

## **Executive Summary**

What can be said about Covid-19 that hasn't been said already? Rather than simply talking and writing about the pandemic we want to share the lived experience of it. With the Support of Realdania and the City of Copenhagen, we engaged 60 surveyors in 4 cities to understand how our streets and public spaces, our parks and our playgrounds are serving the very unique needs of our communities during this strange pandemic.

The first results are listed here both in terms of snapshots of public life during the "lock-down" as well as highlights of the data that we collected. Two main questions are guiding our work

- Will things ever go back to the way they were?
- Are there things we are doing now that will become part of the "new normal"?

This crisis has shown us the power of behaviour change – both how adaptable humans are, and how much of an impact that adaptation can have on our society – socially, environmentally, and of course economically. The key will be to build on the sense of community and social cohesion while overcoming the current economic crisis, in a way that catalyzes the start to a sustainable and climate-ready transition

#### Major Events and their Long-term Effects

Major global events, such as pandemics, economic depressions, and wars have shaped our societies and the way people experience everyday life. For less than a decade, the after effects of 9-11 and our response to terror has had the biggest physical manifestation - with multiple security measures in

airports and air travel shaping our behaviour.

From the panopticon in prisons being adapted to hospitals, the Napoleonic widening of streets to make space for the military movement, to modernist architectural principles based on health & nature, all of these are functional physical approaches to urgent and major needs. As pandemic regulations are being implemented throughout the world, the question of what will be the future measures. More importantly, how can we ensure a post-COVID19 people-first implementation and adoption of physical measures that can inform a future sustainable public life.

To inform these future measures, understanding how people are behaving outside their homes - primarily in public spaces and streets - is paramount for future adoption.



The Studies have been planned and coordinated by Gehl and executed by a combination of Gehl staff, collaborative partners, City staff and paid surveyors. This work is conducted with support from the philanthropic association Realdania and Municipality of Copenhagen.



2



That is why Gehl is collecting data, through an inclusive approach, giving public life and people a voice before experts shape the response.

#### Different Approaches and Public Life

Different preventive and reactive measures are being enforced with various degrees of rigidity. From Peru, Chile, Italy, India, the USA, to Denmark and Sweden. The danish approach has been built upon using public space to actively fight the virus while keeping our democratic humanity alive. The way the Danes and Danish cities handle the COVID19 crisis is based on trust and civic responsibility.

Compared to many other countries that have closed urban spaces or limited outdoor living, public spaces and public life are a vital part of Denmark's strategy to collectively care for one another and at the same

time enjoy physical activity, fresh air, and socializing, but from a distance. With no vaccine or cure available, physical space has now become the mechanism to fight, prevent, and control the spread, while providing the benefits these places have.

In many cases, there are more people spending time in public spaces in Copenhagen now, than before COVID19. It is paramount that private and public organizations understand the value of public spaces, to not only help fight a pandemic, but ensure a better future quality of life.

#### Big Data vs. Thick Data

Google, Apple and others have collected macro-regional trends. All of these are trying to give a glimpse of the impact COVID19 has had on cities. Although these datasets and approaches work well to get a high level, almost global overview, they in some

cases overlook some of the things that are happening in the public sphere. Each form of data has strengths and weaknesses but together they tell a much more complete story. Gehl's data provide complementary insights at eye-level and from a lived experience perspective - people observing people. This study sheds light on the microstories that can get lost in the noise of big-data.

COVID might push urban data sets and mapping more into the mainstream - maps of outbreaks, statistics over new cases, the correlation between things like air pollution and COVID cases all help us to make sense of the pandemic. Yet no single piece of information tells the full story. It is in fact the formulation of data into stories is what really helps us to see the invisible and understand the hidden side of things like how a micro virus much smaller

than individual human cells can bring the entire world to a grinding halt. Yet focus on the development of tools and skills needed to help us to see, then understand and then act on such difficult to comprehend realities might be one of the silver linings of the pandemic

## Methods & Tools Overview

#### What are Snapshots?



These are a demonstration and impression of public life. The Snapshots in this document are results showing how people use public space in 4 Cities we have been collecting data from; Horsens, Helsingør, Svendborg and Copenhagen. We call them snapshots because they are basically "first impressions" that can help demonstrate how everyday life is being played out in the different Cities.

The snapshots are formulated and made accessible as objective as possible, without any further knowledge about the exact context, other than data collected before in the same Cities. At this point, we have not looked into other elements, such as e.g. on-going construction

work, pausing or reprioritisation of cultural programs on a City-level or general strategic decisions that might have had an effect on why public life took place as experienced during the registration.

### What are the Snapshots based on?



Understanding the fundamental to people's wellbeing: In the past years, the broad availability of open hardware tools, the creation of online sharing platforms and the wider access to different data has fostered an increased focus on the use of big data to strengthen and inform urban planning. From tracking vehicles to create more efficient

traffic movement, to mapping trees and installing sensors to determine their impact on air quality, big data can be applied to make informed decisions that improve the way our cities work. Nevertheless, how can we make sure that we also focus on understanding the fundamental to people's wellbeing? And how can we better picture on how different spaces are used, and by who?

During the last couple of years, Gehl has developed a digital PSPL (Public Space Public Life) platform, that enables people to efficiently observe public life and collect fine grained data about the life between the buildings. By using the platform, we have e.g. been able to register how people move, which mode of transportation they use, what activities that are the most popular where and with whom people are spending their time.

Contextualisation of data: One of the key benefits of digitizing and standardising data is the ability to see lots of datasets in context with each other, in order to detect behavioural and spatial patterns. Throughout this research, Gehl has tried to connect our lived experience data from the four cities with larger datasets, such as sensor-data from JC Decaux. open datasets from the City of Copenhagen and movement data from Google and Apple. This contextualization, together with the use of a large number of photos and observations from the different sites, has led to a more nuanced picture of public space, shaping the snapshots presented in this document.

### How did we collect lived experience data?



The collection of lived experience data was conducted in four cities over 2 days, 12 hours per day, on April 3-4 2020. All in all, 60 Surveyors were involved, using Gehl's platform to register the data.

## Where did we conduct our surveys?

#### Horsens

City population 59.181 Gehl public life data collected in 2008, 2014

#### City population 650,000

**Svendborg** 

City population 59.181 Gehl public life data collected in 2008

#### Helsingør

Gehl public life data collected in 2013





Gehl public life data collected in 2019

#### **Total Perceived Gender Distribution**

M: Male F: Female

#### Play and **Excercise**

P: Play E: Exercise

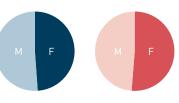
#### Children and the **Elderly**

C: Children

throughout a

#### **Predominant**

predominant activity of people spending time in



Copenhagen

Before During

Ρ

Before



During



Horsens

Before

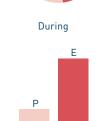


During



Before





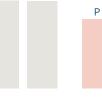
**Svendborg** 





During

Helsingor



Before

Before



During



E: Elderly



Before



Before

1000

500



During



Before

1000

500

Before



During

During



Before



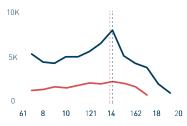
During

#### **Activities** observed during a day.

Measured weekday.

#### **Activity**

Change in public spaces.



**Before** Cafe Seating



**During** Public Bench Seating



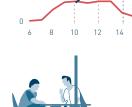
12

**Before** Standing



18 20

**During** Standing



**Before** Cafe Seating



During Standing

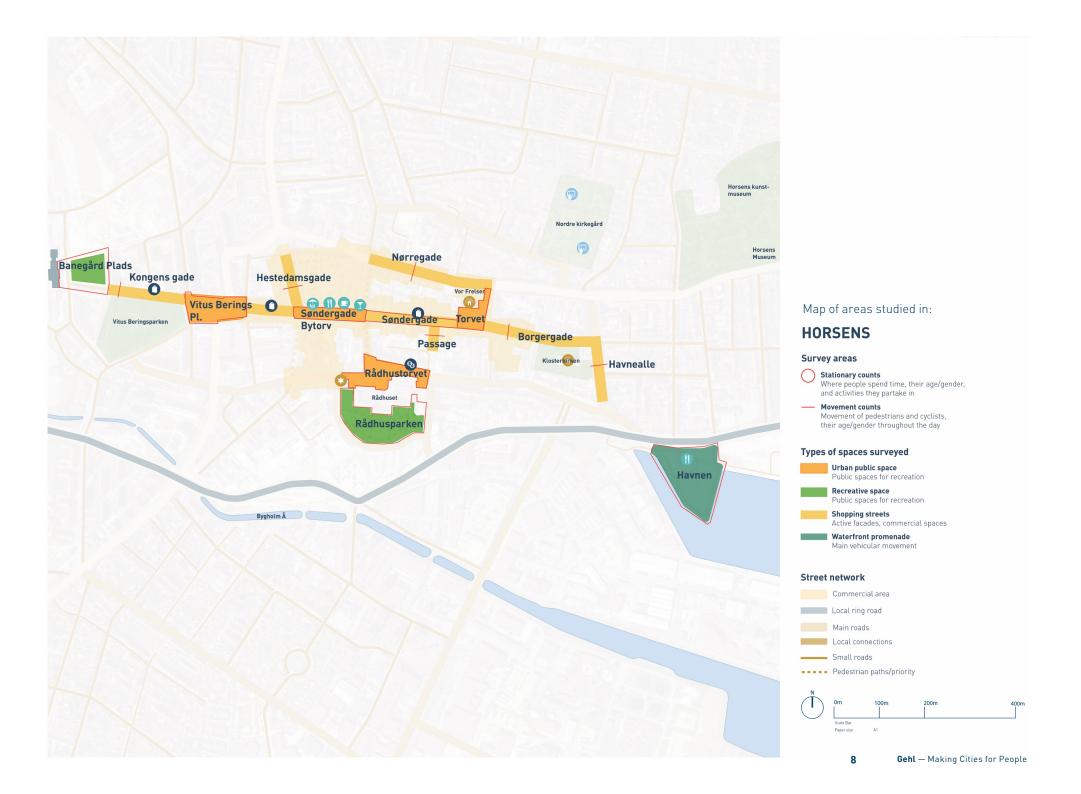


**Before** Not Available

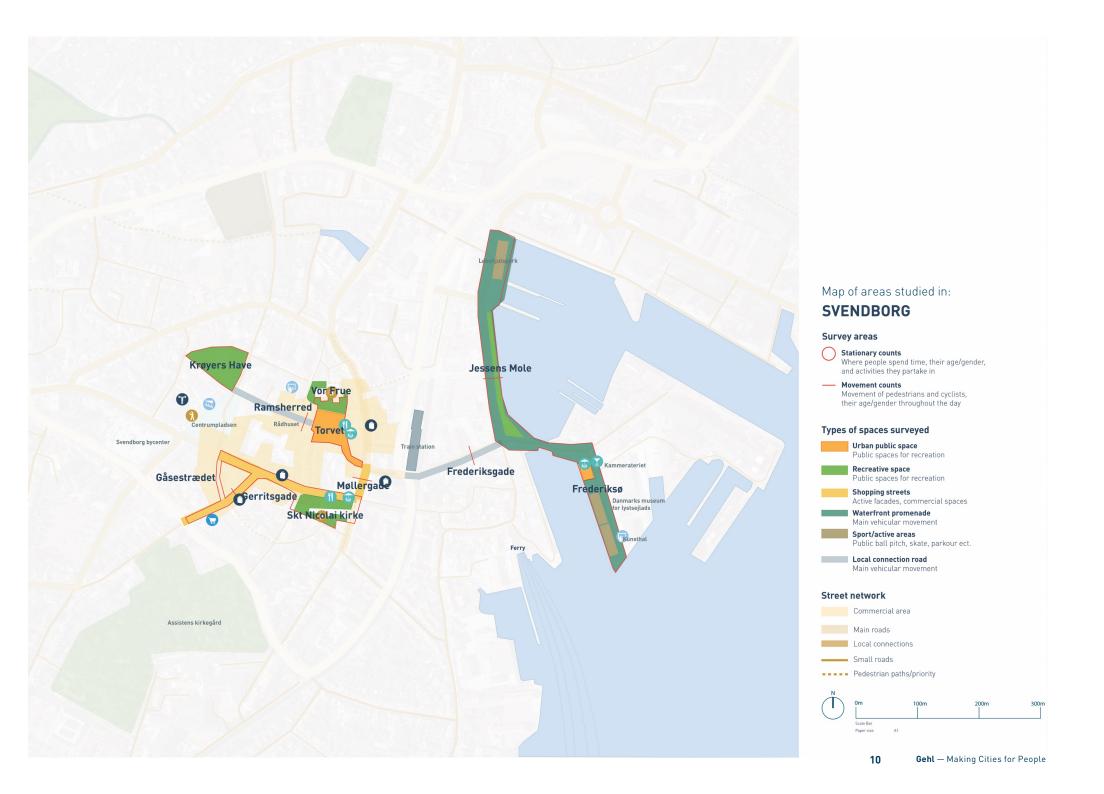


**During** Public Bench Seating









#### **Snapshots**

1

There has been a significant **drop in downtown activities** - especially on commercial streets

2

The city is being used more for recreation, play, and exercise.

3

Use of public space has remained constant, while movements from A to B have decreased significantly.

4

Local places that already offer a public activity (such as a playground) are even more popular than before 5

Popular places make physical distancing **rules hard to follow.** 

6

The search for essential outdoor and climatic human needs has become more valuable

7

**New activities** and forms of urban life are emerging in many cities

8

More **children and older people** are using the city's space than before.

9

Different user groups have different experiences.

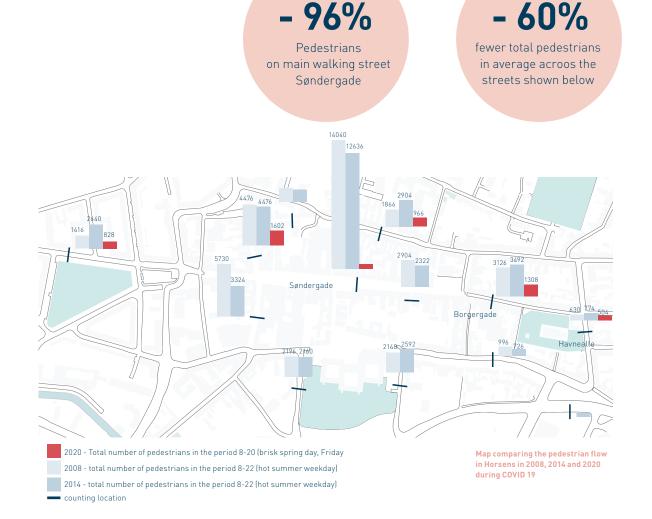
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Overall mobility has decreased, but pedestrian movement is increasing outside of the city centre.

## There has been a significant drop in downtown activities and on commercial streets

## Pedestrianized shopping streets, have been especially hard hit

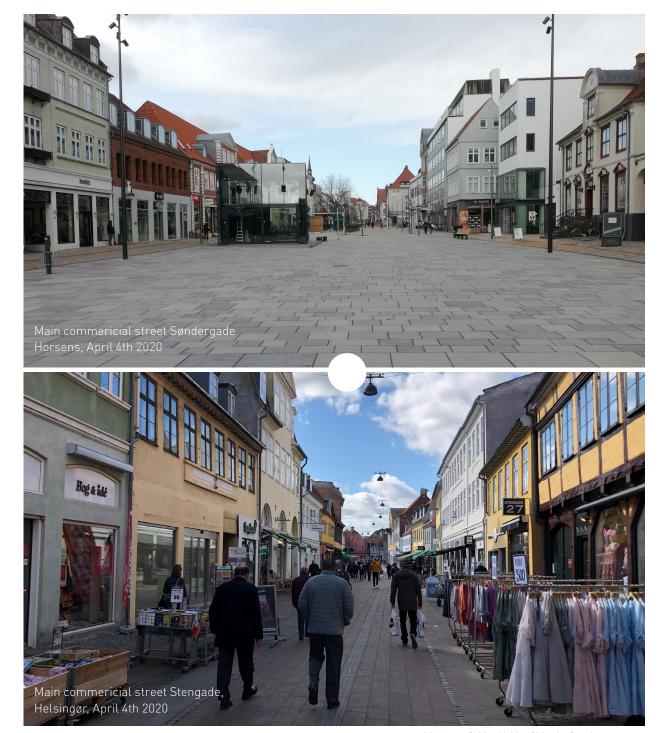
It is obvious that COVID-19 and the subsequent lock-downs forcing children and all non-essential workers to study and work from home impacts the flow of people in Danish Cities. But pedestrianized shopping streets have been especially hard hit. This is exemplified best in Horsens and in Copenhagen.



Some cities, like Helsingør and Svendborg seem to have been less impacted.



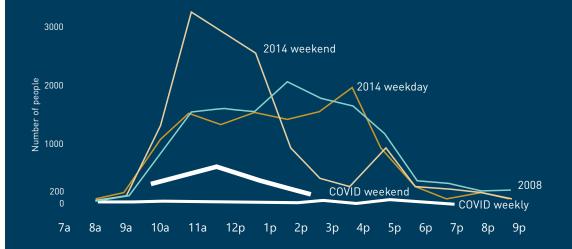
Pedestrian flow along the main commericial shopping street is down 75% in Helsingør and 68% in Svendborg



Routines along pedestrian streets are similar, but exact behaviours are different.



More people still go to pedestrianized shopping streets on the weekend than the weekday. The peak times have shifted to be a bit later on the weekend in Horsens but stay basically the same on the weekday in Copenhagen



#### Horsens

Total amount of pedestrians on Søndergade ( main shopping street)

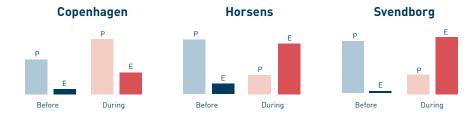
Activities

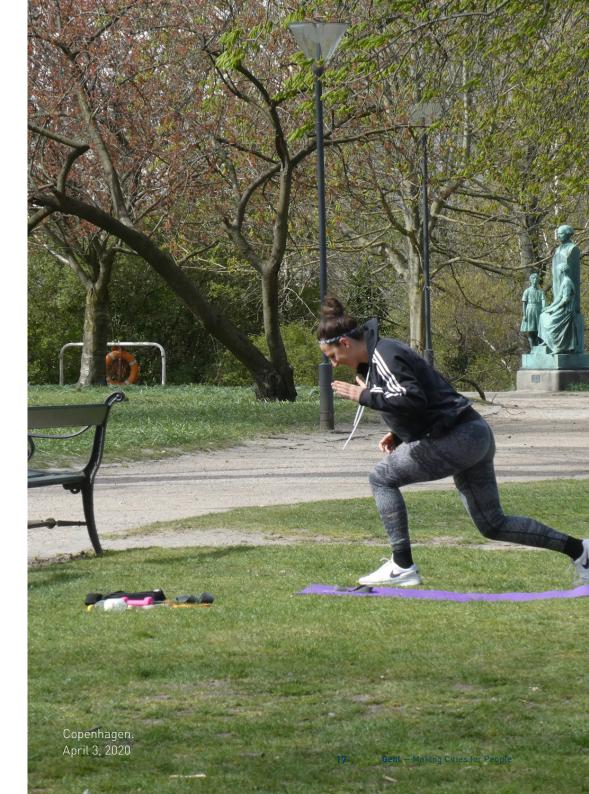
# The city is being used more for recreation, play, and exercise.

# We see a general increase of play, exercise and recreation in public space

Across all cities, we have seen a general % increase of either excercise or play activities. Horsens and Svendborg have had a re-distribution of percentages between Play and Exercise.



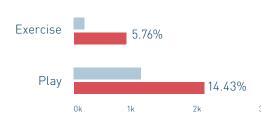


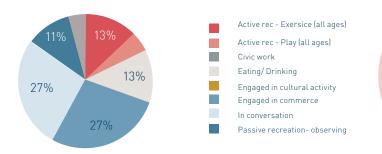


Places that invite recreation, play and exercise are being used the most.



Much more active play and exercise in Svenborg-from barely registering in 2008 to 13% of all activity in 2020- especially in some places like the harbor front where excercise/play is 17% of activity in 2020 during COVID





+13% play across the city



+17% play in the harbor

People spending time in the harbor. Svenborg in 2008

distribution of activities across the city of Svenborg - during COVID

18

People are being resourceful and using places that are convenient for them, even if they aren't full of exercise and play equipment



People have adapted existing offering of public spaces to fit their physical activity (recreation, play and exercise) needs - even in places that don't have exercise equipment
- This can be seen at Torvet in
Svendborg and at Gammel Torv
in Copenhagen



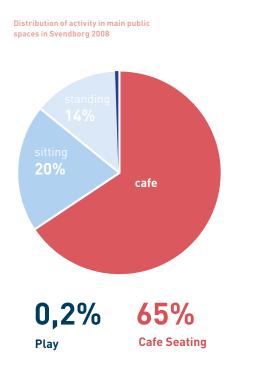
Use of public space is has remained constant, while movements from A to B have decreased significantly.

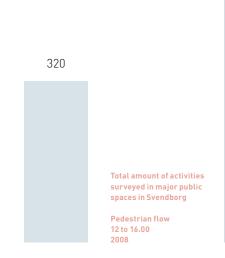
As much activity and people spending time in public space during COVID as before.

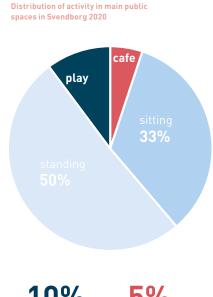


But there is a **substantial redistribution of known activities** - in Svendborg people shifted from cafe seating to standing, benches and exercise

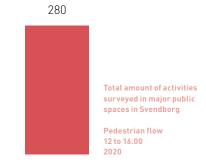
In Enghave Plads in Copenhagen, there is a similar amount of activities before/ during COVID but 10x as much play and exercise









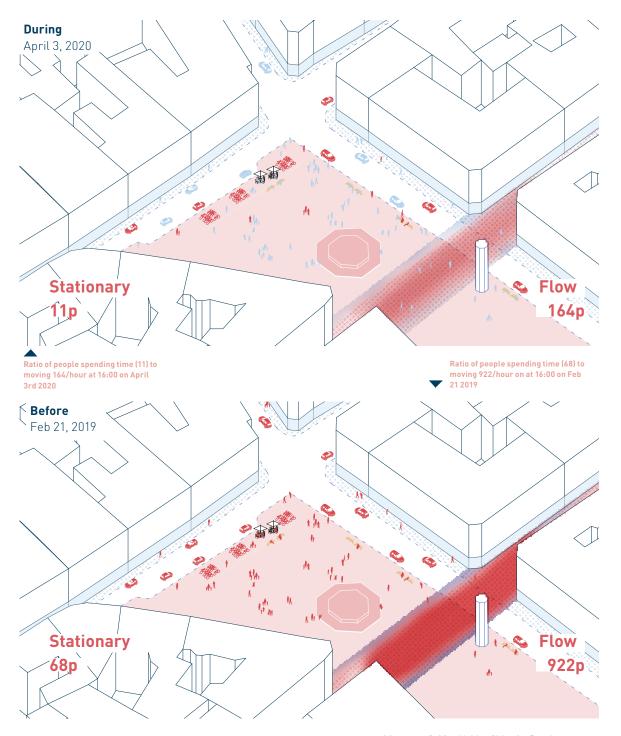


Public space use hasn't gone down as much as the flow of people



In popular city center places like Gammel Torv in Copenhagen it is easy to see that the vitality of public space has decreased, but not nearly as much as the amount of pedestrian traffic **20%** of the flow (172ppl/hour vs 1006ppl/hour) but **50%** of the staying activity during peak times

Data Source: Pedestrian Counts, JC Decaux



## Local places that already offer a public activity are even more popular than before.

Local places that already offer a public activity (such as a playground) are even

## more popular than before



Well-designed local destinations such as Enghave Plads, Superkilen, and Sundbyøster plads all see more activity on the weekend during COVID, than they did in the fall of 2019



People spending time at Sundbyøster plads throughout the day.

before
during COVID

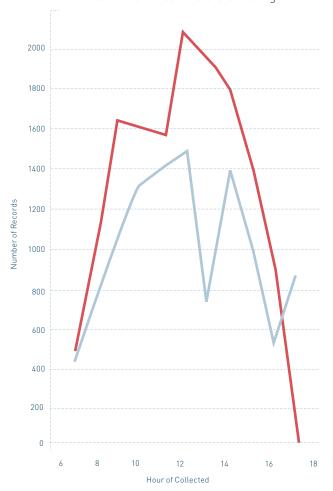


## Some places are **being used more** during COVID19



#### **Weekend Enghave Plads**

Number of Activities - Before & During

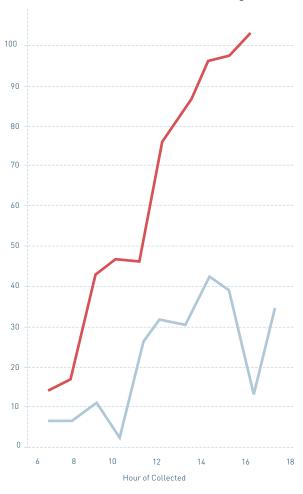


Comparative pattern of use for people spending time in Enghaveplads Plads in Copenhagen before (Sept, 2019) and during COVID (April, 2020)

before during COVID

#### Weekend Superkilen

Number of Activities - Before & During



Comparative pattern of use for people spending time in SuperKilen in Copenhagen before (Sept, 2019) and during COVID (April, 2020)

before
during COVID

# Several local destinations see increased use during COVID

Sundbyøster Plads in Copenhagen has twice as much activity on the weekend in April 2020 in comparison to a September weekend day in 2019.

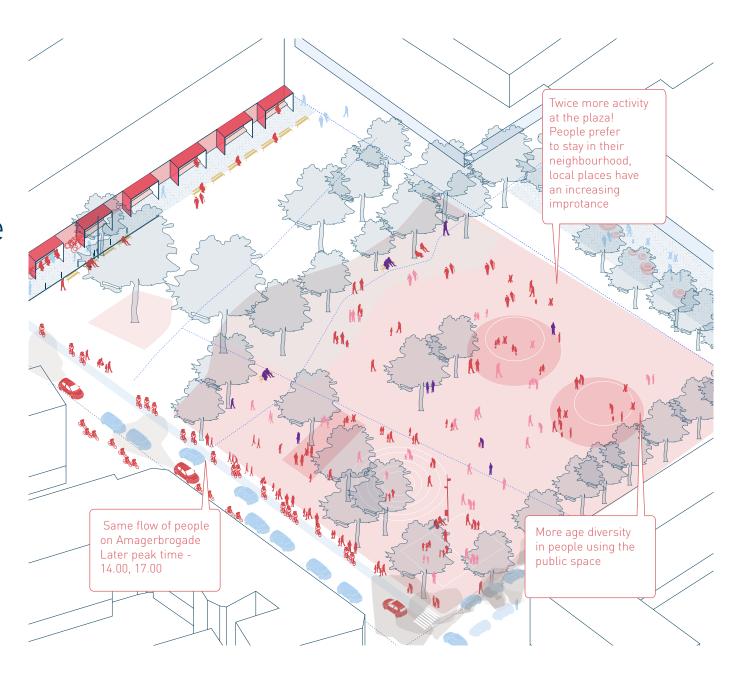
Key:

New activity during COVID

Activity, which remained the same

Activity not present during COVID

Different age group



Proportion between weekend and weekday is the same, but **peak** and daily activity is different.



At Enghave Plads, there is nearly the same amount of people spending time but with a morning and afternoon peak. But during COVID the morning peak is much smaller, while the afternoon peak is more intense and lasts longer.





## Victims of their own success: popular places make distancing rules difficult to follow.

People adhere to physical distaning rules, but successful public places make physical distancing difficult to implement.

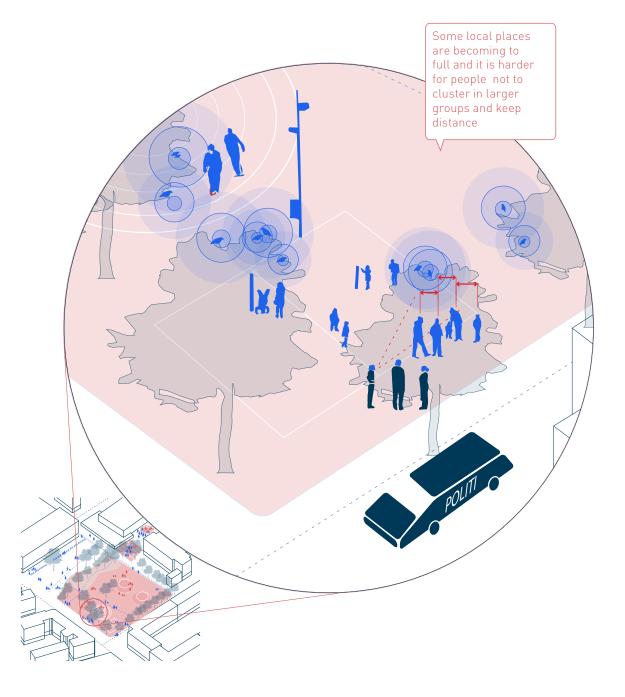




# Social norms around physical distancing are still evolving in popular local places



Police enforcing crowding rules at Sundbyøster plads in Copenhagen



Invitations to keep a good physical distance, (2m space deliniation), are effective in distributing people.



The simple addition of markings separated by 2m help people understand how to keep a safe distance while queing.



When people's senses are peaked, they quickly forget healthy distancing and revert to natural human distancing tendencies.



Physical distancing rules are more difficult to follow in more spontaneous situations like looking at flowers to buy. Social distancing is **forgotten in spontaneous moments**.



## The search for essential outdoor and climatic human needs has become even more valuable

Fresh air, water, sunlight, are as important as they always have been - if not more so!



This is reflected on how people are using meeting places and the types of public spaces they are willing to go to.





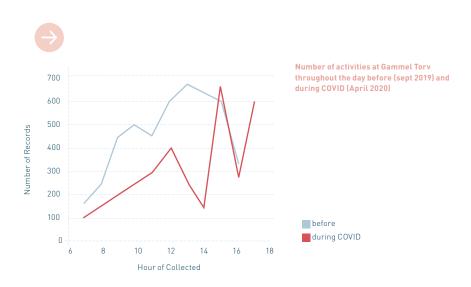
Despite the pandemic, humans are still humans: places that invite for sensory experiences and good climatic conditions continue to be the most sought after.





New activities and forms of urban life are emerging - public spaces are being used like never before!

New forms of public life are emerging in the city - public spaces are being used like never before





New types of spaces provide new opportunities for people to appropiate them



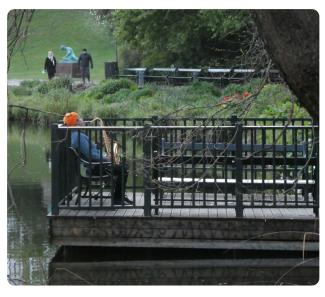
Skating on Strøget, BMX on Rådhuspladsen, and senior exercise classes on amager are all new activities.



**Bicycle Groups** 



Squares turned into Skateparks



People practicing their instruments



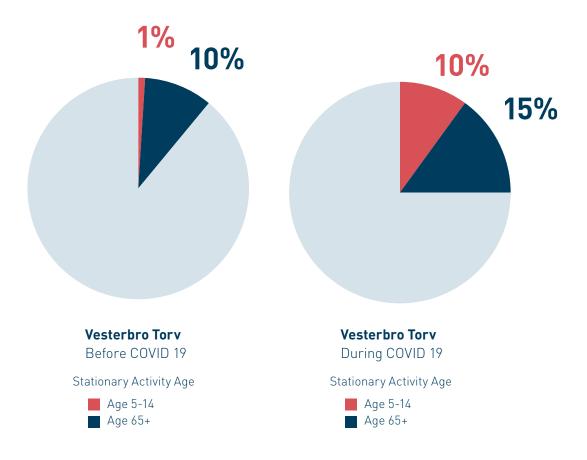
Plaza turned into Concert Hall

# More children and older people are using the city's space than before.

### There are **more kids and elderly people**in public spaces than before.



People spending time in Vesterbro Torv is down to 80% of the stationary activity when compared to a weekend before COVID19. There is a similar percent distribution of activity (main activites are still eating/ drinking, in conversation, using electronics) A larger percentage of **5-14 before** [1%, 6 observed people], after [10%, 9 observations] **65+ before** [10%, 53 observed people], after [15%, 14 observations]



Usergroup behaviours in public spaces

– a diversity of experiences for a diversity of groups

Active elderly are still visible in public life



Men tend to be in groups of 4 or more

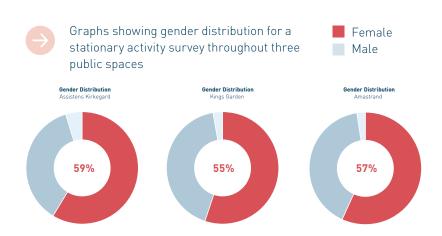


New behaviors aren't always social - like solo yoga at the harbor in Helsingør

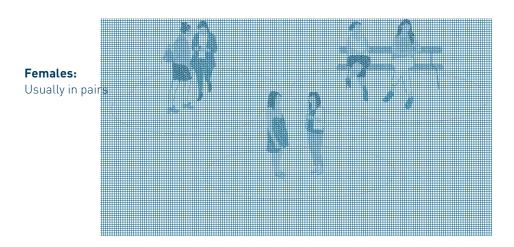


# Women tend to use public space differently than men.

In some cases, we observed more female than men, especially in pairs. Men tend be alone or in mixed groups of 4+.









## Usergroup behaviours in public spaces – a diversity of experiences for a diversity of groups



**Same amount of activity** – but more in the early part of the day.

**Many more teenagers** - Much more male than before.

**More social** – much more conversation and less using electronics



### **Gammel Torv**

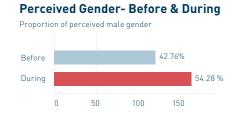
Comparison Weekday. Fall 2019 - April 3 2020

Key:

During COVID19

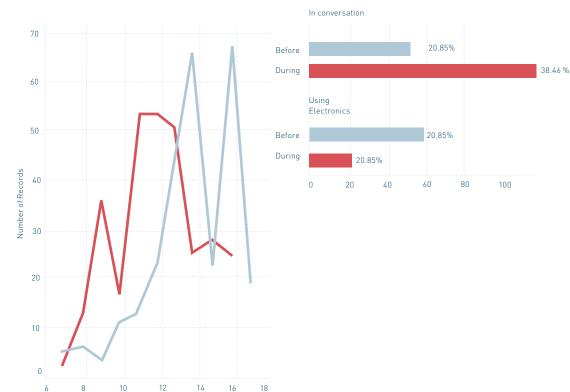
Before COVID19

### Perceived Age - Before & During 15-24 age group Before 9.89 % During 51.32% 0 50 50 150 200 250



### **Number of Activities- Before & During**

### Activity- Before & During

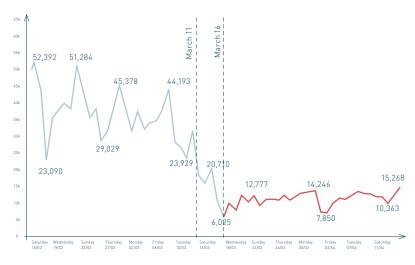


# Vehicular traffic has decreased while walking and cycling are the most resilient.

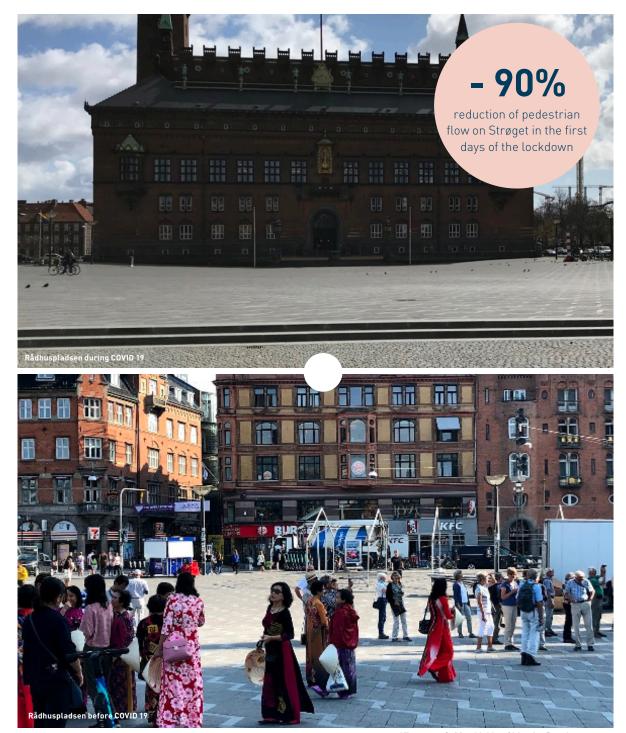
## Copenhagen City Center has seen a **dramatic drop** of pedestrian activity

Copenhagen City Center which usually attracts residents from across the city as well as tourists has seen a dramatic drop in use. City's main walking street saw a 90% reduction just

as the lock-down was enforced and stabilized at a 80% fewer pedestrians in early april in comparison to footfall through the square in January and february of the same year



Data is from Springboard

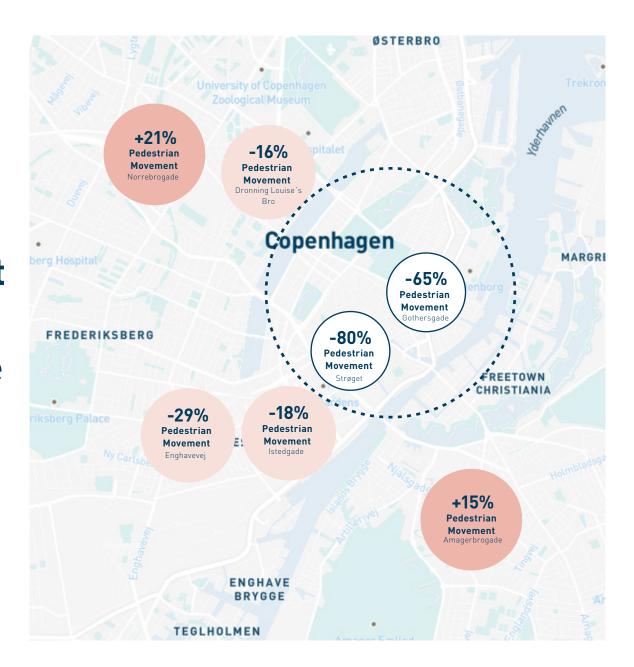


### 10

Overall mobility
has decreased, but
pedestrian movement
is increasing in
neighborhoods outside
of the city center.



Pedestrian movement decreases the most in the city center, is closer to "normal" at the periphery of the center, and increased in adjacent neighborhoods.



### 10

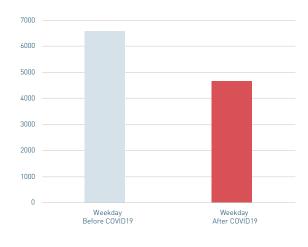
## Walking and cycling have become essential forms of mobility.

Graphs total ped

A more nuanced look and granular on the ground data collection shows that main neighborhood streets (like Enghavevej and Istedgade) prove to be essential for the development of a community. Mobility corridors have gained importance especially for pedestrian and cyclists.

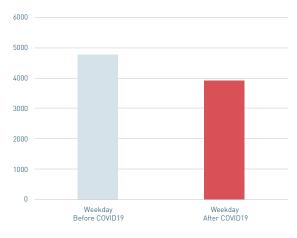
Graphs to the right show a minor decrease in total pedestrian flow in important mobility corridors.

### **Enghavevej**Total Pedestrians from 14-18 on a weekday



### Istedgade -

Total Pedestrians from 14-18 on a weekday



### 10

### High level data doesn't tell the whole story.

High level data completely misses what we documented on Amagerbrogade, a street 5km from the City center. Here pedestrian traffic was consistently higher throughout the day and 15% higher than pre COVID times (late fall of 2019).

Apple data shows a 43% drop in pedestrian activity across the city, but the change on these streets is only (29% Enghavevej, and 19% Istedgade) - see Graphs of total pedestrian flow.

### Method:

Apple's mobility data gives an overview of the major mobility trends for Copenhagen. In order to compare Gehl's data with Apple's, we have reduced the pedestrian activity we recorded in the fall of 2019 by 43% to

create a comparable baseline. This baseline is represented by the dashed-line in both pedestrian movement graphs.

Source: https://www.apple.com/covid19/mobility



Before COVID19 During COVID19

### **Snapshots**

1

There has been a significant **drop in downtown activities** - especially on commercial streets

2

The city is being used more for recreation, play, and exercise.

3

Use of public space has remained constant, while movements from A to B have decreased significantly.

4

Local places that already offer a public activity (such as a playground) are even more popular than before 5

Popular places make physical distancing **rules** hard to follow.

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The search for essential outdoor and climatic human needs has become more valuable

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**New activities** and forms of urban life are emerging in many cities

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More **children and older people** are using the city's space than before.

9

Women use public space **differently** than men.

10

Overall mobility has decreased, but pedestrian movement is increasing outside of the city centre.

### 10 Questions



Which street types, features, and their programming are more conducive to COVID - Public Life needs and why?



How might we **design for physical distancing**so that we can
responsibly take part
in public life across
cities in a healthy,
comfortable way?



Why are people adopting the use of places, schedules, and the timings that they do? What could be the transition to the post COVID19?



How can we design for the sensory and plan for access to **fresh air**, **water**, **sunlight and nature?** 



How are people using the city for other things than before?



What **new types of meeting places** will be
needed in the future
- eating, playing, and
exercising?



What **public space typologies** have the largest impact for quality of life, and why are people spreading to new corners of their neighbourhoods?



What is the role of spatial typologies, social conditions and built form, for different users groups?



What happens when life is **much more local** and how is activity across the city changing perceptions of people's neighbourhoods?



How might COVID-19 redefine mobility priorities and how we evaluate equitable access and essential travel?

### Acknowledgements:

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