

Expanding Preschool in New York City – Which Communities Benefit from Gains in Supply?



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*“The best and the brightest are born in every neighborhood.
We all have a shared responsibility... in making sure their destiny is defined
by how hard they work and how big they dream, not by their zip code.”*

–Mayor Bill de Blasio, Brooklyn, November 2013

Bill de Blasio – like many political leaders over the past three decades – remains enthused about the promised benefits of preschool. He campaigned for mayor pledging new taxes on wealthy families to finance free and universal pre-k for all 4 year-olds in New York City.

Months after winning the election, Mr. de Blasio’s young administration has opened over 13,000 additional full-day pre-k seats in public schools and community-based organizations (CBOs). A similar number of slots, previously half-day in length, have been converted to full-day offerings. The mayor dropped the progressive tax proposal, under pressure from New York’s governor, but won fresh funding from the state capital.

The newly created pre-k slots, greeting families in September, 2014, build from 19,483 already existing full-day and 28,364 half-day seats overseen by the

funding streams. The mayor’s office estimated, prior to the 2014 expansion, that 27% of all 4



year-olds citywide enjoyed access to a full-day pre-k slot, aiming to reach all young children in future years (Office of the Mayor, 2014).

Which Children and Families Benefit?

We know that quality pre-k yields distinct gains in the cognitive and social-behavioral growth of young children – when they come from low-income families. But evidence remains weak that pre-k discernibly advances the growth of children from middle-class or affluent families, even when program quality is strong (e.g., Bassok, 2010; Heckman et al., 2010; Loeb et al., 2007). This is one reason that some policy makers aim to first expand and improve quality pre-k for poor children.

Mayor de Blasio, instead, hopes to provide free and universal pre-k to all families, no matter how rich or poor. His administration moved aggressively to



city. An additional 12,681 seats operate in federal Head Start preschools or with aid from older

advance this heartfelt goal during his first nine months in office.

Risks may arise when pushing to offer a new entitlement, whether the policy goal is to reduce the count of students in classrooms, broaden college access, or seed agricultural subsidies that



often prove to benefit well-off farmers. The track record for broad entitlements, while helping to establish economic security, is mixed when it comes to reducing inequality.

A universal entitlement to pre-k could narrow known gaps in children's early learning if those from poor families gain access to pre-k and show stronger gains than their middle-class peers. The alternative argument is that all children will benefit from pre-k. Yet this could serve to reinforce disparities, not close gaps, in children's early learning.

Quick implementation of a new entitlement necessarily relies on pre-existing institutional structures and the sharply varying capacities of, for example, differing schools, community agencies, and their neighborhoods. Mr. de Blasio and city schools chief Carmen Fariña have relied heavily on public schools to create new classroom space for additional 4 year-olds.

But many public schools remain severely overcrowded or hold scarce resources and little experience in serving preschool-age children. Community-based organizations have long operated child care and pre-k programs in New York City. Many submitted bids to expand their count of seats available to 4 year-olds. Still, constraints on facilities and uneven organizational capacities may act to constrain which communities benefit from New York City's effort to open tens of thousands of new pre-k slots.

Uneven Distribution of New Seats

We tracked the location of new child seats in the opening year of Mr. de Blasio's pre-k effort. This brief first details varying levels of growth in the count of seats situated in *public schools*, looking across the city's boroughs and communities, which differ widely in their economic vitality and organized infrastructure.

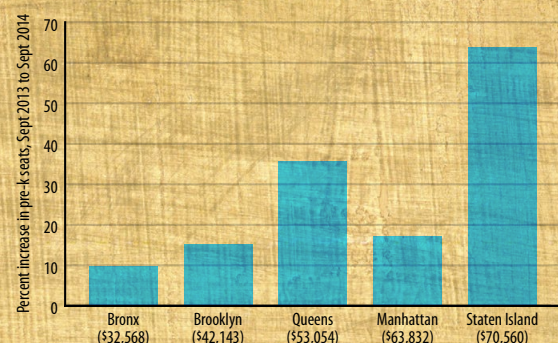
We then examine the evolving distribution of seats situated in *community organizations*, asking whether they help to equalize children's access to preschool. The city's departments of education and health have published neighborhood-level data on the location of pre-k seats for 2013 and 2014, the inventories on which our analysis is based (sources listed below).

Finding 1 – New pre-k seats hosted by city schools tend to be concentrated in better-off boroughs. We compared the number of full-day pre-k seats in the 2013-14 school year with the rising count that became available in September 2014.

Figure 1 reports levels of growth across the city's five boroughs. The rising count of pre-k seats is weakest – under 15% since 2013 – in the Bronx and Brooklyn. Residents of these boroughs report the lowest levels of household income, on average, relative to other boroughs. In contrast, the count of pre-k seats jumped 63% in Staten Island and 36% in Queens, compared with the prior year. Families in Queens benefit from 1,062 new full-day seats in schools this fall, while families in the Bronx enjoy only 316 additional seats.

These striking differences may stem from the

Figure 1. More pre-k seats in public schools created in better-off boroughs
(% gain in full-day seats, 2013-14 to 2014-15 school year)

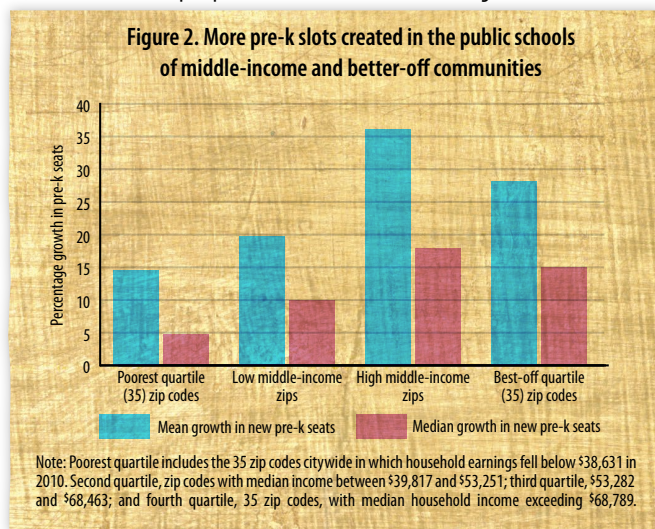


Note: Dollars are median household income for each borough in 2010 (U.S. Census Bureau).

overcrowded conditions that schools in the Bronx and Brooklyn continue to face, as detailed in a recent city audit (Comptroller, 2014). Schools in poorer communities appear to be less likely to find space for pre-k children, or lack the organizational slack to take on new programs.

Finding 2 – New pre-k seats hosted by public schools tend to be concentrated in better-off communities (defined by zip-code areas). Wide demographic and economic diversity is vividly present within boroughs. So, we combined the city’s 140 zip codes across boroughs (with complete data), then ranked them from the poorest to the most affluent in terms of residents’ median household income (for 2010, U.S. Census Bureau).

Figure 2 displays varying rates of growth in pre-k seats, after splitting the city’s zip codes into four quartiles, ranging from the poorest one-fourth to the economically best-off one-fourth of zip codes (35 falling in each quartile). A vast working-to-middle class populates New York City in addition



to poor and affluent families. Many middle-class families, earning close to the city’s median income (\$51,865), remain hard-pressed to afford quality preschool on the private market.

That said, we discovered that upper middle-income communities benefit disproportionately from the initial year of pre-k expansion under Mr. de Blasio’s initiative. The *median* zip code in the poorest quartile is experiencing a 5% gain in pre-k seats situated in their local schools. This compares with 17% growth in seats since last

year within the third (middle-income) quartile.

Growth rates in the count of seats range wider when examining *mean* levels of increase. This stems from several zip codes, most situated in Queens and Staten Island, in which the count of pre-k slots more than doubled over the past year, which drives mean levels higher than the median.



Two maps further illustrate these disparities in where new pre-k seats have been allocated (see pages 6 and 7). We show varying levels of growth set against the household income and poverty level for each zip code. The empty circles indicate where no new pre-k seats have been allocated in schools since last year; the largest circles show parts of Queens and Staten Island where the count of seats grew by 50% or more.

Do Community Organizations Help to Equalize Pre-K Access?

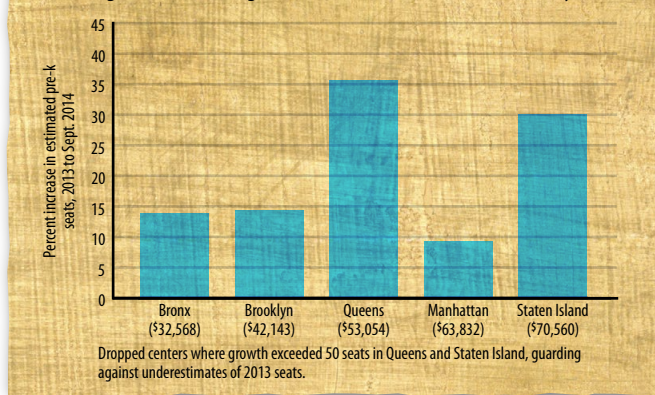
CBOs host over half the new pre-k seats that opened this fall. These 500-plus organizations may help to offset the lumpy, somewhat regressive distribution of pre-k seats across city schools.

Finding 3 – New pre-k seats hosted by community-based organizations (CBOs) tend to be concentrated in better-off boroughs and communities. To supplement the pre-k seats pegged for city schools Mr. de Blasio’s administration asked CBOs to bid in early 2014 for new funding to grow additional slots as well. By last month about 55% of all new pre-k seats were operated by CBOs.

But the distribution of newly created pre-k seats has favored CBOs situated in economically more robust communities. Figure 3 shows that the estimated count of seats serving 4 year-olds climbed by 36% in Queens between the fall of 2013 and last month, September 2014. In contrast, the number of seats in CBOs grew by just 14% in

the Bronx. Families in Staten Island also enjoyed a sharp jump in the count of pre-k seats for 4 year-olds, an estimated 30% growth.

Figure 3. More new pre-k seats created in community organizations of better-off boroughs (estimated % gain in seats, 2013-14 to 2014-15 school year)



Before allocating new seats the Department of Education did examine a needs ratio, weighing the existing supply of pre-k slots against kindergarten enrollments across the city's neighborhoods. But the quick ramp-up, varying levels of parent applications, and available capacity to grow appear to have advantaged CBOs located in better-off boroughs and neighborhoods. We made these estimates by matching preschool supply data for 2013 and 2014 from the departments of education and health and mental hygiene, since the former agency has yet to share historical data on pre-k supply situated in CBOs.

The third map (page 8) further illustrates the relative supply of pre-k slots situated in CBOs. Several zip codes in Queens display relatively high counts of pre-k slots per capita, even as the de Blasio administration awarded a disproportionately high count of new seats to city schools in Queens.

We also calculated the count of CBO centers for every 100 children 4 years of age, based on Census Bureau data. This analysis revealed that Queens hosts more centers than any other borough except Manhattan. Census data do not include counts of pre-k slots specifically for 4 year-olds.

Clarifying Priorities, Tracking Who Benefits

New York is at the front end of an ambitious experiment – rightfully aiming to buoy the

early growth of young children. The spread of quality preschool also backstops the economic security of families, freeing parents to pursue stable jobs.

Yet these initial findings – tied to early implementation of Mr. de Blasio's effort – prompt long-term questions: Are new pre-k slots being allocated fairly across the city's diverse communities? Could the spread of pre-k actually harden disparities in early learning – as schools and communities with stronger capacity reap the bulk of benefits? This would not be the first time that a well-meaning entitlement fails to narrow economic or educational gaps.

The de Blasio administration might take into account prior institutional and economic structures, especially the wide gaps in classroom space and organizational capacity that distinguish overcrowded from well-resourced schools. If CBOs are meant to ameliorate disparities seen among city schools – at least to equalize access to pre-k – a more precise strategy may be necessary. And until the mayor presses to track young children through pre-k programs of variable quality, we will not learn which children and families actually benefit from his bold undertaking.

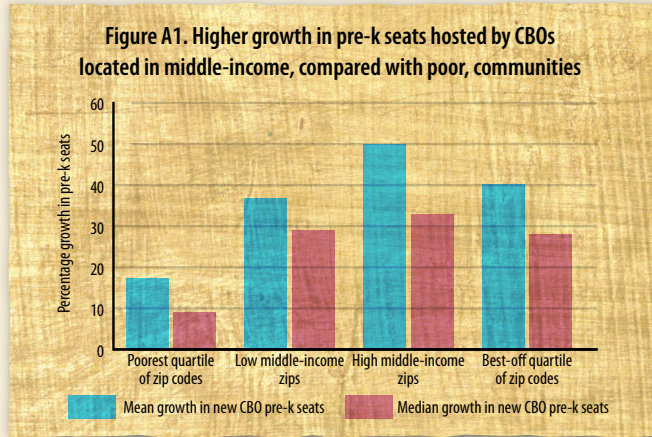
The opening of 25,000 new pre-k seats represents a remarkable policy accomplishment. It's an opportune time to catch one's breath and step back – to carefully assess the distribution of pre-k supply across the city, variability in classroom quality, and the features of public schools and CBOs that may lift young children over time.



Appendix – Data Details and Method

Relative Growth of Pre-k Seats in Community Organizations

Figure A1 displays the estimated percentage gain, fall 2013 to fall 2014, for pre-k seats allocated to children, 4 years of age, among zip codes of differing levels of household income.



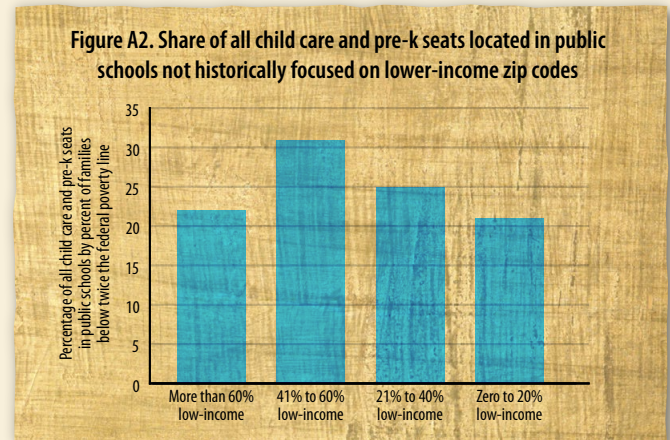
Methods note: Counts of pre-k slots in CBOs for 2013 estimated from licensed capacity data, then matched to Department of Education data for Sept. 2014 to calculate growth. The share of seats in 2013 now designated for Mr. de Blasio's universal pre-k program is not known, but variation is assumed to be randomly distributed among zip codes. Some CBOs set income criteria for family eligibility, while the mayor's initiative serves all families regardless of income.

See Figure 2 note for quartile cut-points for household income of communities. Count of seats are available for 2013 and/or 2014 in 806 CBO-based preschool centers citywide. A portion did not participate in the first year of pre-k expansion. To ensure conservative estimates of growth over the past year, 18 centers were dropped due to estimated increases of 50 seats or more.

Sources: New York City Department of Health and Mental Hygiene (2014) and Department of Education (August, 2014). *Community based early childhood center pre-k directory, school year 2014-15*.

Historical Note on School-based Pre-k Distribution

The share of total child care and pre-k slots located in public schools has been spread evenly among poor, middle-class, and well-off communities historically (Figure A2). Mayor de Blasio's initiative – for the new pre-k seats allocated to schools (not to CBOs) – builds from a baseline level of supply that has not been focused on low-income neighborhoods.



Source: New York City Children's Services (2008). *Charting the course for child care and Head Start: Community needs analysis of early care and education in New York City*.

Note that poverty rates vary markedly among the five boroughs. The share of population residing in households below the federal poverty line in 2010 equaled 31% in the Bronx, 24% in Brooklyn, 18% in Manhattan, 16% in Queens, and 12% in Staten Island. **Source:** U.S. Census Bureau (American Community Survey) and the New York City Planning Department.

Authors: Prof. Bruce Fuller at the University of California, Berkeley, led this analysis in collaboration with Elise Castillo, Thao Nguyen, and Allison Thai. Amanda Recinos at GreenInfo Network designed the geographic displays. Special thanks to Sophia Pappas, New York City Department of Education, for generously sharing pre-k data.

Data sources: Office of the Mayor, *Ready to launch: New York City's implementation plan for free high-quality, full-day universal pre-kindergarten* (January, 2014). Published by the New York City Department of Education: *Community based early childhood center pre-k directory, school year 2014-15* (August 2014 edition); *Pre-kindergarten expansion guide for students starting pre-kindergarten in September 2014* (not dated); *Pre-kindergarten directory, 2014-15* (February 2014) and the 2013-14 edition. Sources for median household income and demographic features of boroughs: Department of City Planning, *New York City population projections by age, sex, and borough, 2000-2030* (2006). Report on overcrowding in select New York City schools: Office of the

Comptroller and Marjorie Landa, *Department of Education Efforts to Alleviate Overcrowding in School Buildings* (July, 2014). Citywide licensing data, Department of Health and Mental Hygiene.

References to research literature: Bassok, D. (2010). Do black and Hispanic children benefit more from preschool? Understanding differences in preschool effects across racial groups. *Child Development*, 81, 1828-1845. Heckman, J., Moon, S., Pinto, R., Savelyev, P., & Yavitz, A. (2010). The rate of return to the High Scope Perry Preschool Program. *Journal of Public Economics*, 94, 114-128. Loeb, S., Bridges, M., Bassok, D., Fuller, B., & Rumberger, R. (2007). How much is too much? The influence of preschool centers on children's cognitive and social development. *Economics of Education Review*, 26, 52-66.

For details and data worksheets: b_fuller@berkeley.edu, Institute of Human Development, University of California, Berkeley. October 2014.



Map 1. Distribution of Full-Day Pre-K Seats among New York City Zip Codes September 2014 (public school seats)

Percent increase in seats between September 2013 and 2014

Median Household Income
Average equals \$51,865

○ No New Seats

● 1% - 25%

● 25% - 50%

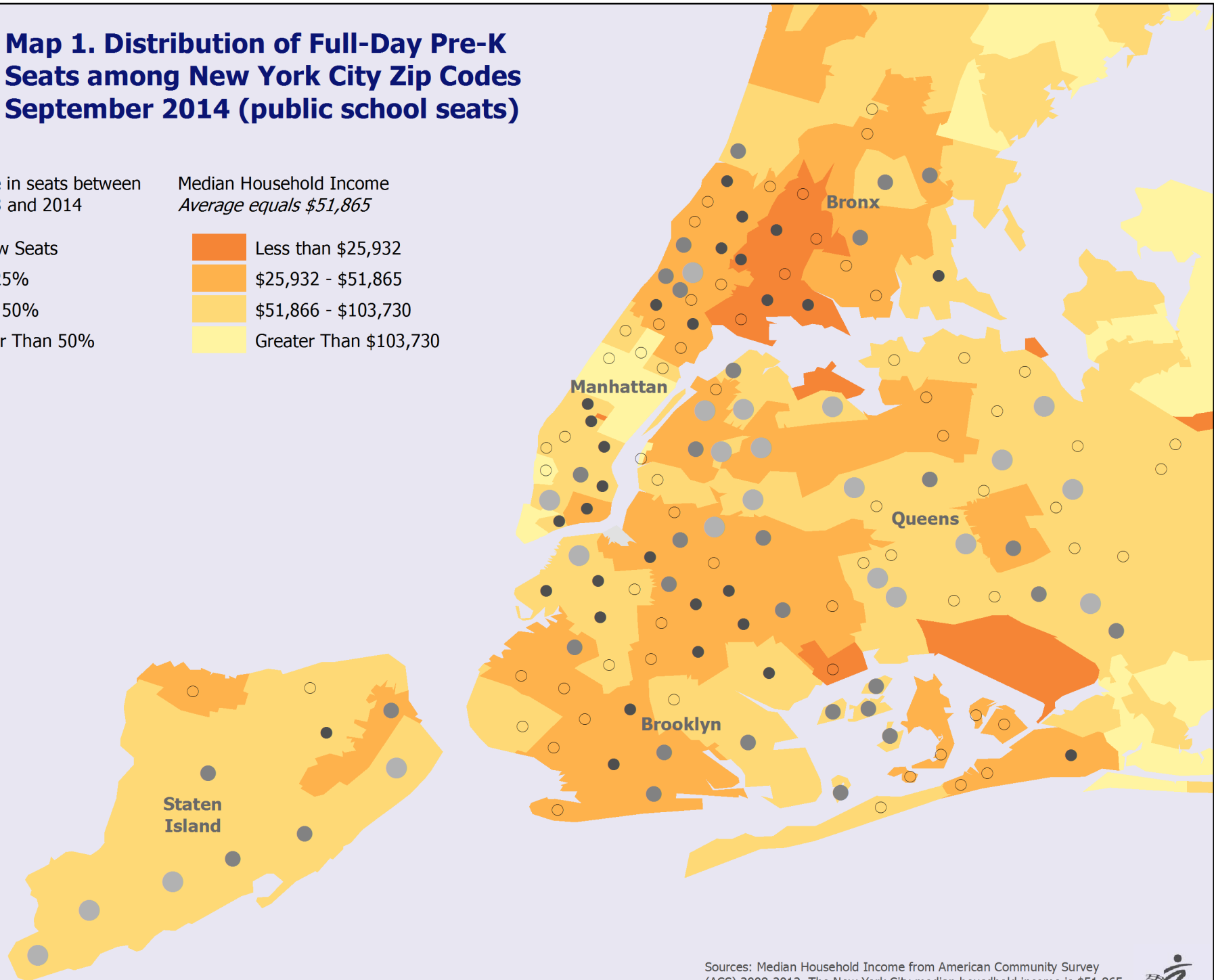
● Greater Than 50%

Less than \$25,932

\$25,932 - \$51,865

\$51,866 - \$103,730

Greater Than \$103,730



Sources: Median Household Income from American Community Survey (ACS) 2008-2012. The New York City median household income is \$51,865. Percent increase in seats calculated by UC Berkeley, based on New York city schools data. *Pre-Kindergarten Expansion Guide, September 2014*
Map produced by GreenInfo Network October 2014.



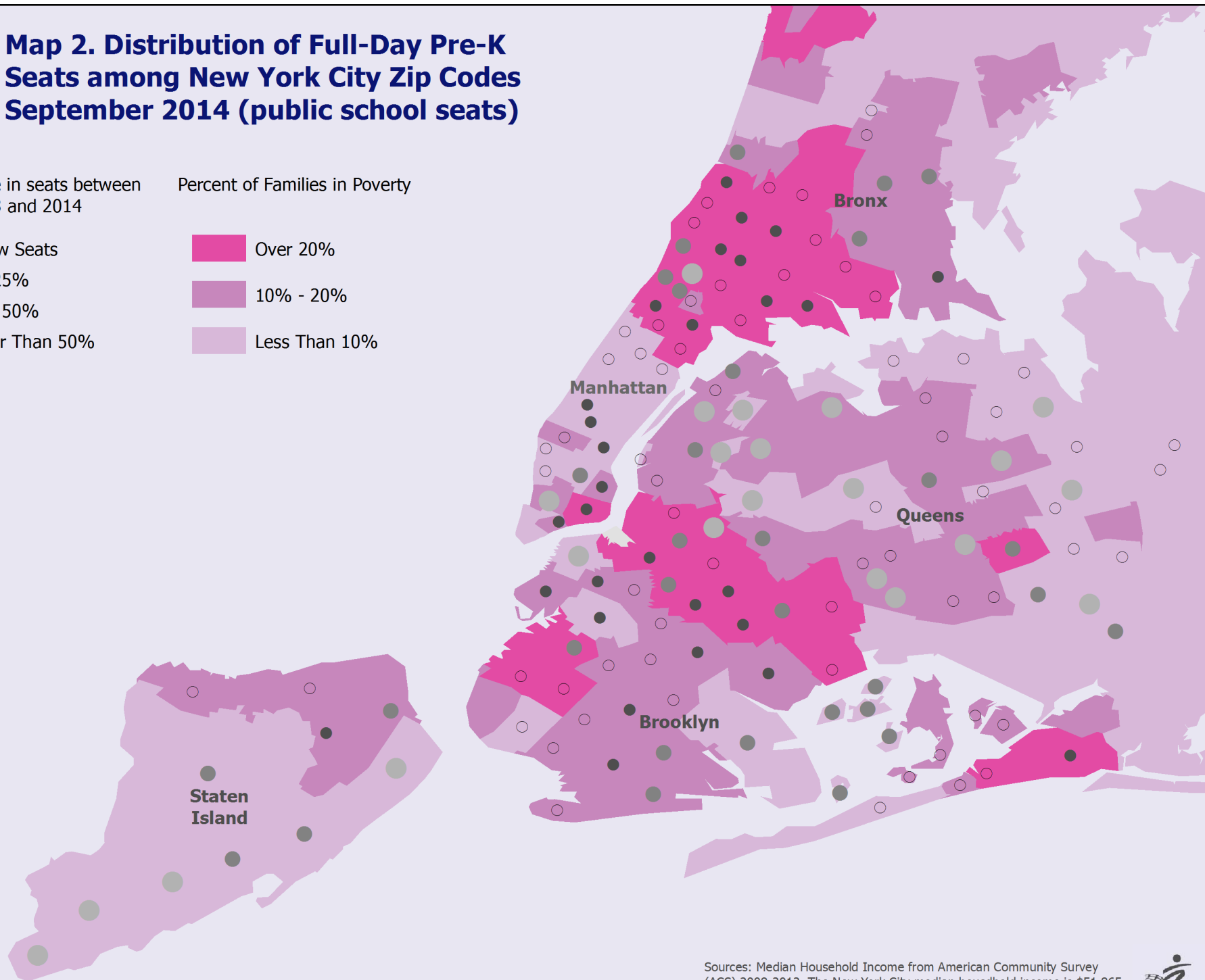
Map 2. Distribution of Full-Day Pre-K Seats among New York City Zip Codes September 2014 (public school seats)

Percent increase in seats between September 2013 and 2014

Percent of Families in Poverty

- No New Seats
- 1% - 25%
- 25% - 50%
- Greater Than 50%

- Over 20%
- 10% - 20%
- Less Than 10%



Sources: Median Household Income from American Community Survey (ACS) 2008-2012. The New York City median household income is \$51,865. Percent increase in seats calculated by UC Berkeley, based on New York city schools data. *Pre-Kindergarten Expansion Guide, September 2014*
Map produced by GreenInfo Network October 2014.



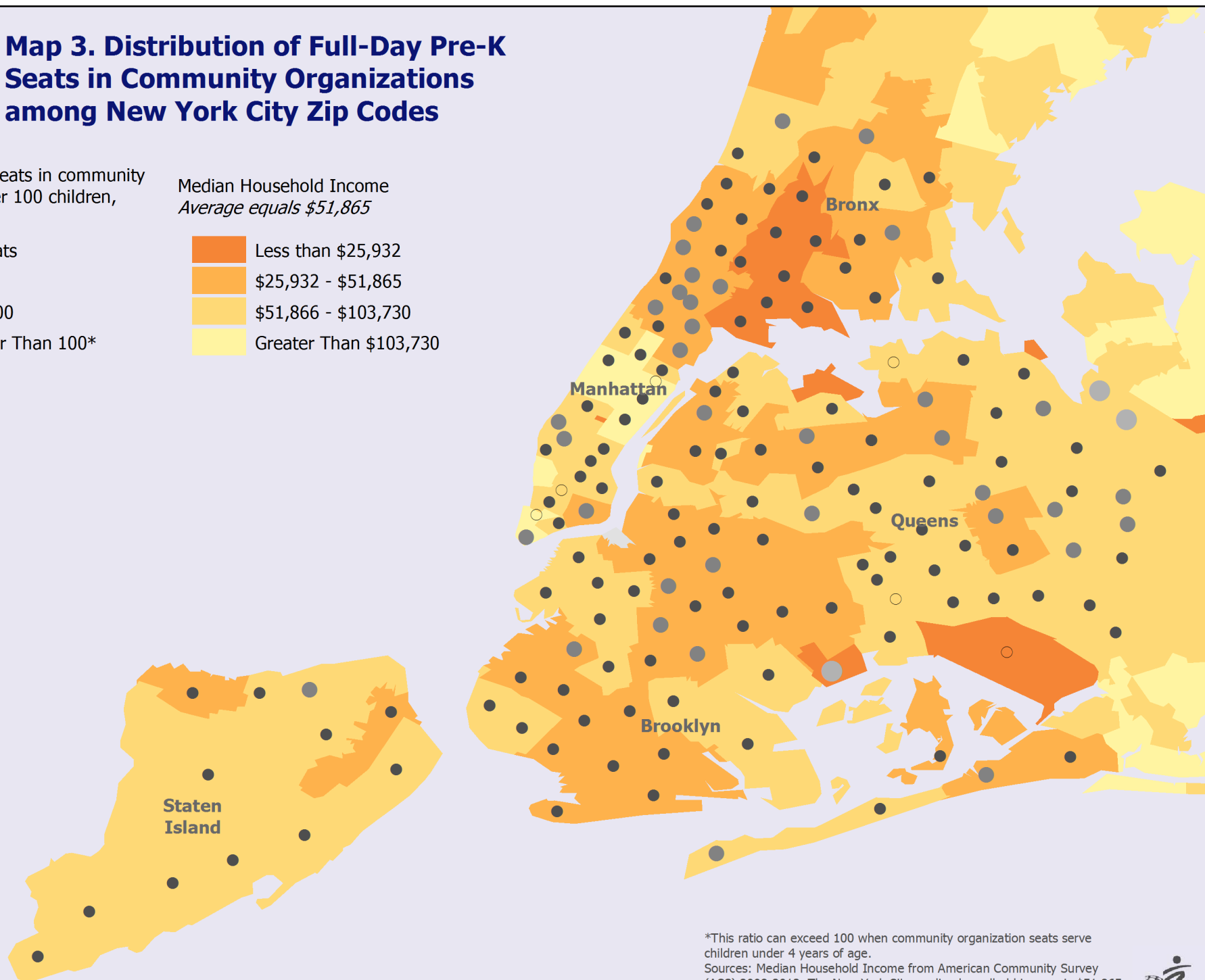
Map 3. Distribution of Full-Day Pre-K Seats in Community Organizations among New York City Zip Codes

Count of pre-k seats in community organizations per 100 children, 4 years of age

- No Seats
- 1 - 50
- 50 - 100
- Greater Than 100*

Median Household Income
Average equals \$51,865

- Less than \$25,932
- \$25,932 - \$51,865
- \$51,866 - \$103,730
- Greater Than \$103,730



*This ratio can exceed 100 when community organization seats serve children under 4 years of age.
Sources: Median Household Income from American Community Survey (ACS) 2008-2012. The New York City median household income is \$51,865. Counts of full-day pre-k seats calculated by UC Berkeley, based on New York city schools data. *Pre-Kindergarten Expansion Guide, September 2014*
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