# EUROPEAN MASTER IN POLICY AND PLANNING FOR CITIES, ENVIRONMENTS AND LANDSCAPE (PPCEL)

# URBAN RESILIENCE IN THE POST-COVID CITY The case of New York

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Area of study

Corona Neighborhood

Total population: 54.453

Covering an area of 1.873 km2, the neighborhood had a population density of 30,800 inhabitants per km2.

New York City



### Socio-economic background

Among the most widespread districts of NYC, Queens recorded the highest percentage of infections in the whole of the Big Apple in the first phase of the coronavirus pandemic. The evident interweaving between the racial question and social disparities emerges.

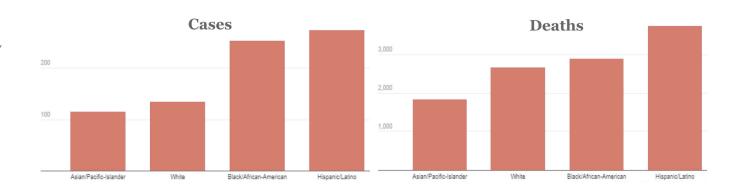
"Using Census Reporter, I compared the racial makeup of postal codes with the highest and lowest coronavirus rates per thousand people in New York. Queens postcode 11370 has the highest rate of confirmed infections in the city, with 12 cases per thousand people, and includes neighborhoods as follows: Latinos (37%), whites (25%), Asians (22%) and blacks (14%) (Ibram X. Kendi, director of the Antiracist Research and Policy Center at American University).

Trying to find an answer to this phenomenon, it was hypothesized that the poorest people, due to their poverty, have more chronic untreated health problems than the richest individuals (as it has been observed also in Italy the virus affects more people with previous illnesses). Additionally, many African Americans and Latin Americans perform high-risk public jobs that can more easily expose them to the disease. Scott M. Stringer, the city's city comptroller confirmed that 75 percent of frontline workers in the city - food departments, bus and train operators, janitors and childcare staff - are from ethnic minorities. In addition, more then 60% of cleaners in the city are Latinos.

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### Observed causes for a higher incidence of Covid-19 cases in NYC:

- 1. Poverty
- 2. Race/ethnicity
- 3. High population density
- 4. Lack of public spaces
- 5. Lack of healthcare

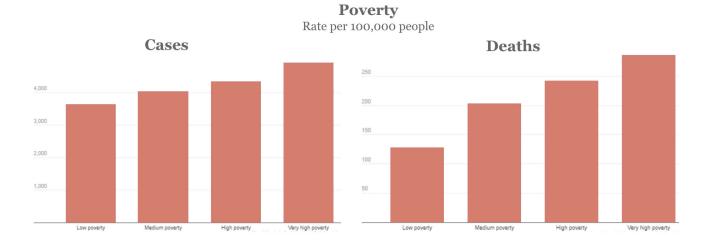


Neighborhood poverty is the percent of a ZIP code's population living below the Federal Poverty Level: Low poverty: <10% Medium poverty: 10% -19.9%

High poverty: 20% -

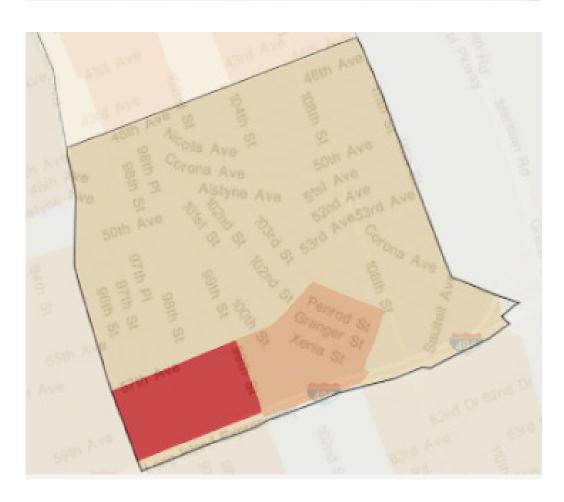
29.9%

Very high poverty: >30%

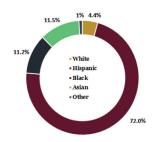


### Number of people by tract

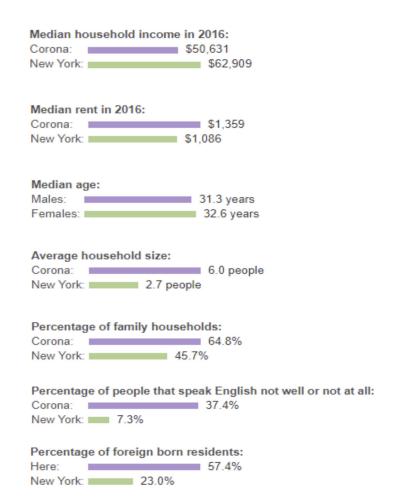




#### Origin of the population

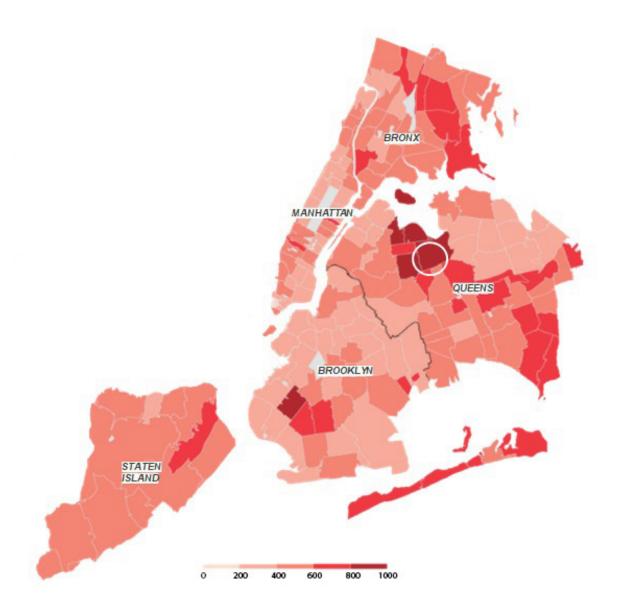


#### Socio-economic background



XX C

Number of positive COVID-19 tests (Source: NYC Department of Health and Menthal Hygiene)

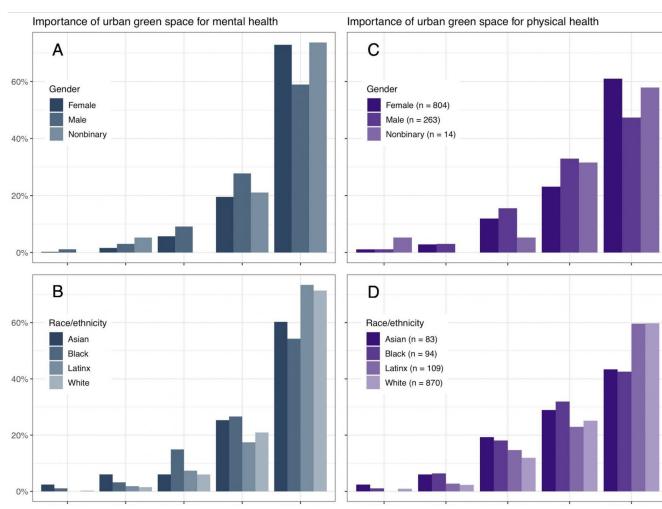


#### Density and public spaces

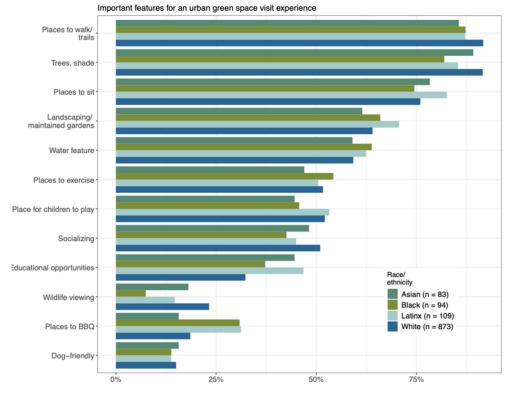
The importance of public space in a city is relevant in a critical condition such as this pandemic. The presence of public spaces is necessary for human well-being. Having access to parks, playgrounds, green areas, etc. improves mental and physical health.

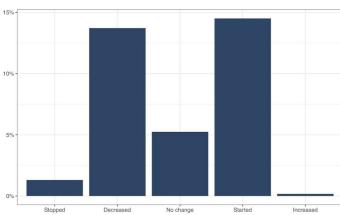
In cities like NYC people do not have access to private open spaces as courtyards or balconies, so the city becomes an extension of their domestic space.

Among the most common problems concerning public spaces are: inaccessibility (due to an excessive distance from one's place of residence), management (sometimes ignored by administrations and citizens), design etc.



Variation in responses about the importance of parks and open space for mental (A,B) and physical (C,D) health across gender (A,C) and race/ethnicity (B,D) groups.





Change in urban green space visits since Covid-19

Distribution of responses to the question: "How has your participation in [visiting parks or open space] changed since the start of the CO-VID-19 crisis?"

Although the use of public spaces such as parks or green areas in general appears to have increased during the pandemic, there are some fundamental requirements that these areas must possess in order to be used more.

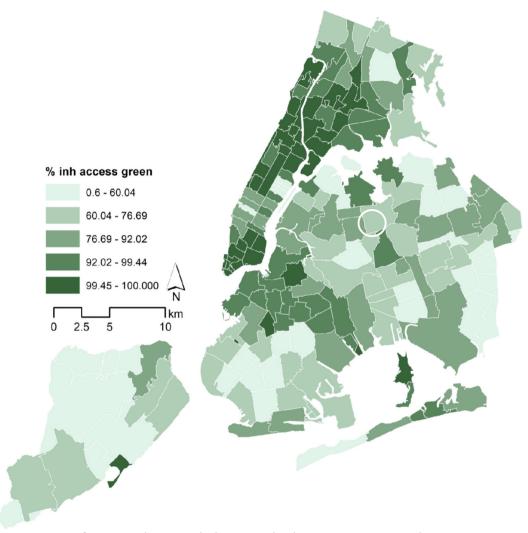
A study has shown, for example, that the size of the parks, the overcrowding, the presence of adequate street furniture, the presence of services and staff, etc., play a fundamental role in the use of the park as a wall for citizens.

### Access to green areas

According to the Trust for Public Land (TPL), almost all New Yorkers live within a 10-minute walk of a green space. Despite this, the rate of white residents is the highest among those people who tend to live near large parks.

Conversely, low-income and black communities are more likely to lack access to quality green spaces and face divestment in local parks.

Residents in Queens and Brooklyn have been observed to have less perceived park access, as well as receiving less of the desired features from urban green spaces.



Percentage of New York City inhabitants who have access to an urban green space within 400m. Map developed by Ahmed Mustafa.

#### Tactical Urbanism

Times Square is the first example of tactical urbanism applied to the city of New York, from a temporary and low-cost project it has become a permanent reality that has radically changed the image of the city.

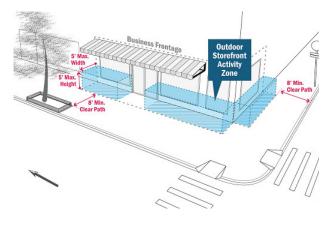
There are different forms of tactical urbanism: unregulated bottom-up actions, top-down actions decided by the municipal administration and by technicians or middle ground that see the support of local politics and the involvement of citizens and the territory.

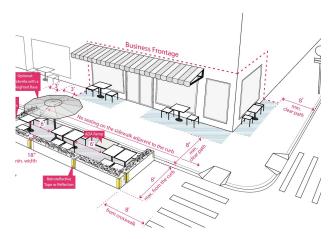
Tactical urbanism makes it possible to carry out projects for modifying public spaces that are temporary, of an experimental nature and with a high communicative value.

The aim of Tactical Urbanism in NYC is protecting the pedestrians given the increase in the number of car accidents and bike injuries due to a lack of bike lanes and sidewalks.

The plan was installing new elements like plazas, pedestrian islands, bus and bike lanes, larger sidewalks... to increase pedestrian's security.

### Tactical Urbanism: top-down actions





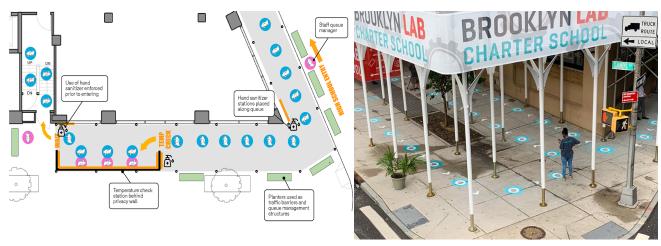
NYC announced that the popular Open Restaurants program will be made permanent. The restaurants will be permitted to use heating and enclosures, and expand seating to adjacent properties with neighbors' consent. Specific guidance is forthcoming The City will work with the City Council to make the regulatory changes necessary to make the program permanent.

The program also allows eligible businesses to conduct activity on sidewalks



Corona Plaza is a recently renovated public space in the heart of Corona, Queens. For years, the once-grand Plaza was just a small one-block street riddled with parking and trash collection problems. After years of community pressure, the street was de-mapped and turned into a public plaza under the DOT's Plaza Program. Corona Plaza programming is supported by grants from The Kresge Foundation, Surdna Foundation, and Institute of Museum and Library Services. Additional support provided by the New York City Department of Cultural Affairs and New York State Council on the Arts with the support of Governor Andrew Cuomo and the New York State Legislature.

### Tactical Urbanism: bottom-up actions



SITU Studio is an architectural practice creating spaces for institutional, corporate, civic and cultural clients.

Working with the Brooklyn Lab Charter School, they investigated the entry experience to address one of the most critical health needs: keeping Structure Urban Umbrella system students, teachers, parents and staff safe during the crowded start and finish of each day.

A new shelter at Brooklyn Laboratory Charter School, designed by WXY and SITU, can act as a provisional outdoor classroom. Staff could lead students in activities — calisthenics, or Spanish drills — as they wait their turn to enter





Barricades Traffic and pedestrian control Planters, benches, Jersey Barriers



Attachments Lighting, acoustics, heaters, sanitzing stations, trash cans



Screens and partitions Privacy, artwork opportunities Filtered natural light, student artwork



Greeting station Check-in, temperature check

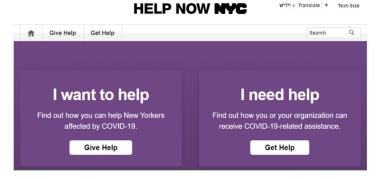


Wayfinding and distancing signage Mobile and fixed signage on structure, ground and other surfaces



## Solidarity amid Coronavirus and mutual

During the Coronavirus pandemic, in NYC, as well as in any city in the world, groups of volunteers were born to help the most disadvantaged during confinement. The NYC government itself has allowed voluntary activity through its website, but the commitment has also developed thanks to social platforms. The aid mainly consisted of aids for the provision of food, care for children, animals, etc.



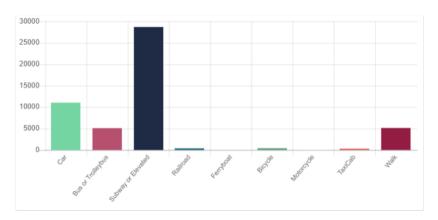


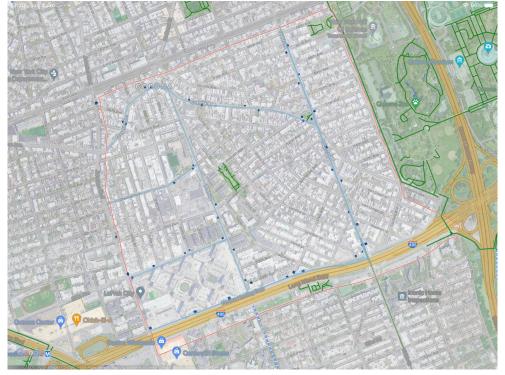
2. City governance in the post-covid-19 new era

# Means of transport of Corona to work

The preferred means of travel by the population are the use of private cars or public transport to the detriment of slow mobility, a factor due to the absence of a cycle path

This factor was in turn decisive for the spread of the virus in the neighborhood since, as can be seen from the graph, the use of public transport is one of the privileged by the workers of the neighborhood and it is known that the use of public transport unsecured public places exposes to a high risk of contagion as well as closed spaces.



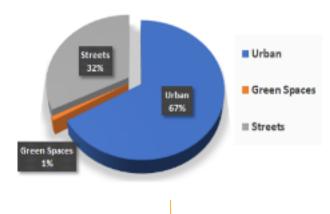


Route of the bus lines that pass through the neighborhood

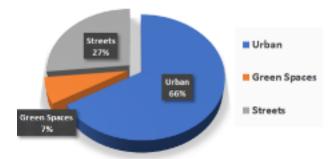
## The strategy

Our strategy is to modify Corona's area distribution so that the quality of life in the neighborhood improves. This would be by creating The Green Path additionally we'll add street elements such as planters, benches and if the street sidewalk allows it some tables. To encourage the use of more sustainable mobility than the use of a private car we add a bike lane that runs throught the entire neighborhood. The improvement of the pedestrian areas is also foreseen.

#### Corona's area distribution



#### Corona's area distribution



### Objectives and Actions

Short Term Long Term

**Create green spaces** 

Connecting the streets with a green infrastructure (Creating a Green Path)

Adding more trees to the streets

Green, healthy, sustainable city

Reduce the space for cars to generate a more active mobility

Establish bike lanes and pedestrian areas

Equally shared public space

Adapting the public space to health security requirements

Add benches and static tables with stools within 1.5m of distance

Leave spaces for oudoors businesses like pop up caffees, food trucks, etc

Less indoor activities, more outdoor activities

**Better habitability** 

Making residential complexes

Rearranging blocks making bigger unit buildings

#### 1. The Green Path

Linking smaller parks with larger parks, NYCHA open spaces, waterfront hubs, community gardens, open and cool streets, and natural areas through a network of urban ecological infrastructure could begin to address issues of uneven perceived access









Before



# 2. Improving of pedestrian areas

Widening the sidewalks in a pandemic period like this makes public space more usable; protect the safety of the cityzens, especially the weakest categories such a children and old people.









Before



# 3. Improve the bike lane

Entice people to choose an ecological way to move in the city, such slow mobility to reduce pollution and improve health

In cities like New York, which was hard-hit by the impacts of the pandemic early on, reports of increased park use in some areas signaled a radical shift in mobility and demand for services as communities across the region adapted to new social distancing policies and mandates.



Actions	Indicators
Dedicating spaces for outdoor businesses like pop up coffee shops, food trucks, etc	Areas and locations of the new created open spaces
Adding benches and static tables with tools within 1.5m of distance	number of benches and distance measurement (benches and equipments)
Creating a Green Path	length and width of the green path
Adding of more trees and planters in the streets	number and location of the plants to install
Establishing new bike lanes	Length of the lanes and location measuring bike injuries

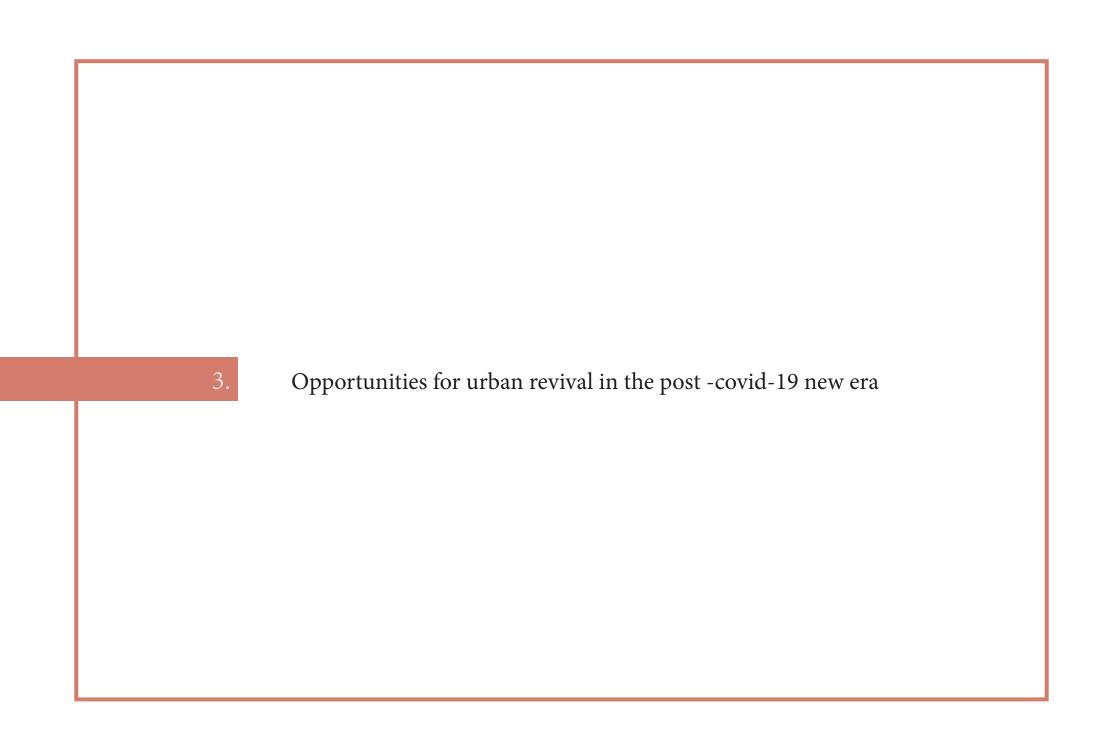
#### Instruments

DCP's Urban Design team works with other City agencies to promote good urban design for all New Yorkers. The Connected Communities Guidebook is a collaboration between DCP and the NYC Housing Authority (NYCHA).

The guidebook offers urban design tools and ideas to help improve open space at NYCHA campuses across the city. Anyone can use it to support better quality of life for all NYCHA residents.

Who Should Read This?

The Connected Communities Guidebook is a valuable resource for all NYCHA's stakeholders: NYCHA residents, Community-Based Organizations, Public Agencies, Private Development teams, NYCHA staff. The Connected Communities Guidebook is divided into four main chapters that broadly reflect the role that NYCHA communities play in the city, the past and current conditions of its form and financing, and how these come together to preserve public housing in New York City.

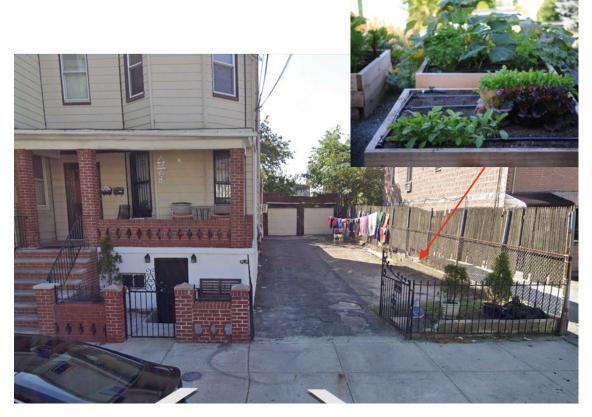


# Vegetables gardens

Local food security:even on a very small scale, the inhabitants will be able to grow their own fruits and vegetables. This can help them, more or less, to ensure their needs in case of extreme situations.

Greener areas: apart from its functional side in terms of air purification, the vegetable gardens will add aesthetic value to the neighborhoods.

Increasing soil permeability by reducing the cemented space: the soil will be more permeable and will then be able to absorb the excess precipitation in extreme cases of climate change.



In Corona, the houses have a lot of unused cemented space that can be turned into vegetables gardens in which a drip irrigation system can be used. The water required for the irrigation can be collected from the roofs (rainwater harvesting).

# Open air study/work

Multifunctionality: these spaces can be used to study or to work or to seek general information by inhabitants who do not have access to the internet.

More job offers: since these spaces require regular maintenance, there will be more work opportunities.

The open air study/work spaces can be implanted all along the green path or on the green roofs. They can be provided with an adequate equipment like computers and a Wifi connection especially in the poor neighborhoods. The material used can be simple and ecological (benches, plants, wood chairs...).





#### Green-roofs

Reduction of air pollution: thanks to their purifying effect, they will be able to reduce air pollution rates and improve its quality. Which will further reduce respiratory illnesses linked to air pollution.

Decrease in the effect of urban heat islands: this can be used to regulate the urban microclimate and fight against the impact of climate change.

Multifunctionality: these spaces can be cultivated as they can be entertainment spaces (playground, gym, open-air cinema ...).





In New york City there is already a green roof project but it is only covering Manhattan and few other zones. The idea is to install more green roofs all over the city especially in the most vulnerable zones like Queens.