## EXECUTIVE SUMMARY

t is conventional wisdom that New York City is in the midst of an unprecedented housing crisis, with rising rents and limited vacancies making it difficult, if not impossible, for households of modest means to live in the city. Mayor Bill de Blasio has responded with a signature initiative to enable and support, via tax abatements and other subsidies, the building of some 80,000 new "permanently affordable" rental units over ten years. ${ }^{1}$

But how extensive is New York's housing squeeze, and does it affect the city as a whole? While an influx of demand has boosted housing prices dramatically in certain neighborhoods once known for modest prices, this paper examines the extent to which NYC retains "naturally occurring affordable housing" (NOAH) unitsapartments that overlap in price with the mayor's affordability targets but that are currently available and require no additional government investment.

Using U.S. Census data, this paper finds significant overlap between NOAH units and Mayor de Blasio's long-term housing targets: some 49,800 such units-including studios and one- and two-bedroom apartments-are likely available in NYC at any given time. Using data provided by StreetEasy, a major online
rental listing service, the paper further confirms the availability of specific NOAH units in NYC. Other key findings include:

1. NOAH units can be found in 42 of NYC's 55 census-designated neighborhoods. ${ }^{2}$
2. NOAH units are most abundant in northern Manhattan (Inwood and Harlem) and in outerborough neighborhoods, such as Astoria, Jackson Heights, East Flatbush, and all of Staten Island.
3. There are likely about 8,800 currently available NOAH units-equal to more than half of the 16,000 subsidized units that Mayor de Blasio has pledged to build-for households with annual incomes as low as 50 percent of NYC's area median income ( $\$ 38,850$ for a family of three; $\$ 30,250$ for a single person).

## I. INTRODUCTION

The administration of NYC mayor Bill de Blasio has embarked on an ambitious subsidized housing program, Housing New York, which includes the construction of 80,000 new "affordable" units (defined as requiring no more than 30 percent of household income) for households earning up to 165 percent of area median income (AMI)—with the bulk of such units intended for households earning 60 per-cent- 80 percent of AMI ( $\$ 46,620-\$ 62,160$ for a family of three; $\$ 36,300-\$ 48,400$ for a single person). ${ }^{3}$ Construction is to be realized through a combination of city financing, forgone property taxes, and affordable-housing mandates.

At a July 2015 ribbon-cutting ceremony lauding the completion of a subsidized $\$ 17$ million, 58 -unit, Bronx apartment building, Mayor de Blasio made clear the assumption underlying the city's new policy: absent such a government role, those of modest means will be unable to live in NYC. "This is real progress, in real time, for real families," said de Blasio. "Together with the city council, community based organizations, and the private sector this will remain a city for everyone. ${ }^{, 4}$ More below-market-rate housing must be
created "because New Yorkers are spending more and more to cover their housing costs, and entire neighborhoods have lost their affordability." This is happening, the mayor's Housing New York plan argues, in part because "supply is not meeting demand."

This is, indeed, received wisdom in NYC, at a time when relatively affluent newcomers gain attention for moving into what were once poor, low-cost neighborhoods. But to what extent is there truly a citywide rental crisis? Does NYC's entire private housing market not offer housing within the means of lower-income households?

This paper explores the extent to which NYC neighborhoods offer privately owned rental housing that is affordable for those of lower incomes-as well as the extent to which such housing is vacant and available. Selecting the same income groups targeted by Mayor de Blasio, the authors examine two segments of NYC's private housing market: affordable rental units for households with annual incomes of 30 percent $(\$ 23,010)-165$ percent $(\$ 128,205)$ of AMI for a family of three; and affordable rental units for single-person households with annual incomes of 30 percent $(\$ 20,730)-165$ percent $(\$ 114,015)$ of AMI. ${ }^{6}$

Determining rent levels for occupied and available units in NYC is made possible by the city's agreement with the Census Bureau to regularly assess these and other aspects of the city's housing market. The New York City Housing and Vacancy Survey (NYCHVS) is conducted every three years, in part to determine if the city's overall housing vacancy rate is such that rent regulation should continue. (State law requires a vacancy rate of 5 percent or less for rent regulation to continue in NYC; the NYCHVS has been conducted since 1965.) Data in this paper are taken from the 2014 NYCHVS, the most recent such survey. ${ }^{7}$

In addition to its citywide findings, the NYCHVS examines housing conditions-including rent levels and vacancy data-for each of New York's 55 censusdesignated neighborhoods. ${ }^{8}$ This paper compares,
by neighborhood, the median rent and the household income that would be required for such rent to be considered affordable-defined as the extent to which rents for occupied and available units equal no more than 30 percent of household income.

Although the NYCHVS does not permit tabulation of specific vacancies in specific neighborhoods (because of the small sample sizes of vacant units in individual census-designated neighborhoods), it does
allow for estimates of vacancy percentages for each of NYC's five boroughs; by multiplying those percentages by the total number of borough housing units, this paper estimates borough-wide vacancies at various rent levels. To further assess the extent of NOAH units in NYC, the authors obtained estimates from StreetEasy, the dominant online rental listing service in Manhattan and Brooklyn, of the number of affordable units, by borough, listed on its website in 2014.

Figure I. NYC Census-Designated Neighborhoods, Mean Occupied Market Rent per Bedroom, 2014*

| Rent per <br> Bedroom (\$) |  | Census-Designated Neighborhood |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |

## II. FINDINGS

This paper finds that NYC does not suffer from a broad market failure, as measured by the preponderance of affordable rental units in its private housing market. Specifically, it finds that in 42 of NYC’s 55 census-designated neighborhoods (Figure 1), housing that Mayor de Blasio would define as af-fordable-equal to about $49,800 \mathrm{NOAH}$ units of all sizes-is currently available (Figure $\mathbf{2}$ and Figure 3); and that median rents for occupied apartments in these same neighborhoods are also affordable.

## Census Bureau

For one important market section-the median market rate of a two-or-more-bedroom apartment-
rent levels for occupied units in 42 NYC neighborhoods do not exceed 30 percent of income for households earning less than 100 percent of AMI ( $\$ 77,700$ for a family of three). In 23 NYC neighborhoods, the same median market-rate unit was rented at prices that would be affordable for households earning 80 percent or less of AMI $(\$ 62,160)$; in six NYC neighborhoods, the median market-rate unit was priced at rents that would be affordable for households earning less than 70 percent of AMI (\$54,390 annually).

This paper finds that, in 45 NYC neighborhoods, about $25,600 \mathrm{NOAH}$ units of two-or-more bedrooms are likely available at any given time for those earning less than 120 percent of AMI for a family

Figure 2. Occupied Market-Rate Rents for Two-or-More-Bedroom Apartments, 2014*

| Borough | Units | 5th Percentile <br> Rent (\$) | 10th Percentile <br> Rent (\$) | 25th Percentile <br> Rent (\$) | 50th Percentile <br> Rent (\$) | 75th Percentile <br> Rent (\$) |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Bronx | 50,809 | 850 | 1,060 | 1,260 | 1,525 | 1,815 |
| Brooklyn | 168,447 | 835 | 1,000 | 1,207 | 1,500 | 1,975 |
| Manhattan | 73,308 | 1,540 | 2,120 | 2,850 | 3,650 | 4,900 |
| Queens | 145,656 | 945 | 1,095 | 1,375 | 1,640 | 1,915 |
| Staten Island | 20,245 | 800 | 1,000 | 1,250 | 1,525 | 1,750 |
| Citywide | 458,465 | 889 | 1,070 | 1,310 | 1,665 | 2,253 |

*How deep is NYC's private rental market below the median? Figure 2 examines the total rent distribution for two-or-more-bedroom apartments to answer this question.

Source: Authors' calculations based on U.S. Census Housing and Vacancy Survey data

Figure 3. Occupied Market-Rate Rents for Studios and One-Bedroom Apartments, 2014*

| Borough | Units | 5th Percentile <br> Rent (\$) | 10th Percentile <br> Rent (\$) | 25th Percentile <br> Rent (\$) | 50th Percentile <br> Rent (\$) | 75th Percentile <br> Rent (\$) |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Bronx | 25,429 | 225 | 400 | 800 | 1,095 | 1,340 |
| Brooklyn | 88,948 | 600 | 750 | 970 | 1,194 | 1,660 |
| Manhattan | 114,798 | 1,070 | 1,828 | 2,440 | 2,890 | 3,450 |
| Queens | 64,837 | 670 | 800 | 1,040 | 1,280 | 1,500 |
| Staten Island | 13,943 | 725 | 860 | 925 | 1,025 | 1,175 |
| Citywide | 307,955 | 600 | 813 | 1,070 | 1,500 | 2,705 |

*How deep is NYC's private rental market below the median? Figure 3 examines the total rent distribution for studios and one-bedroom apartments to answer this question.

Source: Authors' calculations based on U.S. Census Housing and Vacancy Survey data

Figure 4. Estimated Vacant Units at Various AMI, by Household Size, 2014*

| AMI (\%) | Two-or-More-Bedroom Unit |  |  | Studio or One-Bedroom Unit |  |  | Total Affordable Vacant Units | Mayor's Ten-Year Affordable Target |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Affordable Rent (\$) | $\begin{aligned} & \text { 3-Person } \\ & \text { Income (\$) } \end{aligned}$ | Vacant Units | Affordable Rent (\$) | $\begin{aligned} & \text { 1-Person } \\ & \text { Income (\$) } \end{aligned}$ | Vacant Units |  |  |
| 30 | 583 | 23,310 | 956** | 454 | 18,150 | 1,522** | 2,478** | 6,400 |
| 50 | 971 | 38,850 | 4,638 | 756 | 30,250 | 4,207 | 8,845 | 16,000 |
| 80 | 1,554 | 62,160 | 18,491 | 1,210 | 48,400 | 20,873 | 39,364 | 62,400 |
| 100 | 1,943 | 77,700 | 23,386 | 1,513 | 60,500 | 26,423 | 49,809 | N/A |
| 120 | 2,331 | 93,240 | 25,663 | 1,815 | 72,600 | 27,988 | 53,651 | 71,200 |
| 165 | 3,205 | 128,205 | 29,004 | 2,496 | 99,825 | 32,145 | 61,149 | 80,000 |

*Estimates are conservative: two people can comfortably live in a studio or a one-bedroom apartment; and a family of four can civilly live in a two-or-more-bedroom apartment (average unit size was 2.25 for two-or-more-bedroom unit estimates).
**The small number of units means that these estimates should be treated cautiously.
Source: Authors' calculations based on U.S. Census Housing and Vacancy Survey data
of three (about \$93,000) (Figure 4). Two-or-more bedroom NOAH units constitute nearly half the roughly 75,800 vacant rental apartments available in NYC at any given time.

NOAH units are less widespread for single-person households: affordable median market-rate rents for studios or one-bedroom apartments can be found in 32 NYC neighborhoods for those earning AMI $(\$ 60,500)$ or less; three neighborhoods had median rents affordable below 80 percent AMI ( $\$ 48,400$ ); and one neighborhood had median rents affordable below 70 percent AMI ( $\$ 42,350$ ). NYC neighborhoods with a preponderance of NOAH units include Elmhurst/ South Corona, Ozone Park, and Ridgewood (Queens); Bensonhurst, East New York, Borough Park, and Sunset Park (Brooklyn); Morris Heights / Fordham South, Bedford Park / Fordham North, and Concourse/Highbridge (Bronx); and all of Staten Island.

Such affordability is not limited to currently occupied units: in 2014, there were more than 18,000 two-or-more-bedroom apartments and 20,800 studio or one-bedroom apartments affordable for households earning 80 percent of AMI ( $\$ 62,160$ and $\$ 48,400$, respectively); these figures include
more than 8,000 units affordable for households earning less than $\$ 38,850$.

NYC's stock of NOAH units-which require no new city financing-is thus considerably greater than the 8,000 new subsidized units that the mayor hopes to see constructed annually. (The first 20,325 units, for instance, counted toward the mayor's ten-year goal of 200,000 affordable units built or "preserved"-i.e., refinanced such that rents remain affordable for lowerincome households-required $\$ 618$ million in direct city financing alone.) ${ }^{9}$ This finding also suggests that affordability is a recurrent element of NYC's housing market: NOAH units, in other words, are not only abundant but available for rent at any given time.

## StreetEasy

To confirm the availability of NOAH units in NYC, the authors examined StreetEasy listings of two-bedroom units, as well as listings of studios and onebedroom units, at relevant AMI thresholds for various household sizes (Figure 5). In 2014, StreetEasy listed roughly 79,400 total affordable units, including middle-income units (as defined by the mayor's guidelines): 15,316 units were affordable for those earning AMI or less ( $\$ 77,700$ for a household of three; $\$ 60,500$ for an individual).

Figure 5. StreetEasy Neighborhoods with Most Affordable Units at I20\% AMI, 2014

| Neighborhood* | Affordable Units, 165\% AMI | Affordable Units, 120\% AMI | Affordable Units, 100\% AMI | Affordable Units, 80\% AMI |
| :---: | :---: | :---: | :---: | :---: |
| Bedford-Stuyvesant | 4,368 | 2,449 | 1,033 | 157 |
| Astoria | 4,147 | 2,184 | 693 | 45 |
| Washington Heights | 2,711 | 1,977 | 1,102 | 84 |
| Central Harlem | 3,150 | 1,874 | 871 | 96 |
| Crown Heights | 2,755 | 1,574 | 793 | 125 |
| Yorkville | 4,611 | 1,350 | 36 | 1 |
| Bushwick | 2,780 | 1,299 | 457 | 32 |
| East Harlem | 1,921 | 1,294 | 481 | 35 |
| Bay Ridge | 1,232 | 1,041 | 560 | 111 |
| Hamilton Heights | 1,147 | 705 | 291 | 30 |
| Flatbush | 764 | 682 | 530 | 105 |
| Upper East Side | 2,562 | 660 | 18 | 5 |
| Forest Hills | 1,120 | 618 | 214 | 13 |
| Prospect Lefferts Gardens | 648 | 524 | 291 | 33 |
| Sheepshead Bay | 538 | 485 | 359 | 59 |
| Sunnyside | 726 | 478 | 147 | 5 |
| Rego Park | 686 | 469 | 158 | 11 |
| Long Island City | 1,489 | 425 | 127 | 7 |
| Inwood | 483 | 423 | 273 | 37 |
| Park Slope | 2,131 | 412 | 73 | 5 |
| Upper West Side | 2,994 | 401 | 41 | 4 |
| Sunset Park | 457 | 396 | 253 | 20 |
| Williamsburg | 2,746 | 384 | 55 | 9 |
| Ditmas Park | 468 | 360 | 236 | 23 |
| Kensington | 502 | 345 | 192 | 18 |

*As defined by StreetEasy
Source: StreetEasy

Because StreetEasy listings are concentrated in Manhattan and Brooklyn-it listed more two-or-morebedroom apartments of any price for Brooklyn's Bushwick neighborhood than for the entire Bronx, for example-the StreetEasy data serve to complement, not replace, the census data.

StreetEasy's listing service demonstrates the availability of moderate-income units in increasingly popular Brooklyn and Queens neighborhoods (BedfordStuyvesant, Crown Heights, and Bushwick; Astoria
and Long Island City), upper Manhattan (Washington Heights, Harlem, and Inwood), and parts of south Brooklyn (including Bay Ridge, Crown Heights, and Flatbush)—but indicates less availability in the Bronx and central Queens (despite the fact that census data indicate that such housing is likely available).

Why does StreetEasy's share of NYCHVS-estimated NOAH units vary widely (from 303 percent in Brooklyn to 7 percent in Staten Island) (Figure 6)? First, StreetEasy data show a composite of 2014

## Figure 6. NOAH Units, Census-Estimated <br> vs. StreetEasy-Listed, 2014

|  | Census- <br> Estimated | StreetEasy- <br> Listed | StreetEasy- <br> Listed as Share <br> of Census- <br> Estimated (\%) |
| :--- | :---: | :---: | :---: |
| Bronx | 14,894 | 2,244 | 15 |
| Brooklyn | 19,463 | 28,958 | 149 |
| Manhattan | 11,934 | 36,128 | 303 |
| Queens | 11,490 | 11,862 | 103 |
| Staten Island | 3,368 | 221 | 7 |

Source: Authors' calculations based on U.S. Census Housing and Vacancy Survey data and StreetEasy data
vacancies, while census data show a snapshot of vacancies at the time that census staff sampled each neighborhood.

Second, StreetEasy, though the market leader for free public listings in premium and/or newly popular neighborhoods in Manhattan, Brooklyn, and Queens, is less dominant in more modest NYC neighborhoods. (In Manhattan and Brooklyn, in particular, StreetEasy's dominance enabled it to capture more unit turnover across 2014 than did census staff in their sample snapshot.) In other NYC neighborhoods—Queens outside Astoria, Staten Island, the Bronx, and Brooklyn neighborhoods such as East New York, Coney Island, Bensonhurst, and Borough Park-many NOAH units are likely to be found via less prominent listing services or via local brokers. Nevertheless, the StreetEasy data confirm that an abundance of NOAH units are being offered on NYC's leading apartment rental website (Figure 7).

## III. POLICY IMPLICATIONS

There may be legitimate reasons that NYC may wish to continue providing subsidies for some new housing. In a period of growing population and thus, of rising demand for new housing, expanding the city's stock of below-market-rate housing

| Figure 7. Concentration of NOAH Units by Borough, Census-Estimated vs. Street-Easy Listed, 2014 |  |  |
| :---: | :---: | :---: |
|  | Census-Estimated (\%) | StreetEasy-Listed (\%) |
| Bronx | 24.4 | 2.8 |
| Brooklyn | 31.8 | 36.5 |
| Manhattan | 19.5 | 45.5 |
| Queens | 18.8 | 14.9 |
| Staten Island | 5.5 | 0.3 |
| Source: Authors' calculations based on U.S. Census Housing and Vacancy Survey data and StreetEasy data |  |  |

may incentivize political support for new construction among existing residents in high-demand neighborhoods-especially if such residents believe that those of modest means (including, perhaps, themselves) will be able to avail themselves of what would otherwise be higher-cost units. As proposed zoning changes seek to legalize taller, more dense residential structures in non-Manhattan neigh-borhoods-such as East New York and Brooklyn's Broadway corridor, the Bronx's Jerome Avenue corridor, and Jamaica and Flushing in Queens-mobilizing such support may be critical.

Financing subsidized housing should not, however, be rooted in the false argument that NYC's entire rental market has priced out nonaffluent households. Further, there are numerous reasons to be concerned about Mayor de Blasio's affordable housing plans.

Start with the sheer expense of subsidizing individual units. As mentioned, the first 20,325 units that Mayor de Blasio counted toward his ten-year goal of 200,000 affordable units, constructed or preserved, required $\$ 618$ million in direct on-budget city funding. Housing subsidies also represent a significant per-unit expense in forgone tax revenue: New York's so-called 421a program, for instance, leads the city to grant off-budget property-tax exemptions worth more than $\$ 1$ billion annually.

The opportunity cost of such expenditures is considerable, too. NYC has many needs, from public safety to health care, education to parks: $\$ 618$ million, for example, is nearly twice the city's $\$ 392$ million annual budget for park maintenance ${ }^{10}$ and more than double the MTA's recent $\$ 300$ million request for capitalbudget funding (as well as roughly five times NYC's current fiscal-year contribution to the MTA budget). ${ }^{11}$

Directing significant sums to individual units-of which individual households are the main ben-eficiaries-diverts funds from purposes that benefit many more New Yorkers. To believe that subsidies directed toward ensuring an income mix of residents in specific buildings is a key public priority, one must believe that the value of such "economic integration" outweighs the value of investments in, for instance, the city's existing low- and middle-income neighborhoods.

Public budgeting is inevitably a series of such tradeoffs. ${ }^{12}$ Undoubtedly, some will see the mayor's affordable housing plan as a worthy goal-but it is not a goal for which vacancy data make the straightforward case advocated by the mayor. One alternative to costly subsidies would be to improve the informational efficiency of NYC's affordable rental market: expand, say, the listings exposure of outer-borough neighborhoods on StreetEasy and other websites, perhaps with modest financial support from the city.

## IV. CONCLUSION

This paper does not claim that the relative abundance of NYC's NOAH units is permanent and inevitable in the absence of new construction-quite
the contrary. SoHo, Chelsea, and Williamsburg were once naturally affordable neighborhoods but have since seen population growth outstrip housing supply. Upper Manhattan, with the lowest median sales prices in the borough, is now experiencing double the price growth of that seen by the rest of Manhattan. ${ }^{13}$

Yet Mayor de Blasio's affordable housing goals are predicated on the false assumption of an existing, inevitable shortage of housing within the means of low- and middle-income households: most of NYC continues to be characterized by median apartmentrental prices within the means of those earning area median income. Indeed, census and StreetEasy data make clear that NOAH units are not only abundant but available for rent at any given time, too.

There are many reasons that even more relatively low-priced housing is not available in New York. Tax policy and unit-size restrictions affect construction costs per unit. Density-limiting zoning drives up land and air-right prices by restricting the supply of buildable space in desirable neighborhoods. In other major U.S. cities, including Houston and Chicago, where housing is less regulated, affordability is greater. Such concerns and comparisons, however, are beyond this paper's scope.

In sum, the authors find that affordable middle-class and working-class housing remains widely available across most of NYC—even absent new subsidies and other new city interventions; and that such NOAH units represent a significant percentage of the subsidized units that Mayor de Blasio has pledged to build over the coming decade.

## ENDNOTES

1. See http://www.capitalnewyork.com/article/city-hall/2015/05/8568402/de-blasio-unveils-10-year-nycha-plan.
2. A total of 42 census neighborhoods have median rents on two-or-more-bedroom apartments at or below 100 percent area median income (AMI) for a family of three; 30 census neighborhoods have median rents for studios and onebedroom apartments at or below 100 percent AMI for an individual.
3. See http://www.nyc.gov/html/housing/assets/downloads/pdf/housing_plan.pdf.
4. See https://sites.google.com/site/bronxnews/headlines-Bronx-New-York/deblasio-hails-affordablehousing-bronxnews.
5. See http://www.nyc.gov/html/housing/assets/downloads/pdf/housing_plan.pdf.
6. The authors selected all households eligible—as determined by NYC's Department of Housing Preservation and Development (HPD)—for affordable units, such as those set aside in new, generally market-rate developments via "inclusionary zoning" (whereby the city mandates that as many as 30 percent of units are affordable). Under HPD rules, such subsidized units (made possible, in part, by a zoning floor-area bonus of 33 percent and reduced city property taxes) are reserved not only for the very poor but for a range of households earning 165 percent or less of AMI. The mayor's weighted average target for new units is 60 percent- 80 percent of AMI. See http://www.nyc.gov/ html/housing/assets/downloads/pdf/housing_plan.pdf, p. 6.
7. See http://www.census.gov/housing/nychvs.
8. These 55 subunits, known as Public Use Microdata Areas (PUMAs), correspond with NYC's 59 Community Board districts. Some smaller adjacent Community Board districts were merged by the Census Bureau to form an area with at least 100,000 people to meet the population definition of a PUMA.
9. See http://www1.nyc.gov/office-of-the-mayor/news/482-15/de-blasio-administration-record-breaking-20-325-affordable-apartments-homes\#/0.
10. See http://council.nyc.gov/downloads/pdf/budget/2015/15/eb/parks_and_recreation.pdf.
11. See http://www.capitalnewyork.com/article/city-hall/2015/05/8567278/mta-surprises-de-blasio-call-more-funding. During preparation of this paper, NYC announced an initial agreement to increase its annual contribution to the MTA to $\$ 500$ million, contingent on continued state aid and city input on capital budgeting choices. This amount is, however, still roughly 20 percent less than the $\$ 618$ million 2014 housing outlay.
12. Through its inclusionary-zoning policies, the de Blasio administration is, in effect, setting the additional priority of economic integration of specific apartment complexes.
13. See http://streeteasy.com/blog/july-2015-market-update-manhattan-and-brooklyn.
