoBro as a result of this job creation. This relationship, or ratio, is then applied to the projected amount of job growth expected in Hudson Yards, and its directly connected residential area in LIC. These numbers demonstrate that **Hudson Yards employment growth will be more impactful to LIC residential demand than WTC employment growth was to DoBro residential demand because Hudson Yards will produce almost three times as much employment growth as WTC did [Proposition 5].** It further calculates, via Propositions 2+4+5, that **during the period of Hudson Yards Office employment growth, Hudson Yards Residential will outperform Manhattan's residential growth [Proof 4]** as well as, via Proofs 2+3+4, that **during the period of Hudson Yards Office employment growth, Long Island City will outperform Queens' residential growth [Proof 5].**

The FiDi to Manhattan Core Comparison Model is applicable to Long Island City. Our research shows that there will be an equivalent, positive impact on rent growth in Long Island City resulting from jobs created with the completion and opening of the buildings within the Hudson Yards Office development as there was in Downtown Brooklyn as a result of the completion and opening of the World Trade Center.

IX. Conclusion

The effect of a significant reduction in residential supply coming to market in LIC, combined with the continued steady employment growth from the influx of New Economy workers and the direct connection to the employment surge from Hudson Yards, leads to our projection of an average 8.3% annual rent growth in LIC through 2023.

Total Projected Rent Growth In Long Island City By Year			
	Rent Growth Due to Supply (Replicated Rent Forecast) [Proof 5]	Rent Growth Due to Additional HYO Demand [Proof 4]	Total Rent Growth
2019	8.2%	0.9%	9.1%
2020	10.5%	0.0%	10.5%
2021	8.3%	0.0%	8.3%
2022	12.2%	0.6%	12.8%
2023	0.9%	0.6%	1.5%
Average	7.9%	0.4%	8.3%

With respect to the chart above, XXX has shown the creation of more than 82,000 jobs in the Hudson Yards Office Development alone through 2023 and over 108,000 when projecting past 2023, the closing year of the Analysis Period. We have conservatively used a zero factor for any other areas of new employment demand that could generate residential interest in LIC, anywhere else along the line of the 7 Train simply because other transportation lines service those locales, whereas the 7 Train is the only MTA source of transportation to Hudson Yards. With that perspective, we have calculated a conservative result of an approximate 0.9% growth premium in 2019 and 0.6% premium in 2022 and 2023 [from Proof 5], in addition to the rent growth anticipated based on decreasing residential supply through 2023 as demonstrated above [from Proof 1].

5. Local Amenities and Neighborhood Character

During the time of the reconstruction of the World Trade Centers, the Financial District was not considered a desirable place to live. It lacked the retail conveniences needed to support residential development and was subject to the broad perception that “the streets rolled up at night”. This perception, whether justified or not, was none-the-less a depressant to residential demand.

The Queens West/Hunters Point South Neighborhood area of Long Island City, on the other hand, is a vibrant residential neighborhood with views of Manhattan and the river, beautiful waterfront parks and an abundance of small retail stores, new, high quality eateries, and a true open-air ambiance that adds to its character. There is no perception of non-activity during the evening hours that was experienced in FiDi. To the

contrary, we have toured the area on numerous occasions, including several visits to the area in 2019, and we have found it to have, a genuine and steadily rising vitality. Moreover, there has been an expansion of excellent public schools that are conducive to the creation of family-sized homes that are typically viewed to be the most valuable occupants in the market.

6. 7 Train – The Positive Impact of Connectivity Improvements

The MTA implemented significant improvements in CBTC (Communications Based Technology Control) signaling technology on the L train in 2008 that have, enabled the L train to become the most reliable line in the system, as measured by On-Time Performance and Customer Journey Time Performance. The same technology has been installed and is being implemented on the 7 Train, which is the second line in the system to benefit from this new technology. Similar results as were experienced on the L, are now being realized on the 7 (please visit http://dashboard.mta.info for additional information). The MTA has confirmed that the signal upgrading on the 7 Train is fully funded and work is nearly complete. The MTA expects that the CBTC technology will allow the line to operate at a peak capacity of 11% higher than before the technological improvements (30 trains per hour, up from a prior maximum of 27). This improvement in efficiency is expected to enhance the added throughput capability to accommodate new employment demand arising from the new buildings at Hudson Yards.

7. School and Family

The Property is in the capture area of PS 78, a new K through 5 facility that is rated 9 out of 10 on the Great Schools rating site. Further, PS 341 will seat 572 students and PS 375 will seat 612 students. Both schools are Pre-K to 5, and are expected to open in 2021.

(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 5, which discusses the creation of the two schools in Queens West/Hunters Point South Neighborhood, titled Article.)

Based on a research analysis for Pacific Park, which we conducted in 2018, buildings that are zoned for highly rated public schools are 10% more valuable in terms of nominal rent than buildings that are not zoned for highly rated schools, even in the same neighborhood.

(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 5 titled Pacific Park Study.)

Given the presence of PS 78 and the soon to be constructed PS 341 and PS 375, one of the highest and best uses of the Property as a residential building, is to have a substantial portion of the units developed with an eye toward the family demographic. Although this is not the only mix and demographic to which the Property will be attractive, the family demographic in respect of high quality schools within walking distance, is likely to be the most compelling and should be a key focus of the financial projections.

The table below demonstrates the enhanced performance of family-sized units in Queens West/Hunters Point South Neighborhood as compared to smaller units for the period 2016 - 2019.

(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 5 titled Long Island City Analysis.)

Rent Growth in Rental Buildings for Studios and One Bedrooms (Smaller Units) and Two and Three Bedrooms (Family-Sized Units) in Queens West/Hunters Point South Neighborhood*				
	Smaller Units		Family-Sized Units	
	Studio	One Bedroom	Two Bedroom	Three Bedroom
2016 - 2019 Percent Growth	5.6%	5.0%	9.2%	10.2%

*Source: Nancy Packes Data Services

It is important to note that the larger units increased on average, by more than 80% in comparison to the average of the smaller units, thus demonstrating the pent-up demand for family-sized units. The source of this demand is primarily families and again speaks to the increased potential financial benefit to the developer from designing the building with this demographic in mind. As new public schools are built in Queens West/Hunters Point South Neighborhood, they will attract the family demographic, supporting continued higher rent growth for larger units. The influx of the older and more affluent family demographic also supports the creation of more extensive retail amenities, thus continuing the "virtuous cycle" that builds the vibrancy and livability factors that enhance the attractiveness of neighborhoods of rising income levels and overall gentrification.

8. <u>The Property – Proposed Unit Mix and Pricing</u>

Based on the foregoing data and analysis, one of the highest and best uses for the Property would be as a rental building with the inclusion of a substantial component of larger, family-oriented units. The transaction values during the past several years in Queens West/Hunters Point South Neighborhood, in rental buildings, by unit type and square footage are instructive in establishing the mix, sizes, and current pricing of such a residential development on the Property

(Please see corresponding attachment in the Exhibits folder contained in Sub-folder 6 titled Unit Mix and Pricing.)

Having identified the top performing rental buildings in Queens West/Hunters Point South Neighborhood, we constructed the mixes of those buildings based upon the number of listings by unit type over two years (Please see below).

Unit Mixes in Top Performing Rental Buildings in Hunters Point South				
Address	0	1	2	3
28-30 JACKSON AVENUE	22%	57%	15%	5%
2-01 50 AVENUE	19%	52%	22%	7%
43-10 CRESCENT STREET	25%	50%	19%	5%
11-39 49 AVENUE	36%	44%	4%	16%
42-12 28 STREET	25%	41%	21%	13%
4545 CENTER BOULEVARD	23%	51%	21%	5%
4720 CENTER BOULEVARD	19%	55%	25%	1%
Average	23%	52%	19%	6%

Based on the top performing units data and the top performing buildings' unit mixes, the chart below represent the optimal mix and pricing, in the current market, for the Property.

We have assumed that the Property is a 31 story building and that the studios and one bedrooms will be located up to the 20th floor and that the larger, 2 and 3 bedroom units will be located from the 21st to the 31st floors. In the chart below the average prices given are for studios and 1 bedroom on the 11th floor and for 2 and 3 on the 25th floor.

We priced the 2 bedroom 1 bath unit type using the same PSF as for the 2 bedroom with 2 baths unit type due to limited amount of data for the unit type of such designation. The suggested unit percentages consider both information derived from our Analysis of the highest yielding unit types and sizes as well as the above stated assumption for unit placement in the Property. As such, the suggested percentages emphasize the placement of studios and 1 bedrooms in the lower 2/3rds of the Property and 2 and 3 bedroom units in the upper third, where they can benefit from superior views and command a view premium.

Pricing and Unit Mix for the Property				
Unit Type	Avg Rent	Avg SF	Avg PSF	Unit Mix
Studio	$2,800	500	$67	25%
1 BR	$4,000	650	$74	50%
2 BR 1 BT	$5,300	850	$75	10%
2 BR 2 BT	$6,200	1000	$74	10%
3 BR 2 BT	$8,000	1300	$74	5%
Weighted Avg / Totals	**$4,250**	**700**	**$73**	**100%**

(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 6 titled Long Island City Comp Report.)

9. Condo Market Analysis

The comparables set below documents average price per square foot achieved over the past 12 months in select New Development (i.e. newly constructed buildings that are being occupied for the first time) Brooklyn and Queens condominiums. While we have listed a handful of completed projects for comparison, a better measure of the current New Development market in Brooklyn and Queens may be represented by New Developments that are currently selling, but where closings have not yet begun. Though these values are listed values as opposed to sold values, they reflect developer confidence and opinion of value in the current Brooklyn and Queens New Development market.

In Queens, the most comparable new development project that is currently on the market is Skyline Tower where the blended price of units on the market / under contract is $1,587/psf. The most comparable based on location is The View at East Coast, where the sellouts have averaged a similar $1,586/psf over the past year and a close $1,541/psf since 2016. The important delineation between the two is that The View was developed in 2008 while Skyline Tower is 1 mile northeast further into Long Island City adjacent to Court Square. Additionally, just to the south in Greenpoint, 21 India has a comparable waterfront location and has averaged approximately $1,531/psf between its first closings and those units recently on the market.

Consistent geographically with the comparability analysis employed in the rental section of this paper, Downtown Brooklyn also features a number of new developments with similar price points including 138 Willoughby, One Clinton, The Boerum, 11 Hoyt, & The Hendrik which are asking / achieving pricing between $1,500 - $1,800/psf. To further illustrate the potential as the Long Island City market matures, comparable new developments in Brooklyn that are either waterfront or that feature similar skyline views include 1 John Street, The Quay, and 5 River Park where sales have passed $2,000/psf. Please see summary table below:

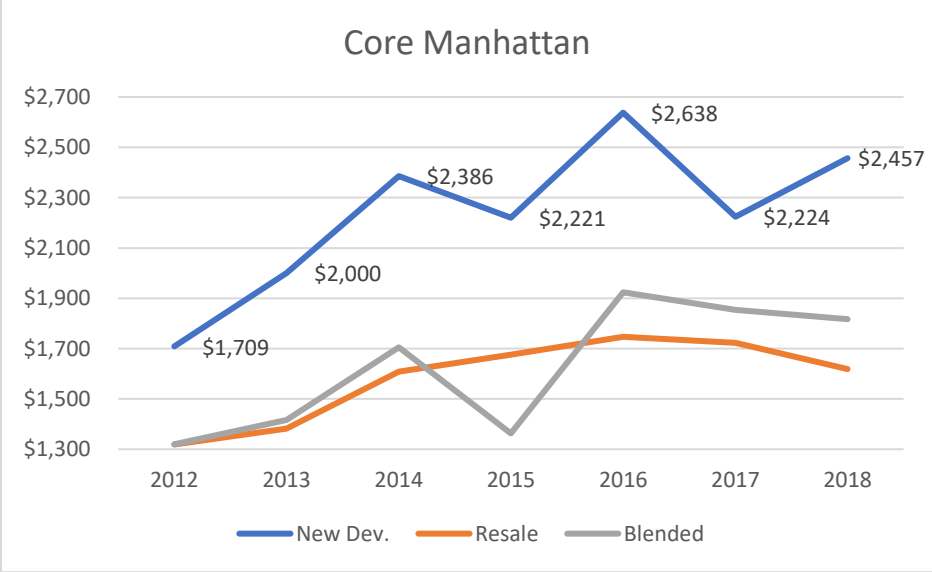
Brooklyn											
Building Name	Address	Type	Borough	Age	Year to Market	Stories	Units	Service level	Service level descriptor	Avg PSF	Sample Size
New York Public Library	1 CLINTON STREET	Condo	Brooklyn	Post-war	2019	36	134	Attended	Doorman	$1,687	15
One John Street	1 JOHN STREET	Condo	Brooklyn	Post-war	2014	12	42	Attended	Doorman	$1,771	57
Polhemus Building	100 AMITY STREET	Condo	Brooklyn	Post-war	2017	8	17	Attended	Doorman	$1,680	14
	11 HOYT STREET	Condo	Brooklyn	Post-war	2018	5	481	Attended	Doorman	$1,435	134
City Point, Tower 3	138 WILLOUGHBY STREET	Condo	Brooklyn	Post-war	2018	57	458	Attended	Doorman	$1,775	91
	21 India Street	Condo	Brooklyn	Post-war	2018	40	95	Attended	Doorman	$1,535	62
5 River Park	347 HENRY STREET	Condo	Brooklyn	Post-war	2018	5	30	Unattended	Doorman	$1,912	25
The Quay	50 BRIDGE PARK DRIVE	Condo	Brooklyn	Post-war	2018	6	58	Attended	Doorman	$1,910	49
Average										$1,655.81	
Queens											
Building Name	Address	Type	Borough	Age	Year to Market	Stories	Units	Service level	Service level descriptor	Avg PSF	Sample Size
The View at East Coast	46-30 CENTER BOULEVARD	Condo	Queens	Post-war	2009	18	184	Attended	Doorman	$ 1,580	152
Skyline Tower	3 Court Square	Condo	Queens	Post-war	2019	67	802	Attended	Doorman	$ 1,548	136
Average										$1,564.89	

(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 6 titled Brooklyn and Queens Condominium Data.)

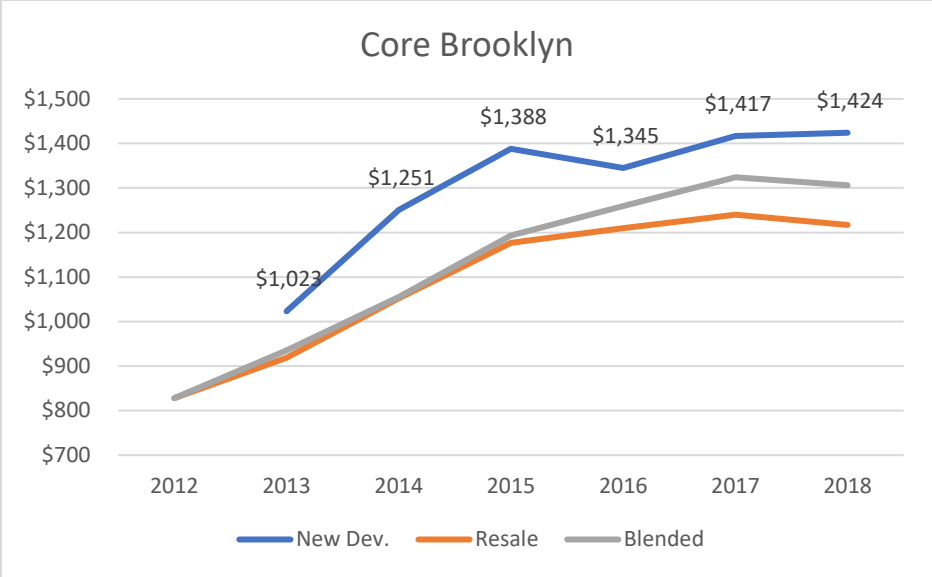
As shown in the graphs below, during the past six years, from 2012 to 2018, New Development condo price growth in Queens has significantly outpaced both Core Manhattan and Core Brooklyn. Long Island City has realized a compound annual growth rate of 8.3% over this period while Brooklyn prices grew 6.8% and Manhattan 6.2%. In analyzing future LIC values, for New Development condominiums, this growth rate of approximately 8.3% can be used as the basis for projecting future value.

The continued growth and maturity of the Brooklyn and Queens New Development sales market, as demonstrated by the buildings and values cited above, demonstrates a high level of not only developer confidence, but also buyer confidence, in the future strength of condominium values in the boroughs, especially Long Island City. There is little reason to believe this confidence indicator will change in the near term as NYC Metro job growth and the economy as a whole continue to remain strong. Given these two factors, if the Subject Property were to come to market today, we would project the 8.3% growth noted above to remain consistent.

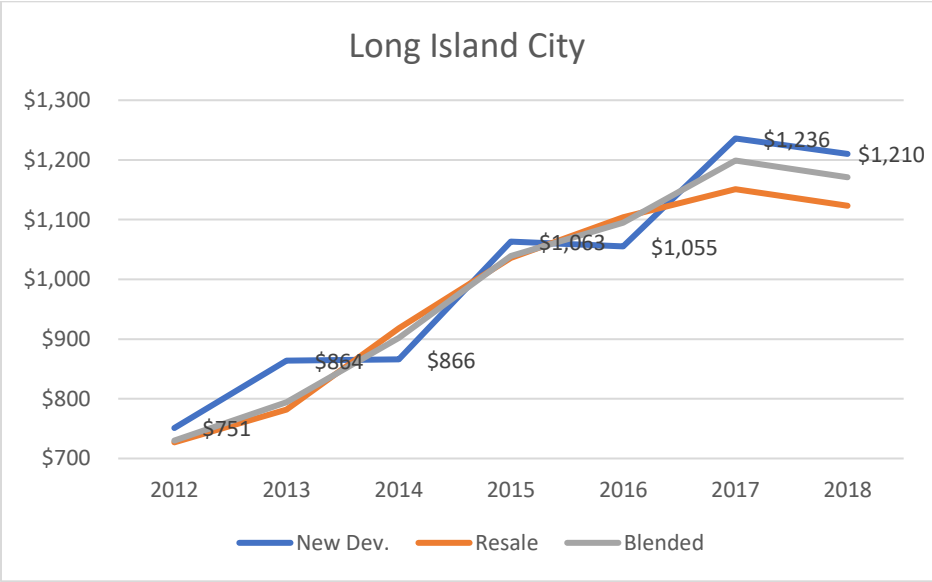
(Please see corresponding attachment in the Exhibits Folder contained in Sub-folder 6 titled Condominium Comparison Charts.)



Core Manhattan									
	2012	2013	2014	2015	2016	2017	2018	2012 - 2018 Percent Growth	CAGR
New Dev.	$ 1,709	$ 2,000	$ 2,386	$ 2,221	$ 2,638	$ 2,224	$ 2,457	44%	6.2%
Resale	$ 1,319	$ 1,382	$ 1,608	$ 1,676	$ 1,747	$ 1,723	$ 1,619	23%	3.5%
Blended	$ 1,320	$ 1,416	$ 1,705	$ 1,363	$ 1,924	$ 1,854	$ 1,817	38%	5.5%



Core Brooklyn									
	2012	2013	2014	2015	2016	2017	2018	2012 - 2018 Percent Growth	CAGR
New Dev.		$ 1,023	$ 1,251	$ 1,388	$ 1,345	$ 1,417	$ 1,424	39%	6.8%
Resale	$ 828	$ 919	$ 1,052	$ 1,177	$ 1,210	$ 1,240	$ 1,217	47%	6.6%
Blended	$ 828	$ 935	$ 1,055	$ 1,193	$ 1,259	$ 1,324	$ 1,306	58%	7.9%



LIC									
	2012	2013	2014	2015	2016	2017	2018	2012 - 2018 Percent Growth	CAGR
New Dev.	$ 751	$ 864	$ 866	$ 1,063	$ 1,055	$ 1,236	$ 1,210	61%	8.3%
Resale	$ 727	$ 782	$ 918	$ 1,036	$ 1,104	$ 1,151	$ 1,123	54%	7.5%
Blended	$ 730	$ 794	$ 902	$ 1,039	$ 1,095	$ 1,199	$ 1,171	60%	8.2%

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