

# mapping nyc fitness

## Introduction

Health is one of the only things that unites all of humankind, regardless of a person's heritage or identity. However, access to space, race, ethnicity and income may influence someone's participation in activities that benefit health, such as general exercise or yoga. According to a study done by the Department of Health and Human Services in the year 2000, white people of higher income exercise more often than black and Hispanic people. The National Housing Act of 1934 allowed for the division of neighborhoods up according to race in direct correlation to home loan approvals. Can mapping present day fitness facilities help us understand who has priority access to public or private, indoor or outdoor space and fitness at an affordable cost? How can this information be used to help guide more people to healthy living?

## Data & Methodology

A total of 455 fitness venues were mapped for this study across 4 NYC Boros excluding Staten Island. All fitness facilities websites were visited and were originally found by Google Maps search between March 2022 - May 2022. Fitness modalities and venues considered for this study aimed to be as broad and as accessible as possible. Yoga, barre, pilates, dance, strength and resistance training and major gyms were all included in this count but only if they were easy to find and their site clearly stated that they offer public classes to groups of 2 people or higher in person, both indoors or online. Means for disqualification is a very unclear website, unclear information regarding open or closed status or the area had too many items already. For gyms, they must be a general fitness center or gym with open floor space for activities and offer a monthly membership to the public. Gyms that host rock wall climbing or fitness like Capoeira, Martial Arts and other more technical fitness modalities were left out of this study due to their very small search results and their less accessible means of doing exercise for the general public. Physical Therapy offices and exclusive or private wellness facilities were not included in this study. A variety of attribute table joins by location and filtering of data was used to offer us a meaningful spatial analysis of NYC Fitness using QGIS and NYC Open Data Sources.

## Results & Conclusion

Manhattan and Brooklyn far outweigh fitness options and yoga and gyms own the most real estate overall. Queens seems to have very little fitness options and is home to some of the most diverse communities in the world. Unfortunately, this research and variety of maps reinforce that fitness is still considered more of a luxury service, spoken mostly in English, especially in locations like the Bronx, south Brooklyn. In the winter time, when parks are not the ideal locations for fitness, this could be troublesome for those looking for a local fitness solution who don't live near the subway. Alternatively, it is a welcome time for affordable chains to take up real estate like Retro Fitness, Planet Fitness and Blink in almost every neighborhood that shows any historical low income as those gyms cost \$20 or less per month. Crunch gym also has affordable tiered options in locations of lower income, listed on their site and in comparison to this data. Manhattan and Brooklyn

### Legend

- ▲ Fitness in NYC Parks
- ▲ Studios W/ Park Classes
- ★ Low Cost Gyms [74]
- ★ Gyms and Boutique Fitness [277]
- ▲ Low Cost Classes [25]
- ▲ Open Yoga Studios [123]
- ▲ YMCA [24]
- ▲ Recreation Centers [31]
- ▲ Subway Lines
- ▲ Swimming pools (r)

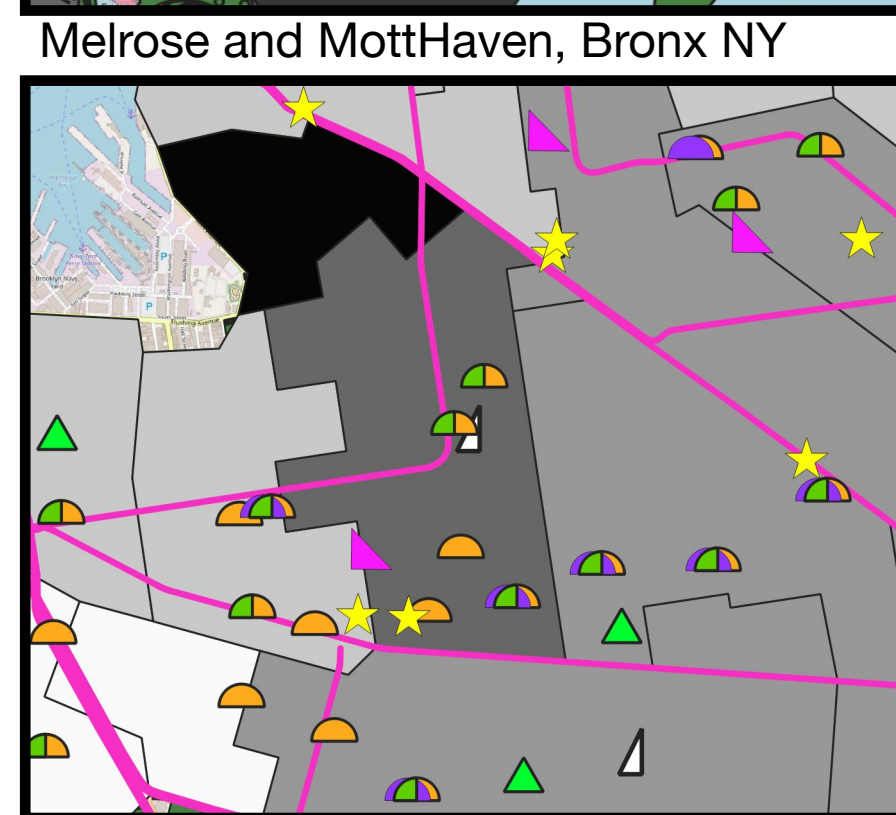
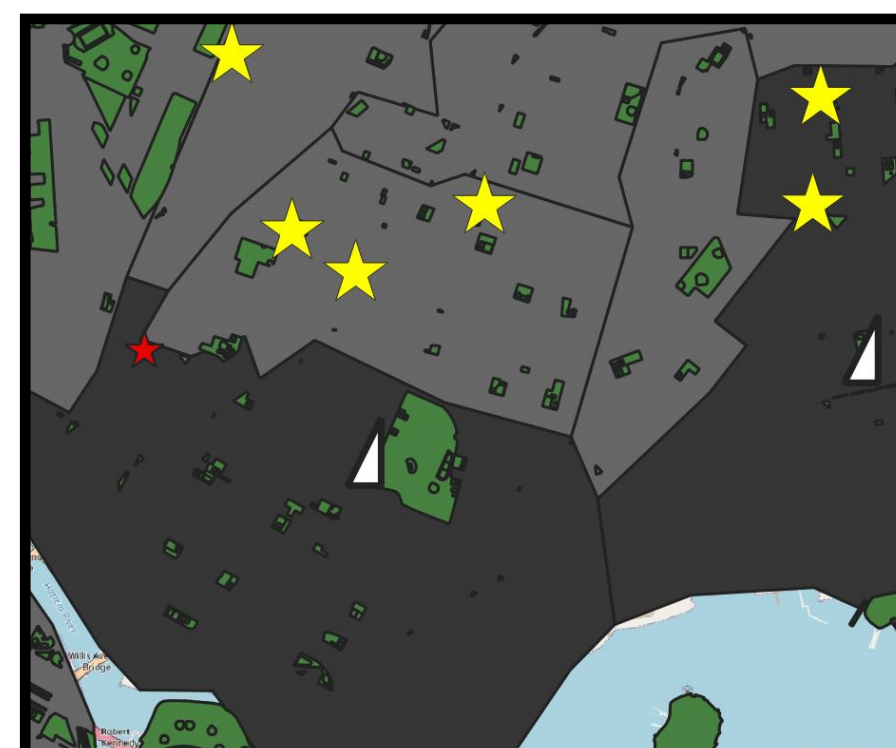
**Author:** Allison Daugila, May 2022

**Disclaimer:** These maps are accurate but a project for DATA 787000 at the CUNY Graduate Center in NYC Under the advisement of Dr. Shipeng Sun

**Other Data Referenced Here:** NYC Open Data **Public Pools & Athletic Facilities** Accessed 24 May 2022

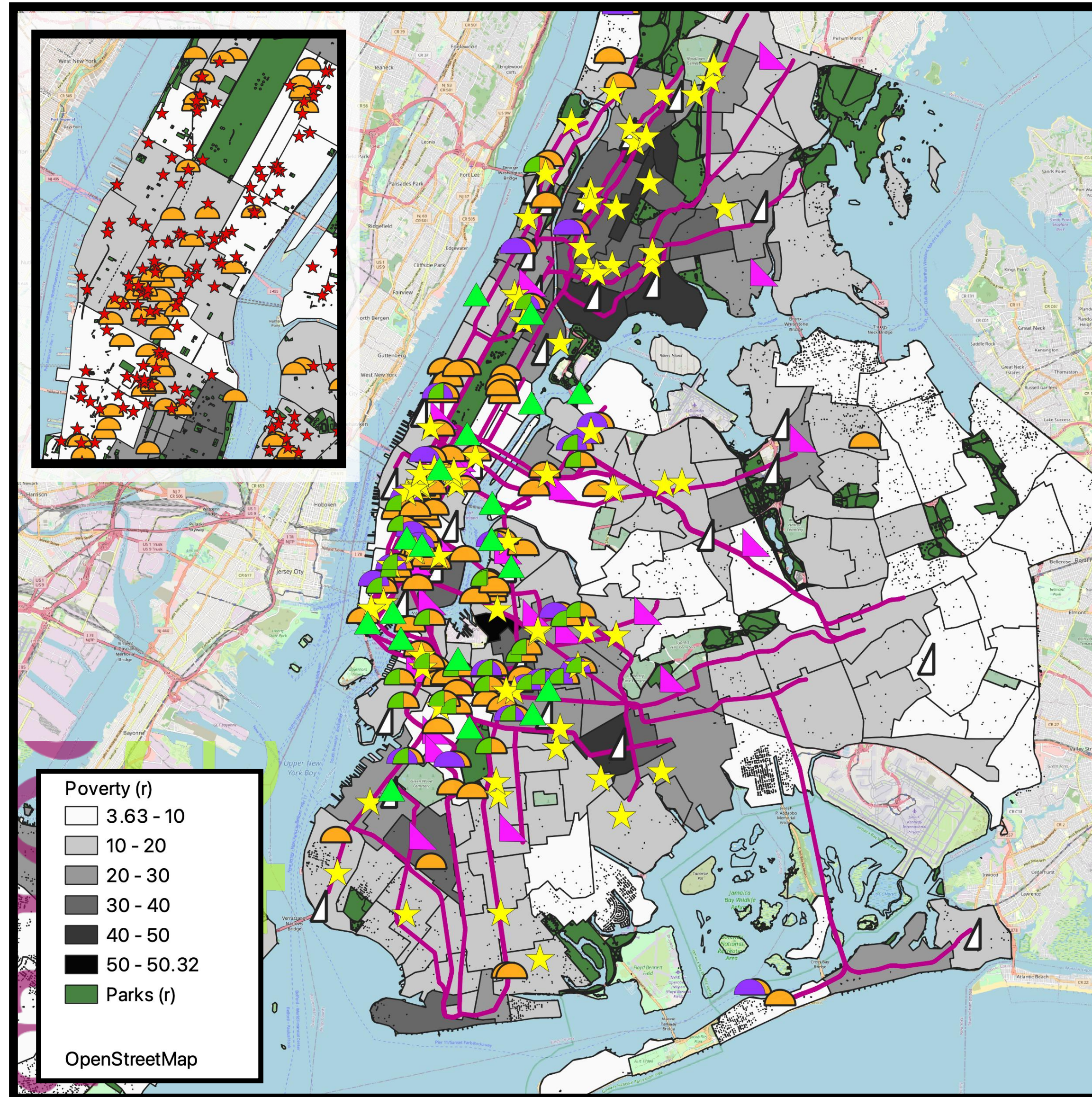
**Holc Grade Data Source:** Robert K. Nelson, LaDale Winling, Richard Marciano, Nathan Connolly, et al., "Mapping Inequality," *American Panorama*, ed. Robert K. Nelson and Edward L. Ayers, accessed May 22, 2022, <https://dsl.richmond.edu/panorama/redlining/>[AllNYCBoros].

## Poverty and NYC Fitness



**Up Close:** The Central Brooklyn neighborhoods of Bedford and Stuyvesant Heights and Bronx neighborhoods Melrose and Mott Haven are home to some of the highest poverty levels in all of NYC. They also have some of the longest commutes to other Boros, making local fitness an essential service. Gyms like Planet Fitness, Blink and Crunch all offer memberships under \$20/month. Unfortunately, neither neighborhood hosts extensive boutique fitness studios.

**Note:** Low cost classes & gyms = \$20 or less in the legend



**Wellness or Welfare?** Equinox and Soul Cycle operate 92 out of 94 of their facilities in Manhattan. The average yoga class in 2022 is \$26.71, with 21 of them \$35, 12 at \$30, and 21 at \$25 out of a total of 123 yoga studios that listed drop in prices on their website.

**Data Source:** Poverty Data - NYC Open Data 2015-2019 Accessed 17 May 2022

## Race and NYC Fitness

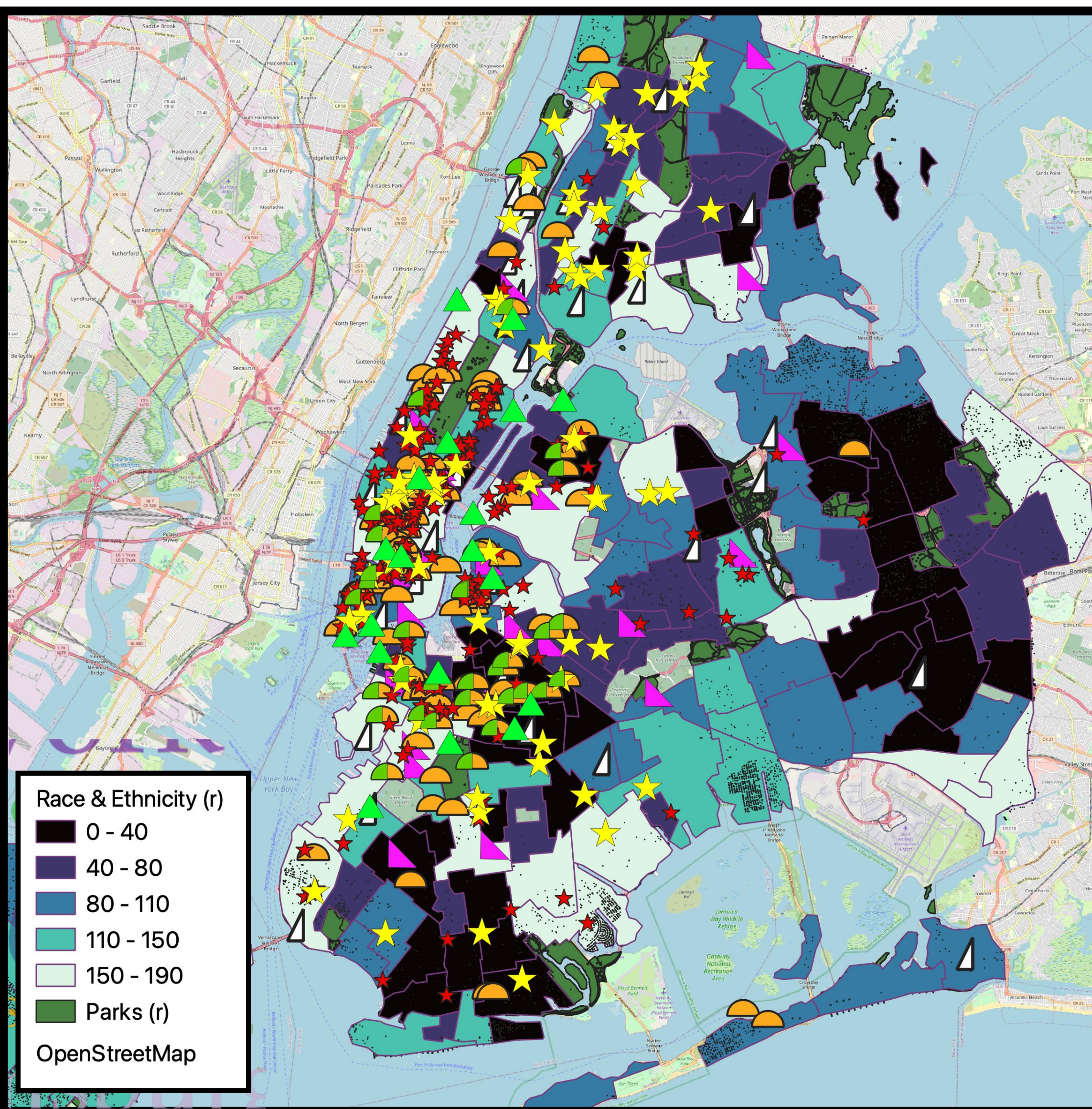


**Up Close:** Astoria, Queens is home to one of the only reported Spanish Yoga classes at the Atmananda Yoga Center in 2022.



**Up Close:** Bedford and Stuyvesant Heights Brooklyn neighborhoods are home to high numbers of people of color. Out of all of the studios in these two neighborhoods, at least 7 out of 10 in this dataset are owned by people of color

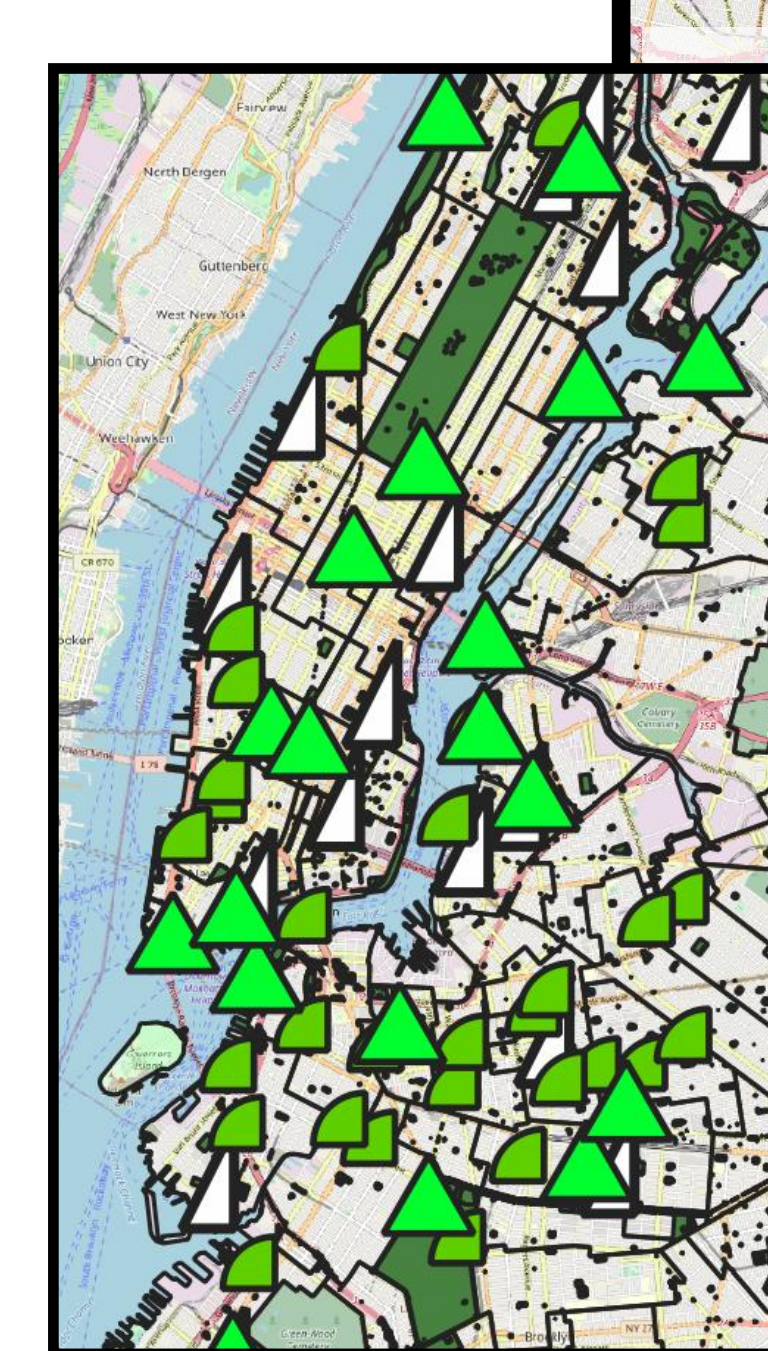
**Note** The dark areas represent high levels of BIPOC and extra time was spent searching in this area for boutique fitness locations and chains!



**Does language spoken, ownership of studio/facility and fitness in your neighborhood matter?** We think so. It's important for underserved communities not to repeat patterns of the past and to advertise their services with pride. It is unfortunate that many fitness institutions do not explicitly share their offerings in more languages other than English in a city as diverse as New York City.

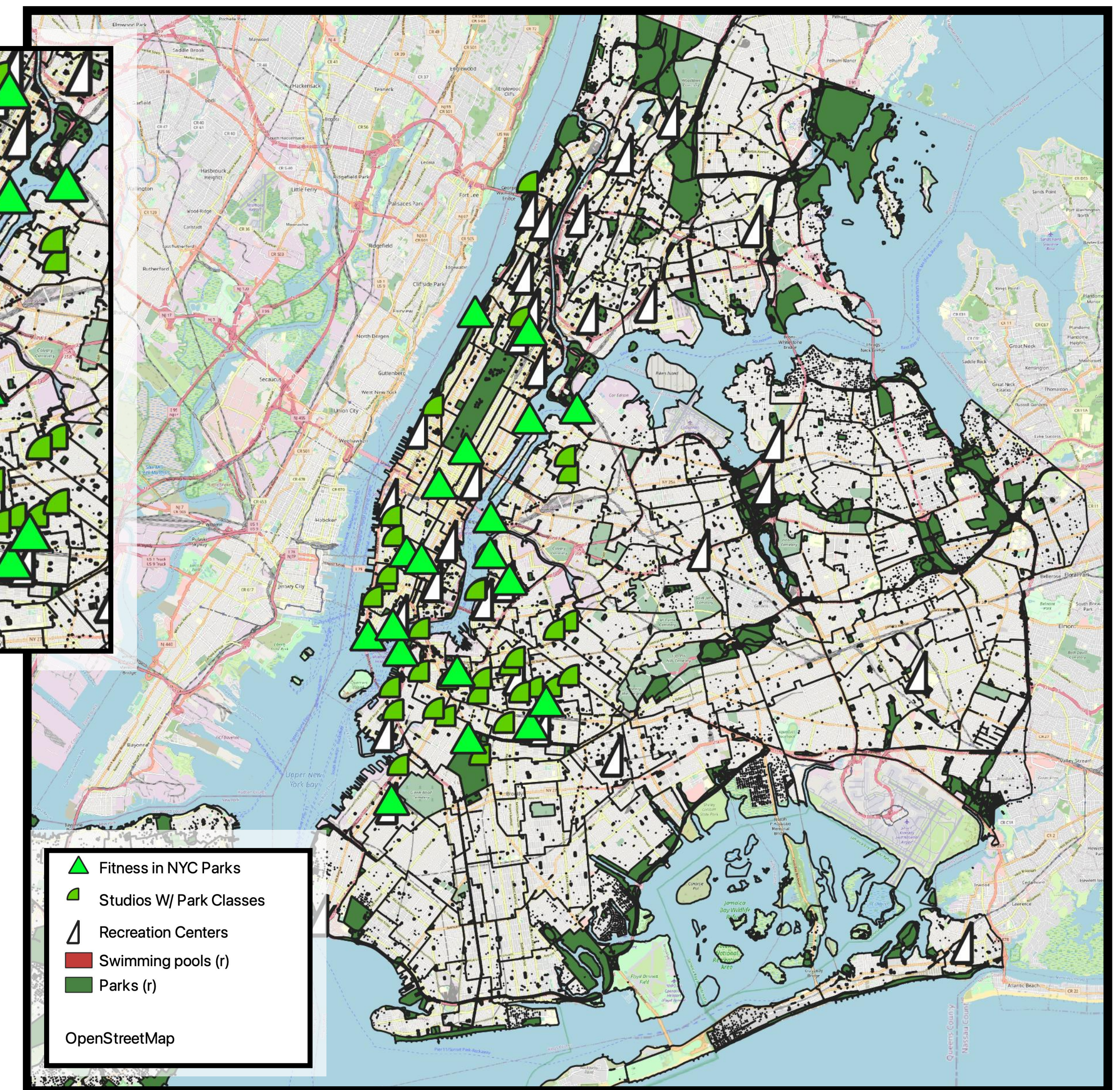
**Data Source:** Race & Ethnicity Data - NYC Open Data 2015-2019 Accessed 17, May 2022

## Parks and NYC Fitness



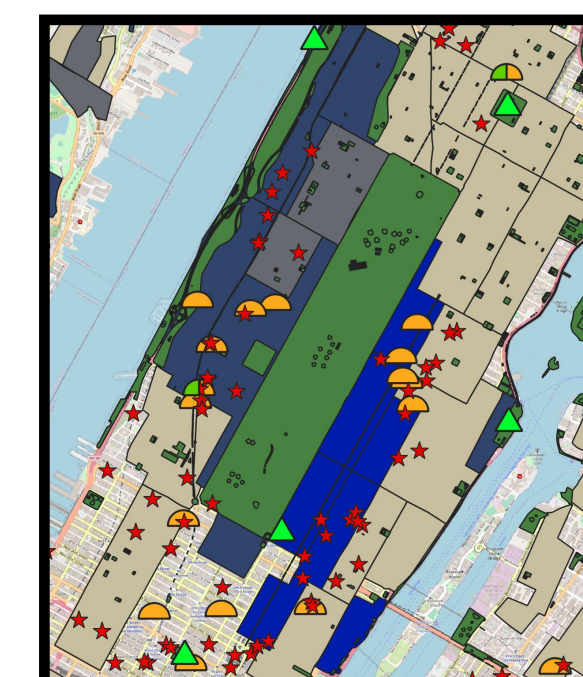
**Up Close:** Park and outdoor fitness classes are back but their reach is disappointing. They are all mostly located in lower or upper Manhattan and central parts of Brooklyn. The good news is that most classes are free, near mass transit and coordinated by local studios or the NYC Parks Dept.

[nycgovparks.org/](https://nycgovparks.org/) for more info!

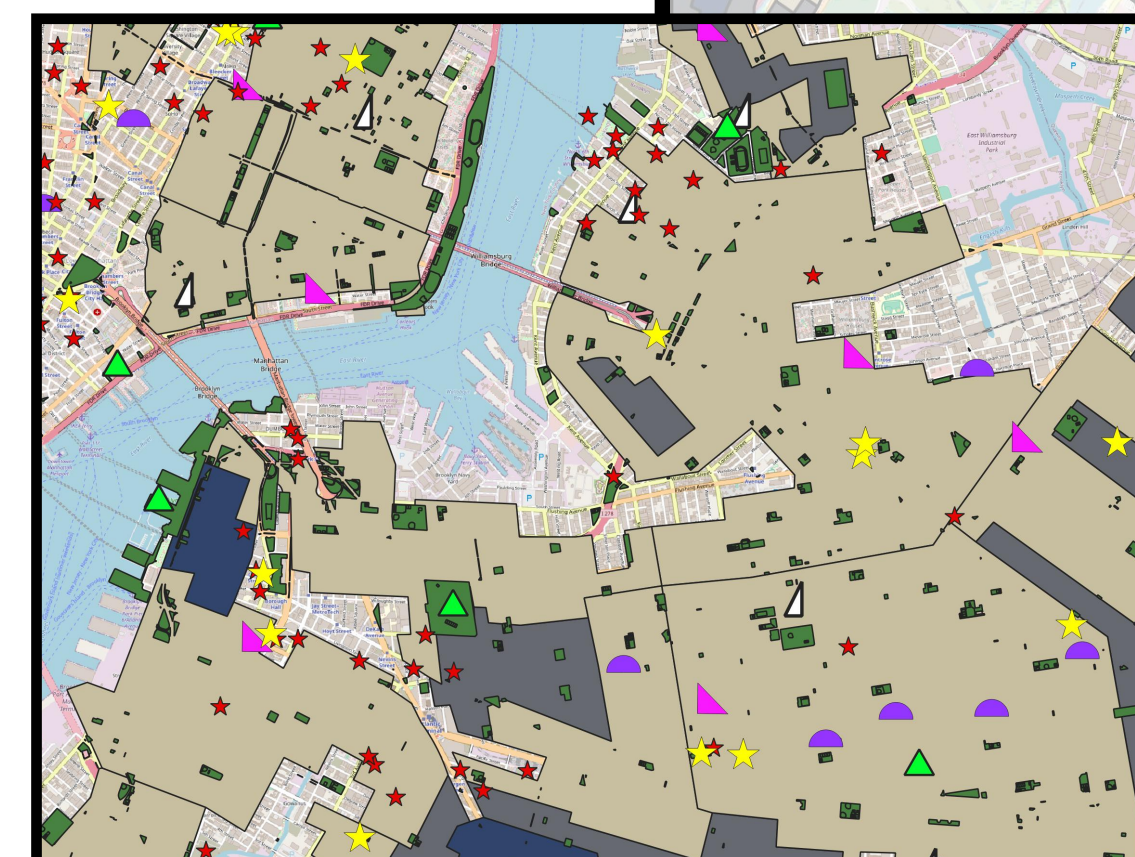


**Fresh Air Fitness** NYC Park fitness classes appear as accessible by subway with the majority in Manhattan and Brooklyn. 12 of them are free or by donation! Can't make it to a class in a park? Check to see if your local park as a nearby recreation center or pool to get your summer fitness on or suggest to your local studio to offer some outdoor sessions! **Data Source:** Greenspaces NYC Open Data Accessed 17 May 2022

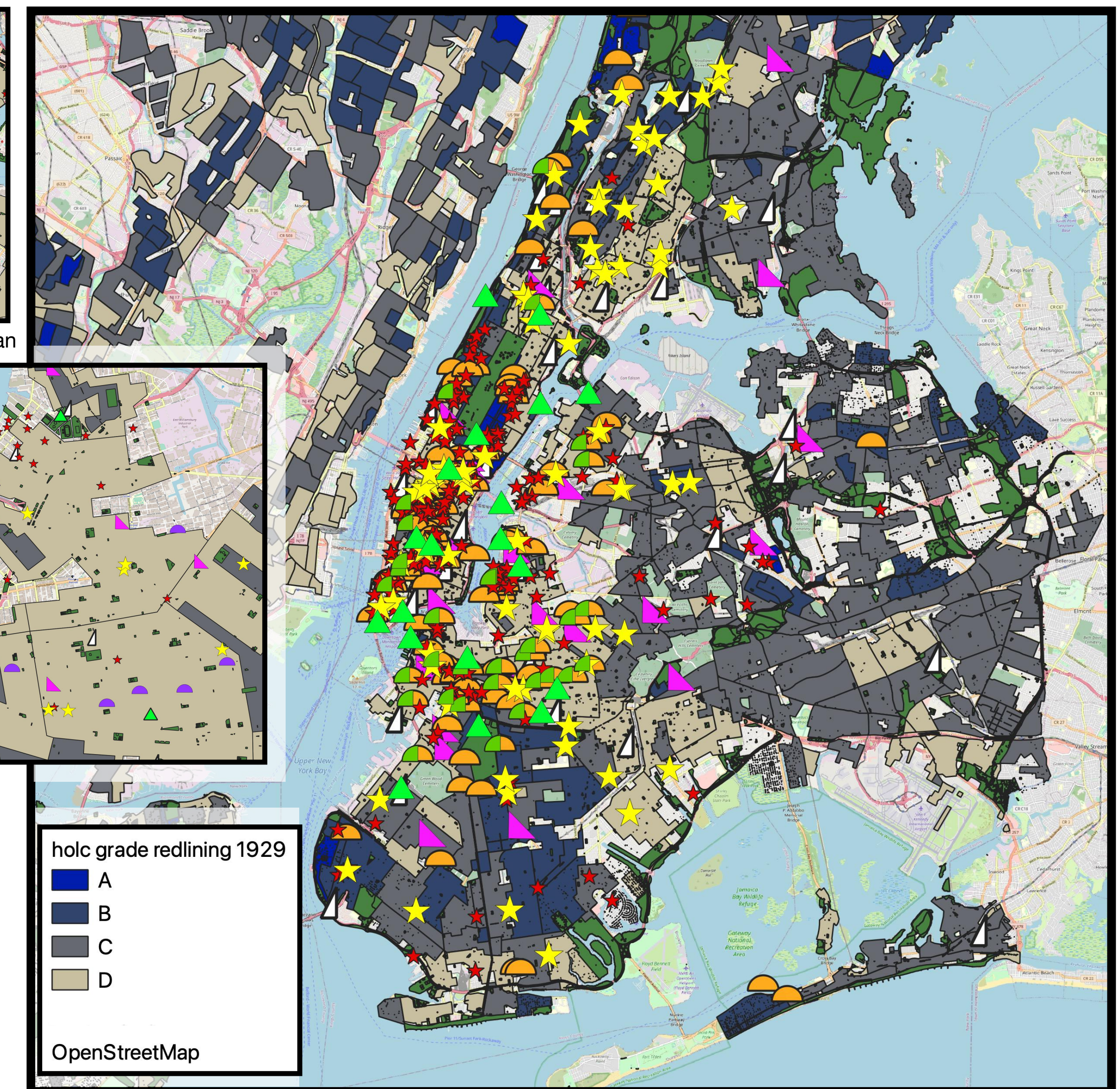
## Redlining 1929 and NYC Fitness



**Up Close:** Upper Manhattan



**Up Close:** It is visually obvious that Bedford and Stuyvesant Heights have fewer fitness facilities overall. On a positive note, this very same neighborhood in particular was introduced to at least 5 new boutique fitness studios since 2020.



**How Can Mapping History Help Guide Us Toward a Healthier and Equitable Future?**

The YMCA is one of the oldest affordable health club establishments founded in 1844, are there any comparisons that we can draw in relation to this map from 1929? Visit <https://www.ymca.org/> for an affordable fitness location near you!