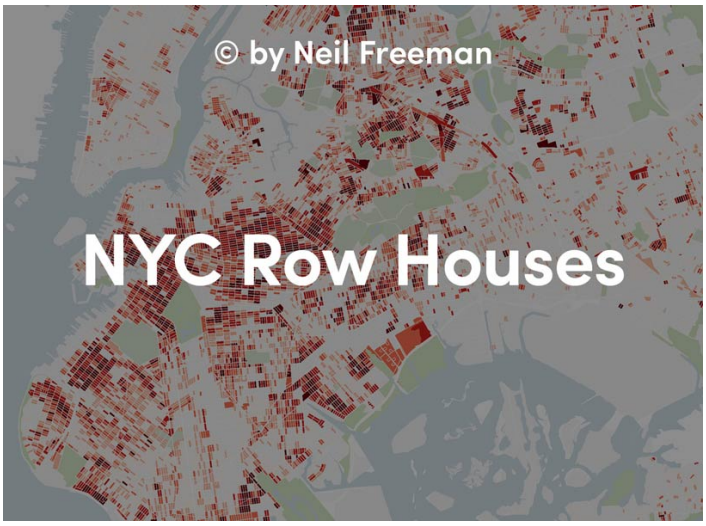

ROW HOUSES NYC: HOW MANY ROW HOUSES ARE THERE IN NEW YORK CITY?

Posted on June 6, 2018 by editorship

Categories: Data, expanding design practices, Middle Density, Territory and mobility, Urban Omnibus, Urban Omnibus

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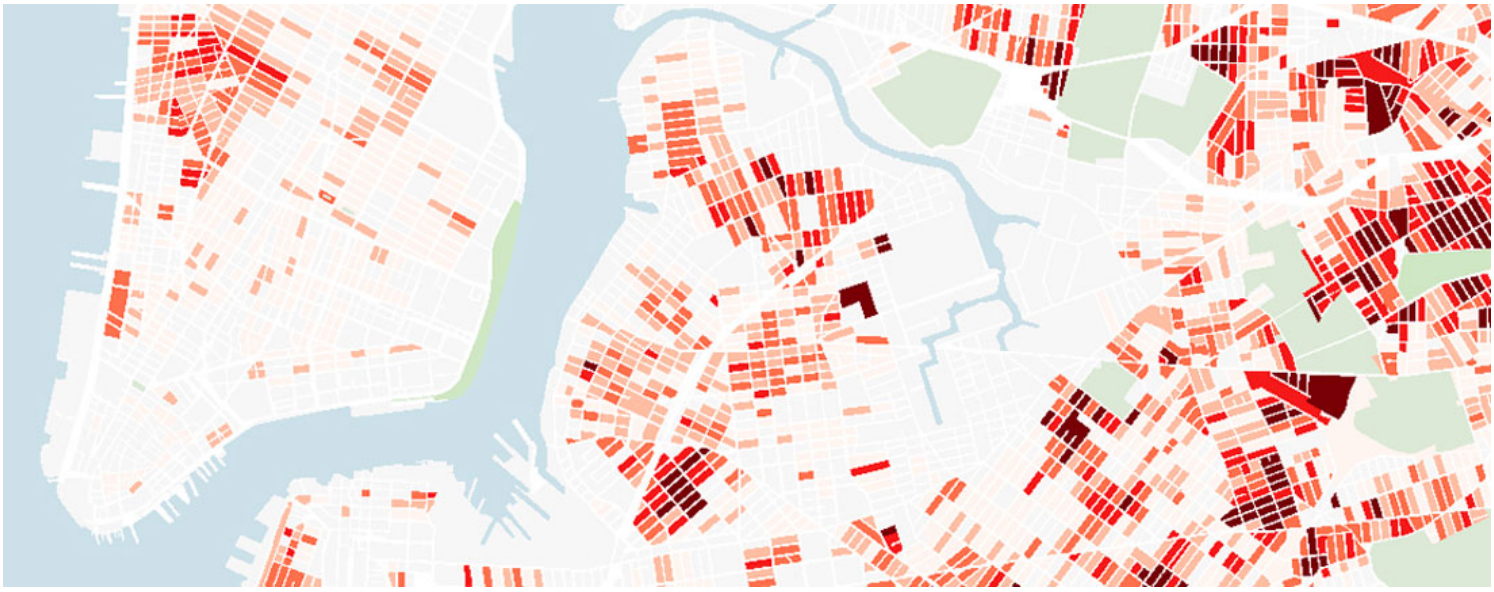
The past decade of urban cartography has given us dozens of new ways to see New York City: by Census statistics, by Airbnb rentals, by cab rides, and by incarceration costs, to name just a few. Google's three-dimensional satellite view offers a drone's dreamlike perspective on the city.

This week, we add a survey of New York's row houses to the mix. Artist and urban planner **Neil Freeman** has mined the city's tax lot data to identify row houses — a category of building we all know well, but one the city doesn't officially recognize — to finally put a count on the number of row houses in New York. He illustrates his process of weeding out the row-house-like qualities of the city's 900,000 buildings, then takes us on a journey beyond the hackneyed Brownstone Belt and through a much larger row house belt that ranges across four boroughs (sorry, Staten Island).

Neil's excellent response to our central question — but how many row houses *are* there? — also explicates why it's so difficult to answer: the row house is an imprecisely defined building category. So he offers another method, an **"Is it a row house?" quiz** that allows you to give the thumbs up or down to photos of possible New York row houses. Go ahead and become the appraiser — a few hundred thousand votes and we'll have a database of public opinion. –H.G.



The New York row house is an incredibly versatile form, ranging from grand stone piles off Central Park West to low, shallow houses with built-in garages — as different as Dobermans and Shih Tzus, but both recognizably row houses. While "brownstones," a much-admired subspecies, might be worth coveting, most row houses fade into the background. This combination of ubiquity and

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anonymity makes row houses worthy of interest, and an accounting.

To better understand row houses, I set out to count them. It's not a simple task. We must first carefully define a "row house" — and match that definition to the data we have.

The city publishes some very specific data, like the location and species of street trees. But the city doesn't track building typologies, at least not in the way that an architect would recognize. The Department of Finance does apply one of 216 "building classes" to each property. These include: "Z5: United Nations," "P4: Beach club," and "G7: Unlicensed parking lot." Its residential codes describe some very specific forms ("A0: Cape Cod"), while others are vague ("D6: Elevator Apt; Fireproof Without Stores").

But "row house" isn't one of the categories.

We'll have to find the row houses for ourselves. New York City publishes information about building and lot dimensions, counts of housing units, and land use in Pluto, a database that tracks the city's 900,000 tax lots. If this is hard to visualize, imagine an Excel document with 80 columns and 900,000 rows. It's in the city's interest to track information about properties and buildings because it taxes them, fights fires in them, enforces building codes, and writes plans. We'll craft a definition of a row house by combining data fields in Pluto.

Some of the data in Pluto is text, like the address, some is numeric (e.g., the area of the lot), and some consists of special codes. For instance, there's a field called "Proximity Code" with four possible values: detached, semi-attached, attached, and "not available." Unfortunately, almost 20 percent of the entries are blank — which means there's a lot of information missing about "attachedness," which we can all agree is one of the row house's defining qualities.

One approach to the data would be to simply pick out entries in the table that have specific values, like you might when shopping for furniture: "I'd like to see couches that are between 60 and 65 inches long, are gray or green, and are upholstered in fabric." That approach isn't ideal here because there isn't a strict definition of "row house" and there is noise in our data, like the frequently missing Proximity Code. More to the point, there's no explanation about how the data was generated. Pluto, like most datasets, is the product of human labor; without knowing the methods of data collection, it's best to approach the data carefully, assuming that it's permeated with error.

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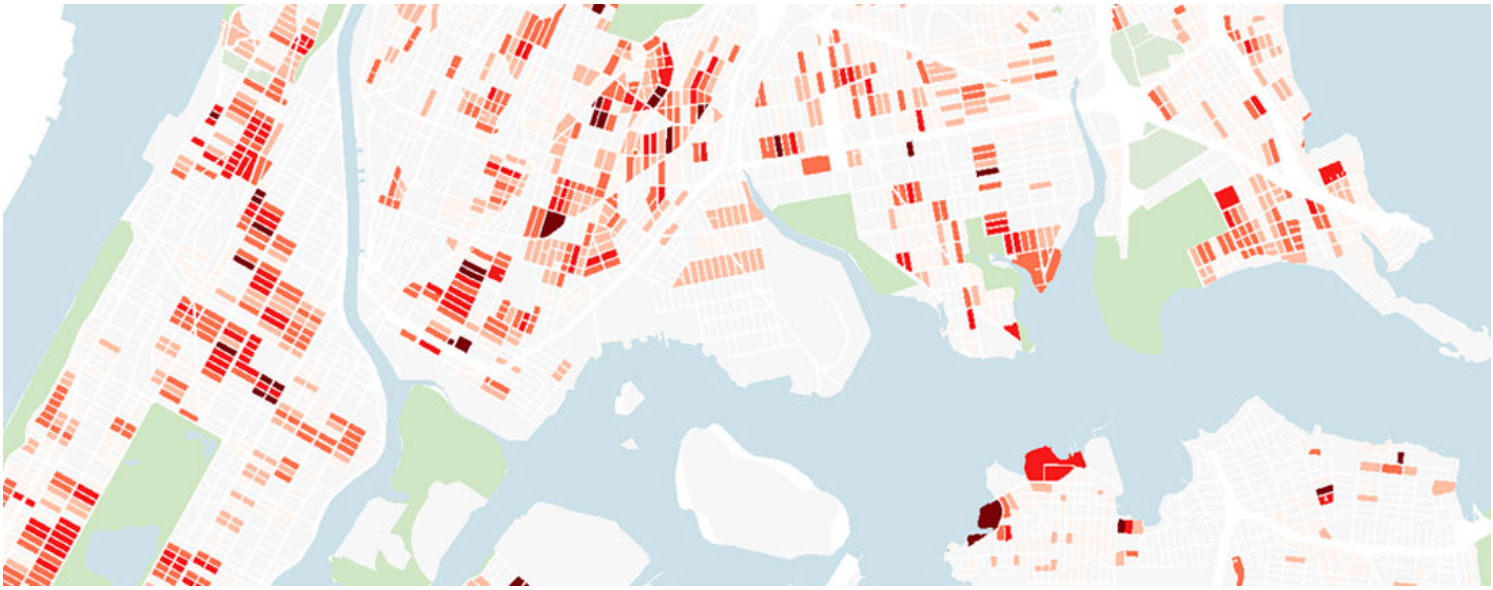

Is it a row house? You decide. Take the quiz!

As a workaround to these conditions, we're going to give each property in New York a score that rates its likelihood of being a row house. Our fuzzy definition becomes a grading rubric. I'll give each property in New York a point for fulfilling a particular value (with built-in wiggle room to account for the noise in the data). I developed this list by looking carefully at Pluto and determining what row-house-like qualities it records, also bringing my own educated guesses to this process. Here are the criteria:

Row houses are attached: The fundamental quality of a row house is that it sits in a row, connected to its neighbors by party walls. Properties get one point if they are marked as "attached."

Row houses are narrow: This criterion adds one point for buildings that are no more than 25 feet wide. The standard Manhattan lot is 20 feet wide, but row houses can be wider in the outer boroughs.

Row houses have a street wall: The front of a row house stretches across the entire property. In some ways, this is a restatement of the first criterion. This redundancy is good, since it balances a potential omission in one field. One point is added if the building face, which is given in feet, takes up the vast majority (92%) of the lot's face. The fudge factor allows for errors of measurement of at least one foot on either side of a 25-foot-wide lot.

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Row houses aren't apartment buildings: The classic brownstone was designed for a nuclear family plus a few relatives, boarders, and/or servants. Of course, today many row houses are divided into apartments, but they don't have long internal corridors and aren't deep enough to have several units per floor. This criterion gives a point for properties with at least one but fewer than five units. This may omit some row houses that have been divided into studios and SROs as well as row houses with only commercial (or other non-residential) uses. That's the cost of excluding bigger apartment blocks from our dataset, which is more significant here.

Row houses are residential: While there is the occasional row house that's been entirely converted to commercial or industrial use, the form is fundamentally residential. The rubric adds one point for buildings coded with one of several building classes that describe residential land use.

Row houses are built around stairs: Row houses aren't elevator apartments. The last criterion adds one point for properties with six or fewer stories.

Together, these factors form a simple six-point scale. Each of these factors will be true for some buildings that aren't row houses, but the hope is that buildings that score higher will look more like row houses. Each factor in the score acts like a lens, helping us resolve an image from the noisy data.

The scale doesn't include any consideration of a particular property's neighbors. Is a row house still a row house if its neighbors are torn down? I say yes. It also doesn't factor in a building's setback. The canonical New York row house sits back from the street, leaving room for a small garden and a stoop. However, this isn't ubiquitous in row houses, so we don't consider it. Additionally, the scale doesn't distinguish between solely residential and mixed-use row houses, except that row houses that are used entirely for commercial uses won't get the point for residential use.

Does the scale work? You be the judge.

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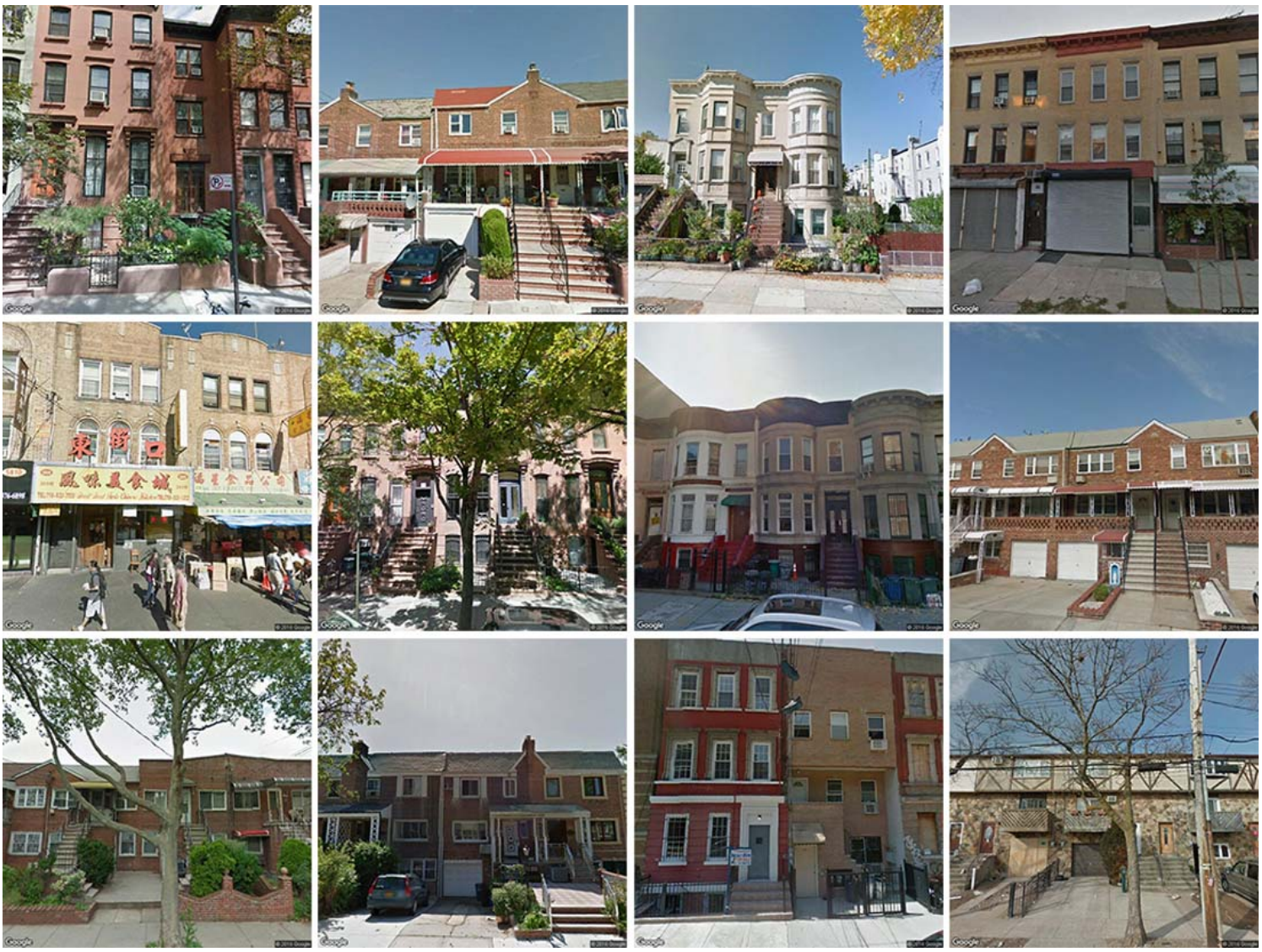

6s: A random selection of properties that scored six on the row house scale | via Google

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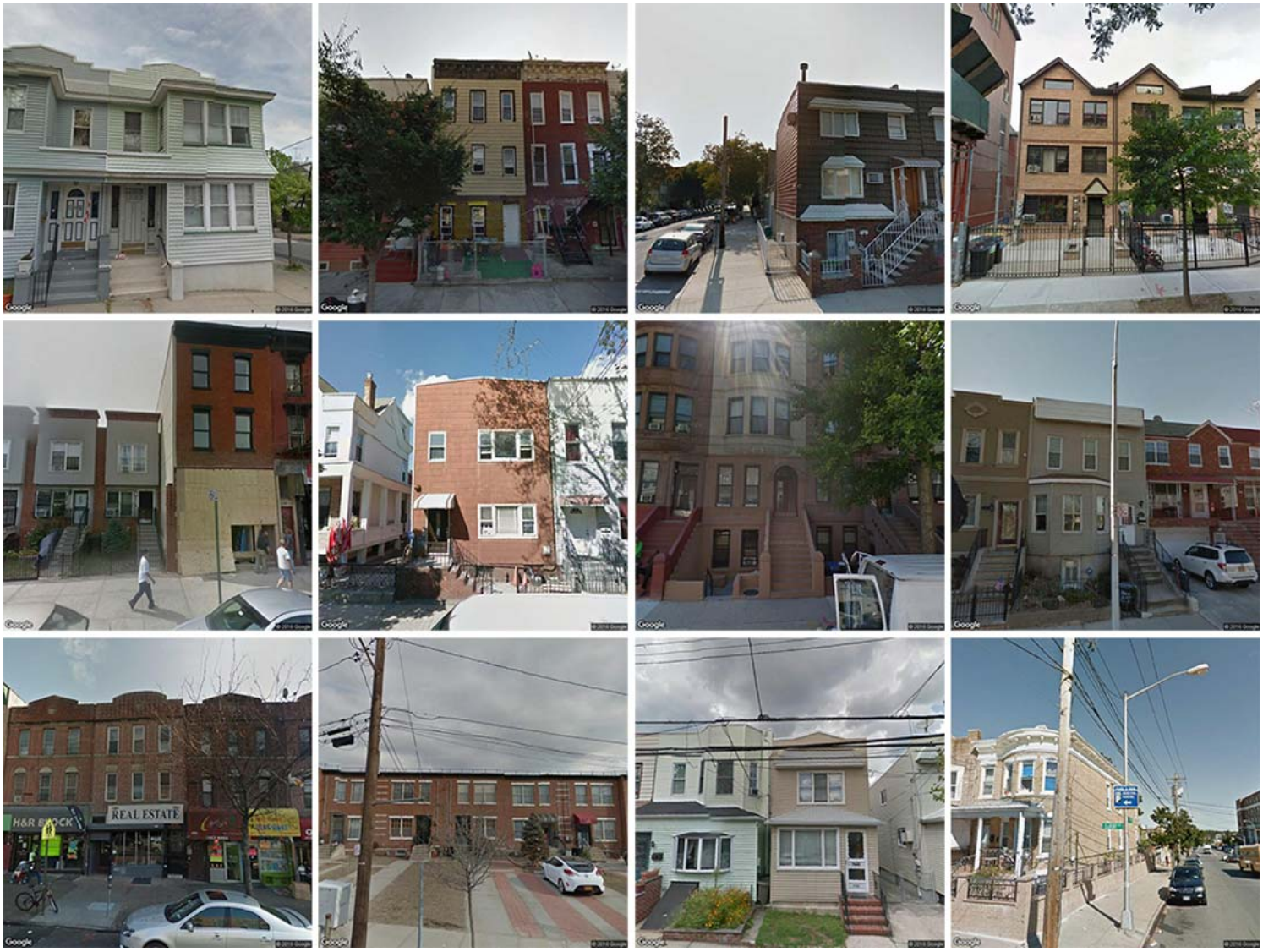

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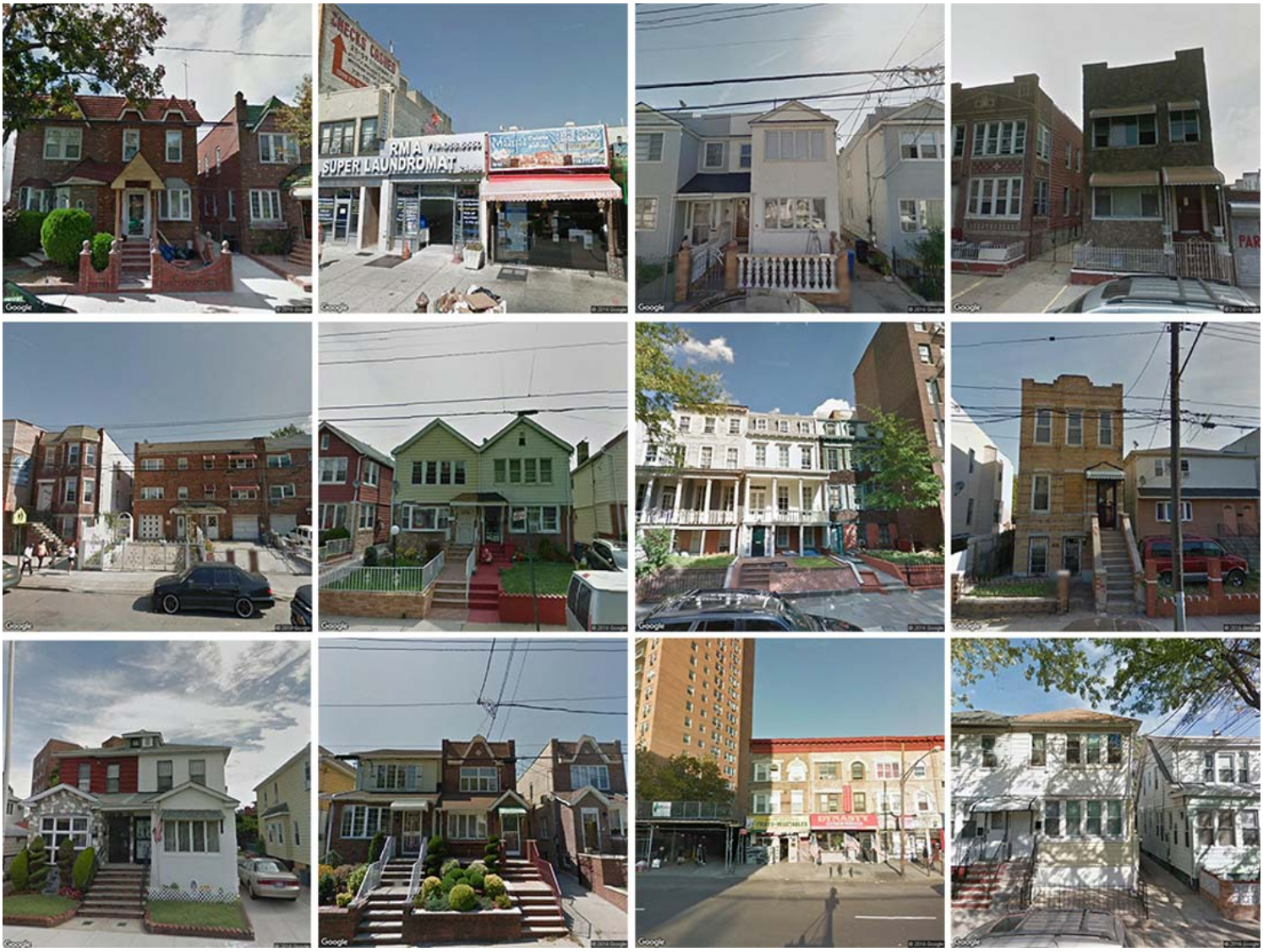

4s: A random selection of properties that scored four; while occasionally a row house appears in this category, usually the buildings are cousins of true row houses | via Google

By this measure, there are 217,000 row houses in New York. With 761,000 residential properties total, that's more than a quarter of the residential building stock!

Row houses, however, comprise only 434,000 of New York's 3.5 million housing units, or 12 percent. On average, row houses have 2.0 housing units each, compared to the citywide average of 4.6 units

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per residential building. This underscores that a row house isn't just a small apartment building; it occupies a blurry area between single-family and multi-family housing. This low unit count isn't limited to the fives and sixes; fours, our "not quite" category, average about three units each. It's important to note that illegal subdivisions and cellar apartments aren't officially recorded, so these averages are likely somewhat low.

The size of row houses varies by neighborhood. The largest row houses are in Manhattan and Bedford-Stuyvesant, Brooklyn. Moving away from the center, row houses tend to be smaller, although there are, of course exceptions, such as in Corona, in Queens, and Woodlawn, in the Bronx. Row houses citywide offer some of the biggest housing units – it's rare to find a row house unit that isn't in the top fifth of all units by size. In general, row houses offer some of the biggest units available in the dense, inner neighborhoods, but average-sized units in outer neighborhoods.

The average row house lot has an area of about 1,900 square feet, very close to the prototypical 2,000 square foot (20 x 100') New York City lot. While larger building types rely on merging lots, the row house is more likely to occupy the parcel as it was originally subdivided.

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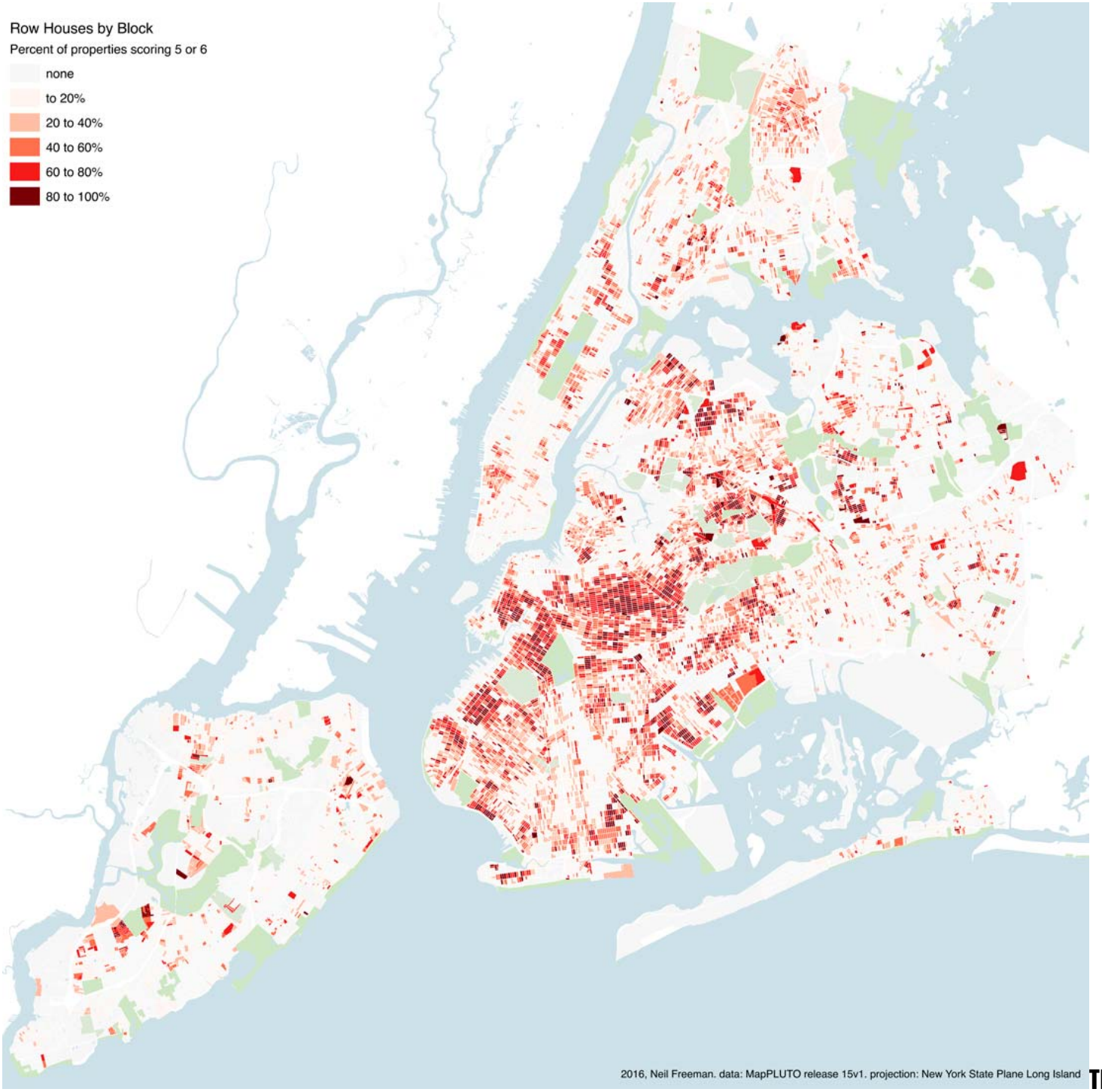

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e concentration of row houses across New York City, block by block | Graphic by Neil Freeman, from MapPLUTO data

To get a sense of the distribution of row houses across the city, I mapped the percentage of properties on each city block that scored five or six. On this map, there's a solid row house belt running across Brooklyn, from Bay Ridge up through Park Slope, Bed-Stuy, and Bushwick. The row house belt is interrupted in northern Bushwick, where three-story, 30-foot-wide apartments predominate around Maria Hernandez Park. This form occupies the middle ground between row house and tenement, and is surprisingly rare in the rest of the city. Southern Bushwick is home to a tract of wood frame row houses, another rarity.

The Bushwick grid stretches northwest through Ridgewood, where it disperses among the cemeteries and rail spurs of Maspeth and Middle Village, Queens. In the more fragmentary development patterns in Queens, chunks of row house development intersperse among detached houses and apartment blocks.

Jumping to Manhattan, the belt runs thinly across Harlem. The famous row houses of the Upper East and West Sides are identifiable, but rarely occupy more than four-fifths of the properties on a given block. Once a dominant form in Manhattan, many row houses were torn down for higher density development in the 20th century, especially along the avenues. In lower Manhattan, the pattern of row houses in the West, Greenwich, and East Villages tell a story of diverging historic development. The east side was long the poorer relation to the west, more likely to house tenements and tower-in-the-park developments. As a result, the West Village has a relatively concentrated pocket of row houses, while the form is rare in the East Village.

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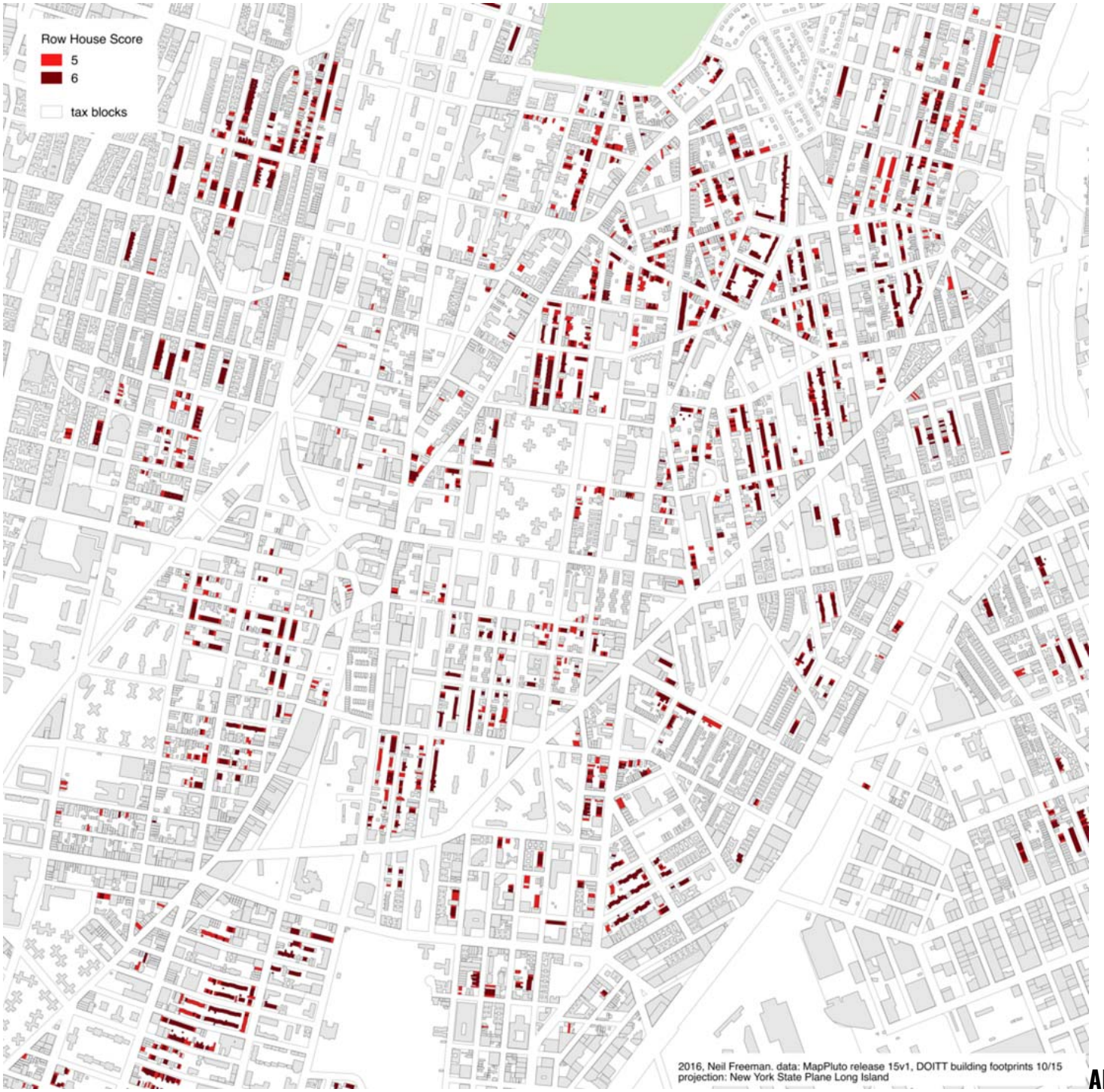

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the row houses in the Claremont, Morrisania, and Melrose neighbrohoods of the Bronx (with Crotona Park at the northern reach) | Graphic by Neil Freeman, from MapPLUTO data

The Bronx has two main patches of row houses: an uneven mix in the South Bronx that extends the row house belt, and a larger number in Williamsbridge, in the far northern reaches of the borough. Row houses are, diametrically, some of the oldest and newest buildings in the South Bronx. The older row houses include elegant brick and stone rows that date back to just before the turn of the 20th century, exemplified by the Morris High School Historic District, as well as many anonymous, short sections of wood frame row houses on side streets. Later developments of apartment blocks and towers-in-the-park diluted the concentration of row houses. However, row houses have made a comeback. Recent decades have seen many new, unadorned rows built, an infill and affordable housing strategy that followed the famous fires and abandonment of the 1970s.

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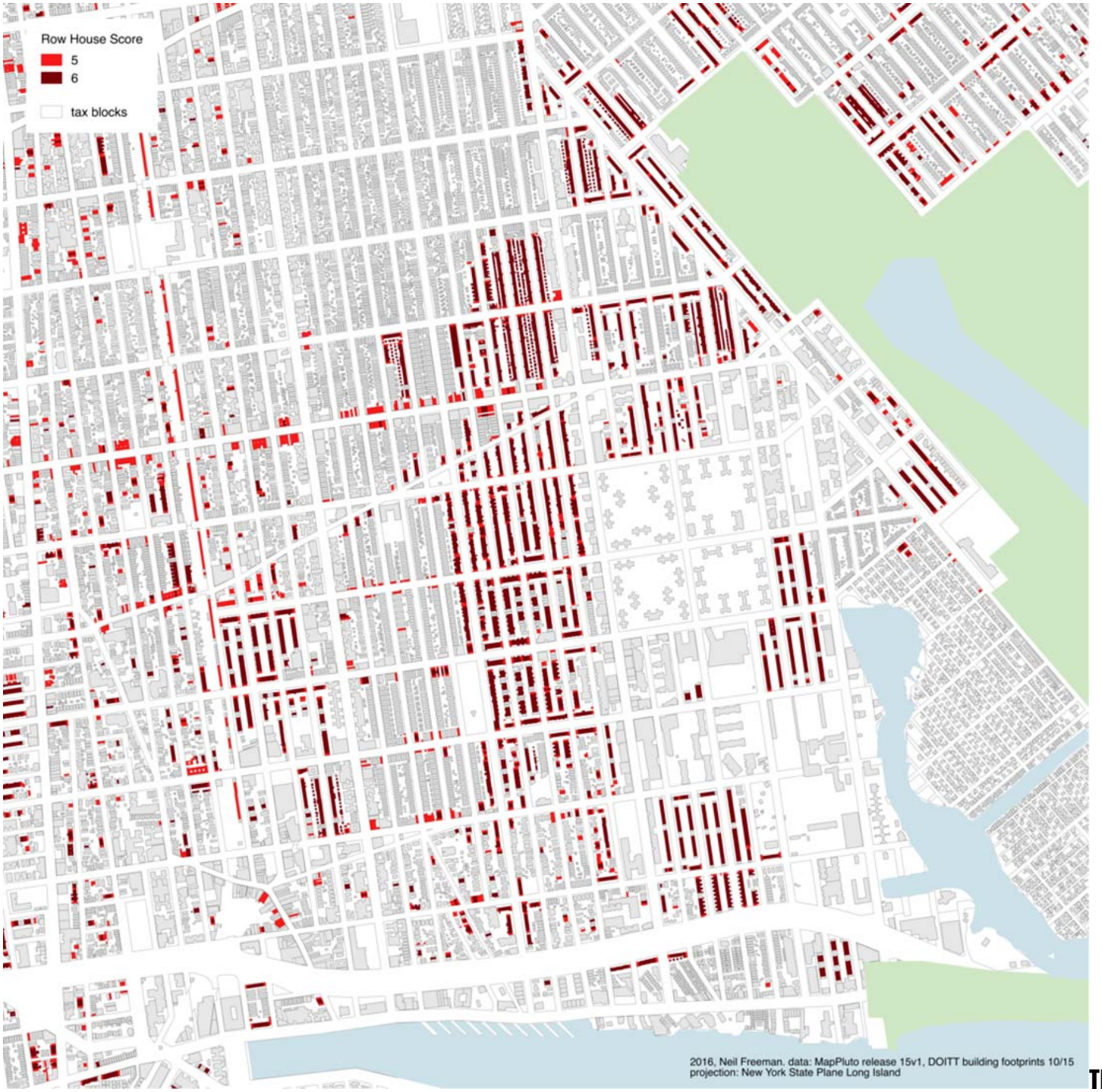

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e row houses of Sheepshead Bay; the row house block in the image's center replaced the Coney Island Jockey Club in the 1920s | Graphic by Neil Freeman, from MapPLUTO data

In Manhattan and parts of the Brownstone Belt, row houses tend to be the oldest buildings in the neighborhood. In the outer reaches of the city, however, row houses can actually be interlopers to neighborhoods of older, single-family homes. A band of row houses in Sheepshead Bay, Brooklyn, is actually younger than its single-family surroundings. This patch, running on the numbered streets south from Avenue S between Bedford and Nostrand Avenues, was once — starting in 1879 — the Coney Island Jockey Club. Members of the city's elite Four Hundred, including William K. Vanderbilt, raced horses in the bucolic setting. The track was briefly used for racing cars before being subdivided in 1923. Developers built short row houses, some with alleys and others with street-facing garages.

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