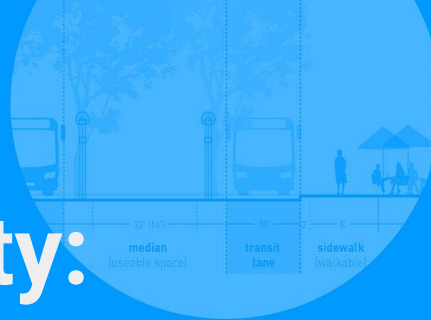


View from the city: Climate Action in Copenhagen



Gehl

Morten Kjer Jeppesen

Director - Europe Masterplanning & Design

morten-j@gehlpeople.com

Gehl is an urban design consultancy

We work globally to improve conditions for **health, equity and sustainability** through urban strategy, masterplanning, mobility plans, landscape design and social science.



Jan Gehl pioneered human-centered city making, improving the quality of urban life by placing people at the heart of the design process.

We are build on a 50 year legacy of human-centered urbanism

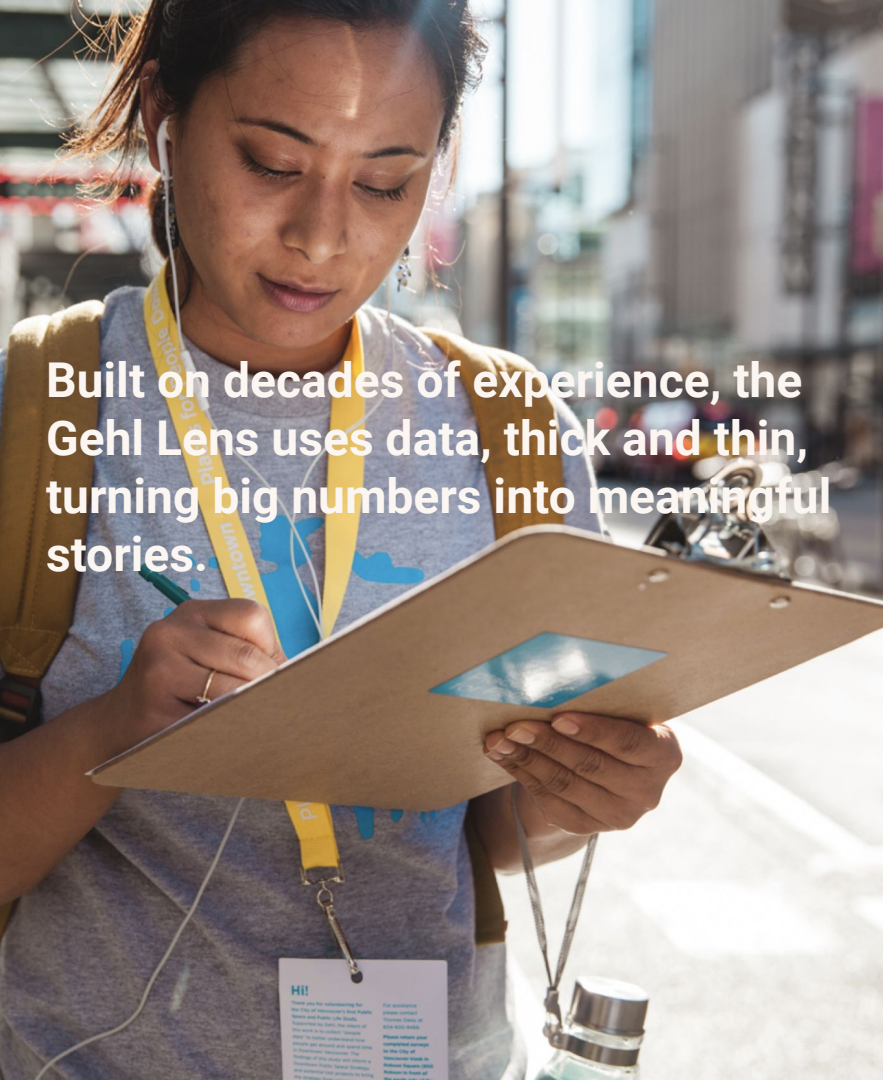


The City of Copenhagen, our urban laboratory, is a world-renowned model for urban quality and sustainable urban development

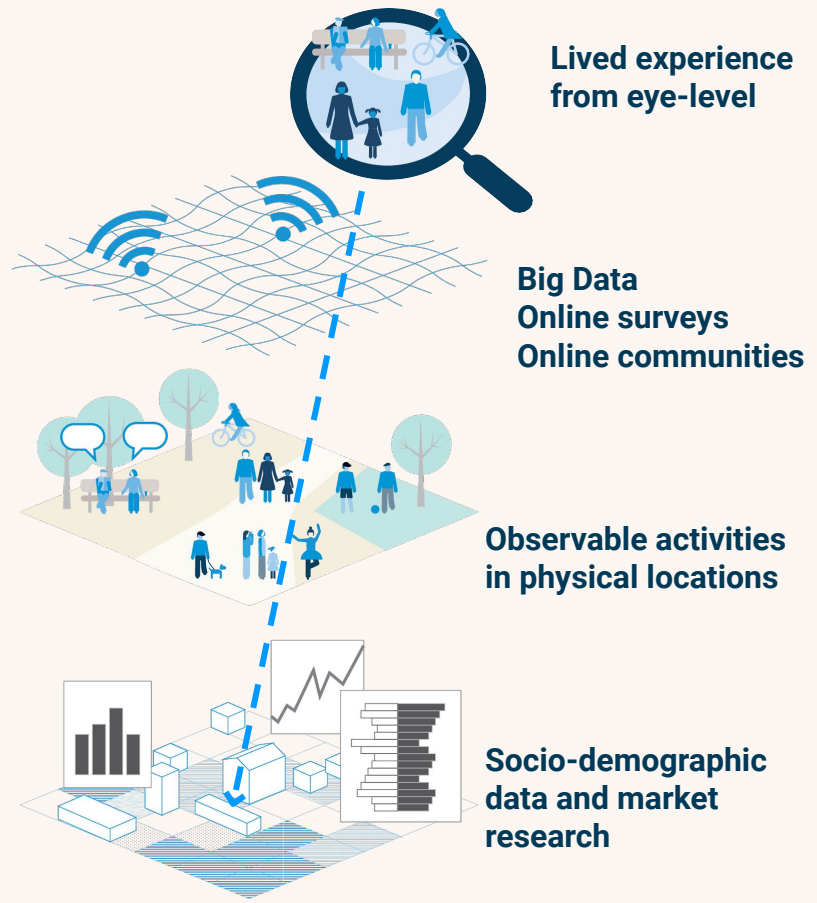


Gehl
20 years
gathering
public life data
in over **300**
cities around
the world.

Our mission:
We work for cities
and communities to
be **equitable, healthy**
and **sustainable**
places for all



Built on decades of experience, the Gehl Lens uses data, thick and thin, turning big numbers into meaningful stories.



Understanding how we live...



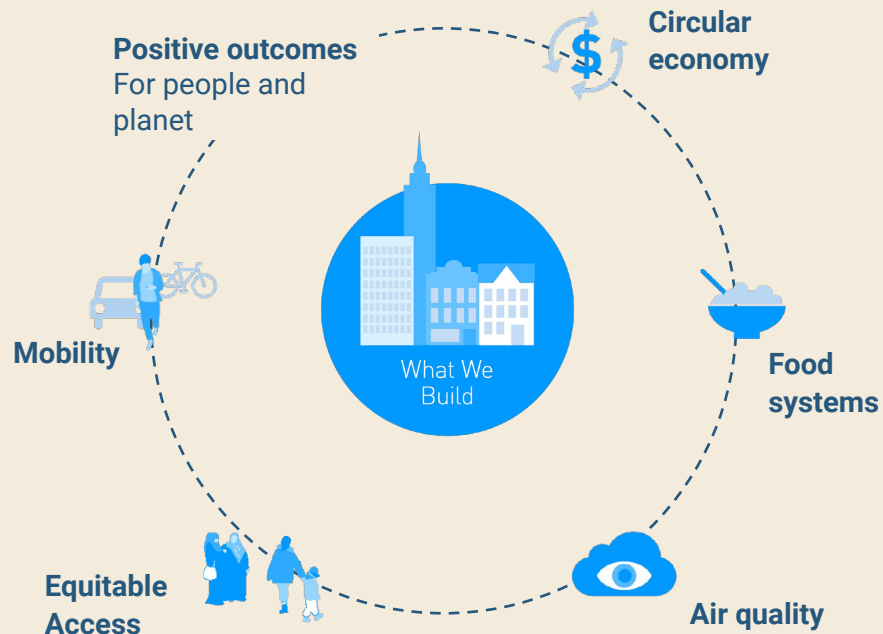
Conscious decisions
empowering people by providing the
outlet to act sustainably



Everyday convenience
enabling everyday routines to act
subconsciously



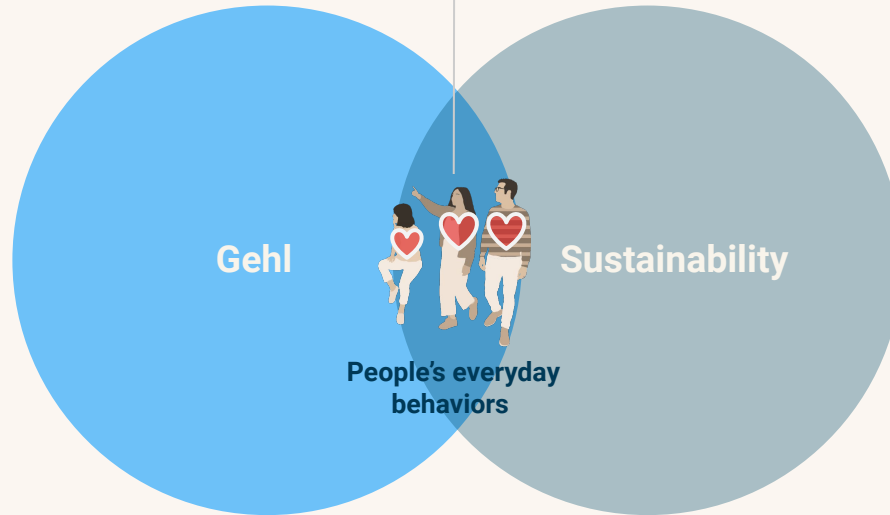
...to shape what we design.



...and design for a sustainable behaviour

People & life first sustainability

- Sustainable behaviour
- Social sustainability
- Sustainable mobility
- Microclimate in public spaces



Gehl

Sustainability

People's everyday
behaviors

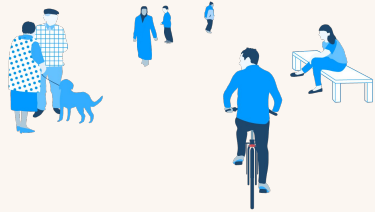
Gehl

- Cities for people
- Human scale
- **People & life focus**

Sustainability

- Certifications DGNB, LEED, BEAAM
- Engineered approach
- **Carbon and numbers focus**

The Gehl approach of 'Life first'



Life



Space



Buildings

'Life-First' considers systems-wide behavior change

Changing how
we move



Changing how
we consume



Changing how
we build



Enabling change of mindsets while
imagining what a place can be like...

1930 Copenhagen Harbor

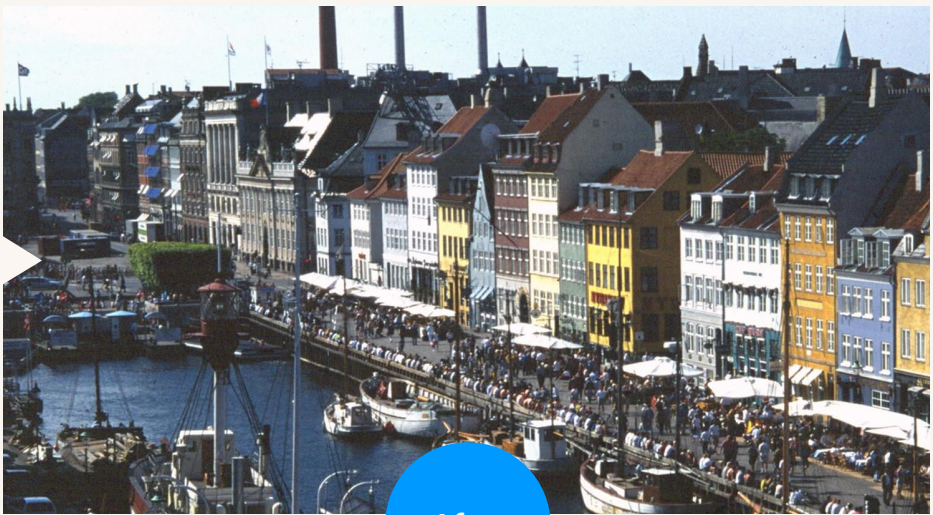




Enabling a new urban culture and way of life in Copenhagen



Before



After



Köpenhamn

Stadsrums och stadslivsanalyser 1968 - idag



Nyhavn
Before



Nyhavn
After

4 x more space
4 x more public life
1962-1995



Strøget
Before
1962

The shops will die!
The climate is wrong!
It is not our culture!



Strøget
Today

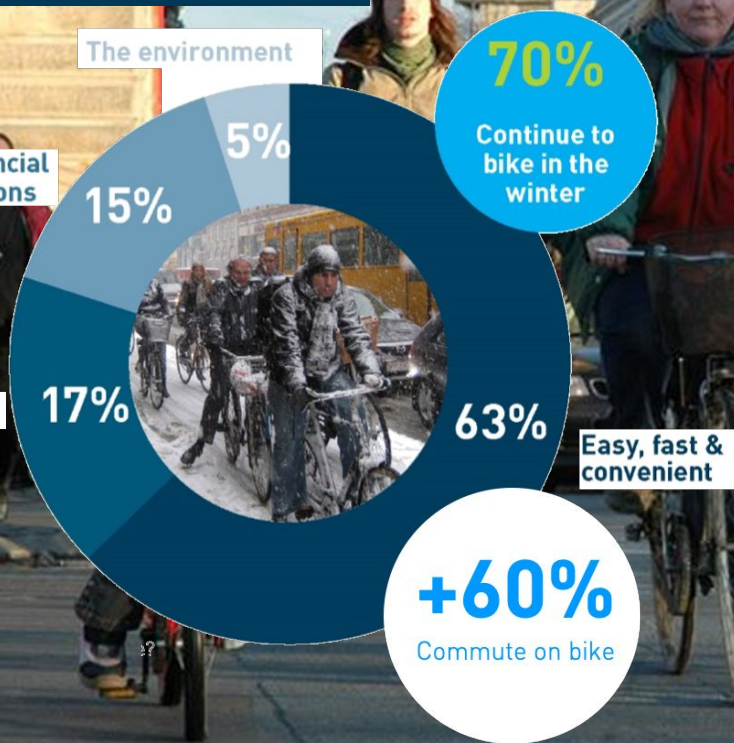
80.000 pedestrians per
24 hours in the summer



Diversifying the way we move

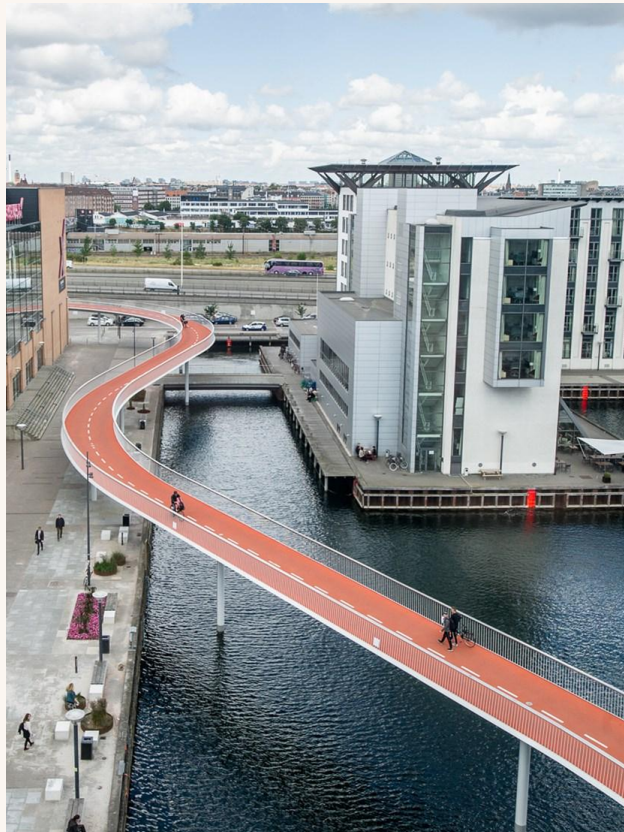
62% bicycle

Trips to work or education in the City of Copenhagen
People living in Copenhagen
2016





Prioritizing soft mobility



Making public spaces attractive for all



Sønder
blv
Before



Sønder
blv
Today

Using temporary activation as a tool to test





**Enabling a new urban culture
and way of life in Copenhagen**

Copenhagen
- The City to the waterfront

1962

First steps

- Pedestrianising Strøget, 1962

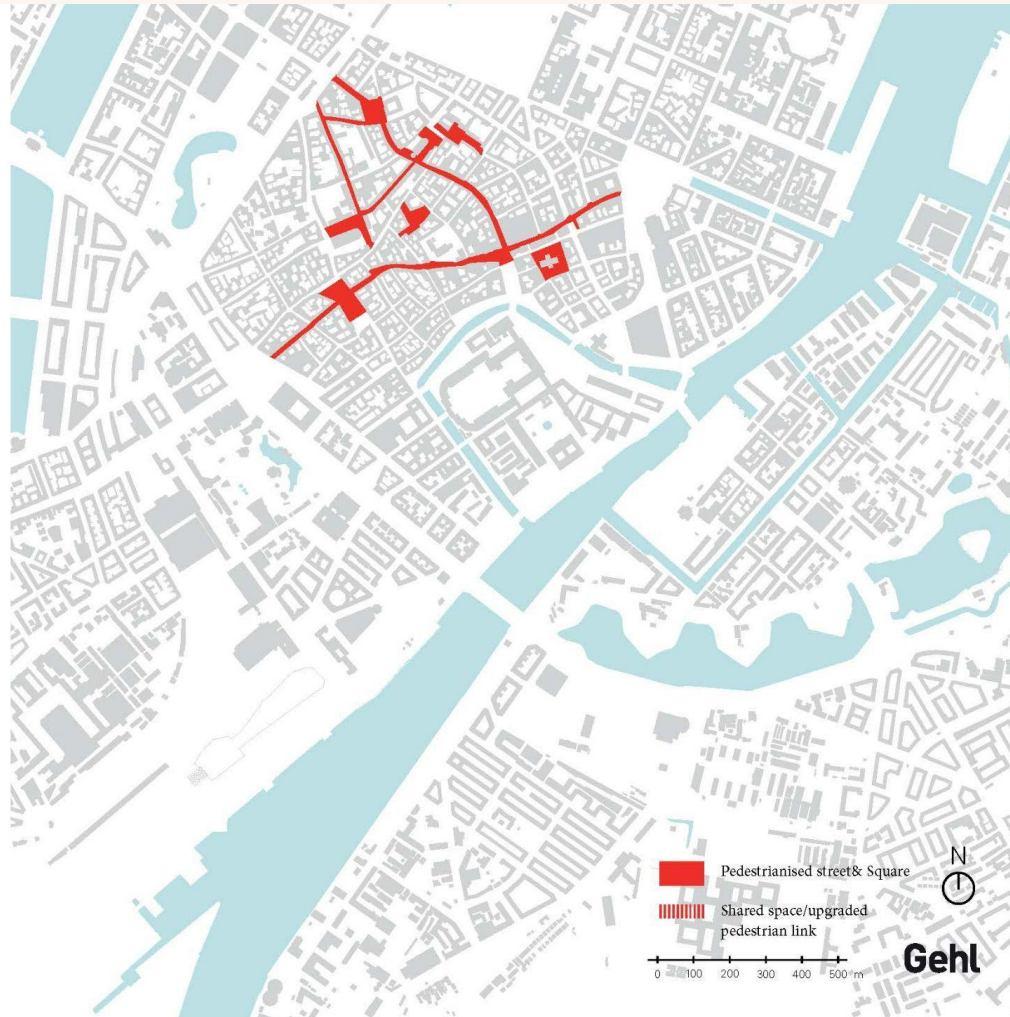


Copenhagen - The City to the waterfront

1973

Calming of the centre...
49.200 m² carfree streets and squares

- Gråbrødretorv 1968
- Købmagergade 1973
- Stora Kannikestrædet 1673
- Rosengaarden 1973
- Pilestræde 1973
- Gammeltorv og Nytorv 1973
- Kulturvet 1973

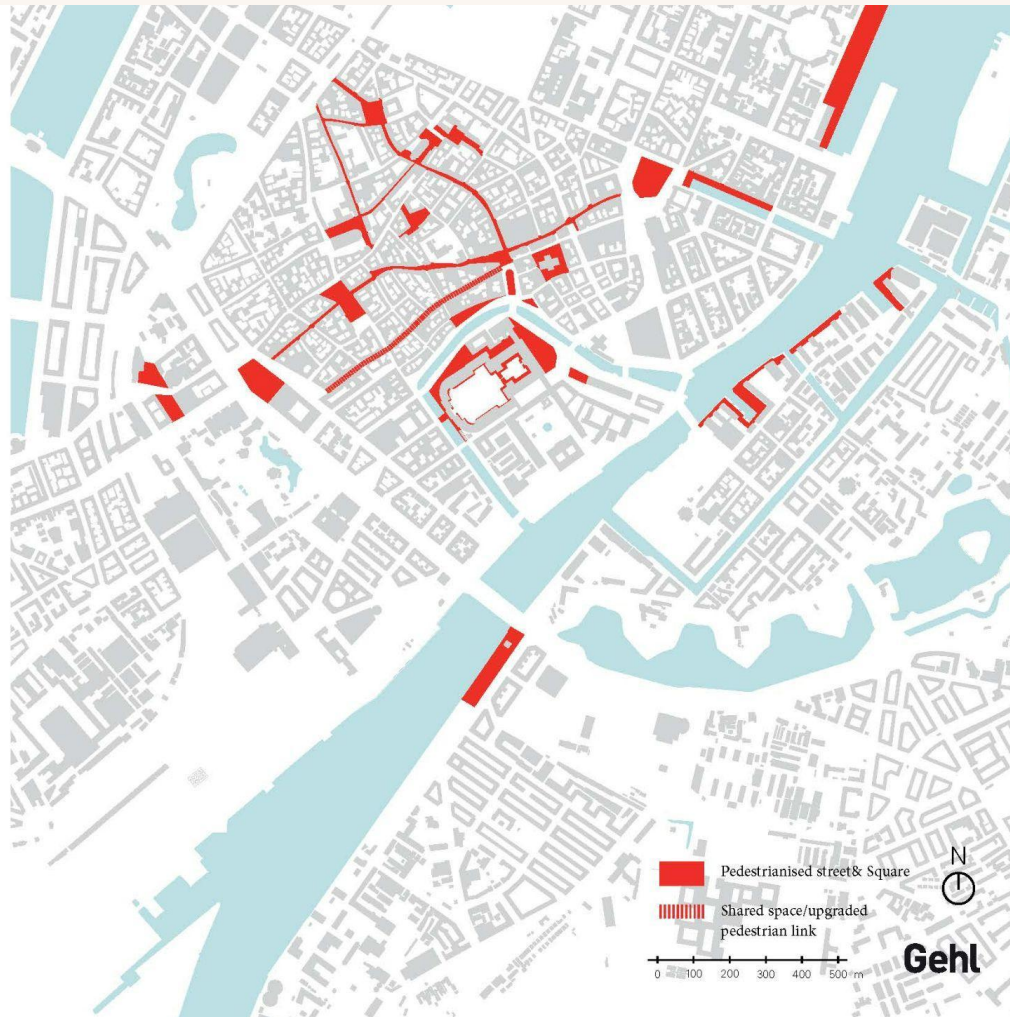


Copenhagen - The City to the waterfront

1996

Reaching out to the water

- Nyhavn 1980
- Amaliehaven 1983
- Axeltorv 1988
- Strædet 1992
- Islandsbrygge havnepark 1994
- Gammel Strand 1991
- Ved Stranden 1995
- Højbro plads 1986, 1996
- Rådhuspladsen 1996

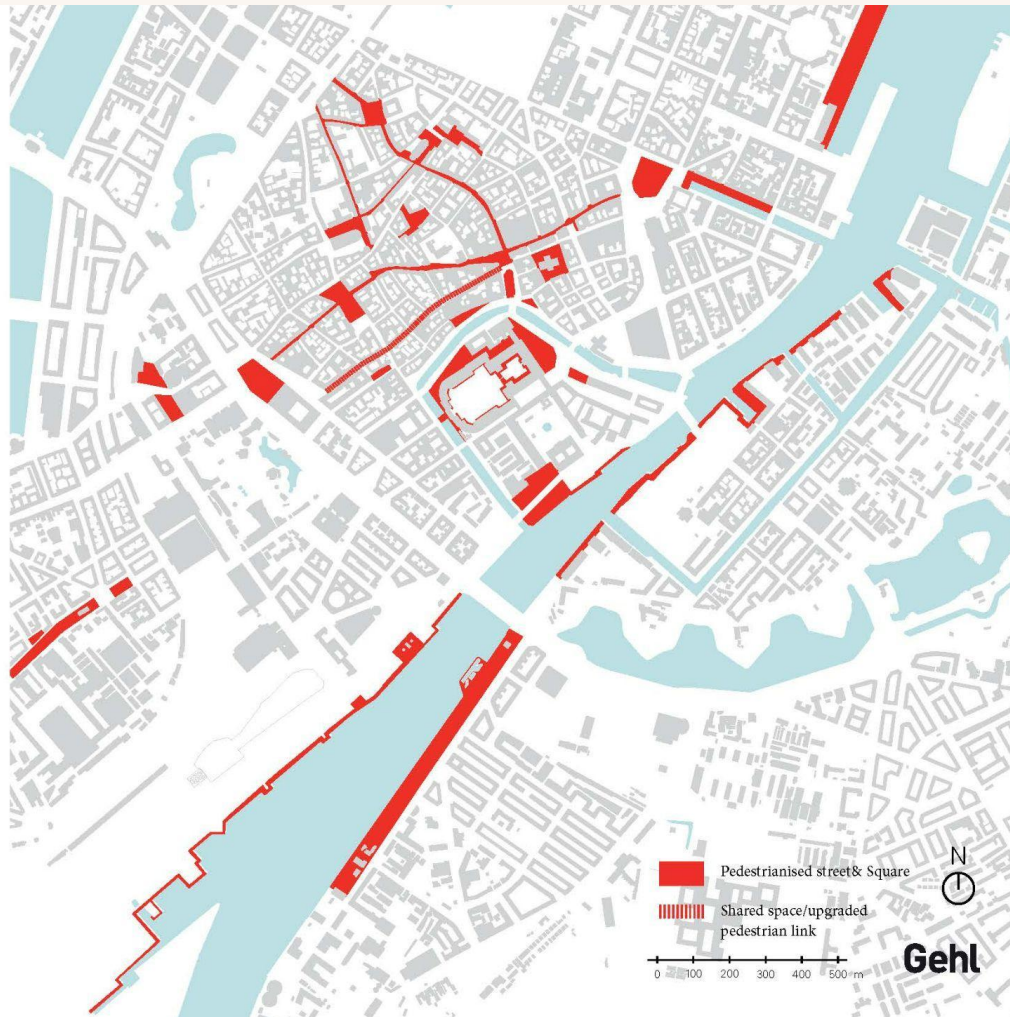


Copenhagen - The City to the waterfront

2005

Waterfront city emerging

- Søren Kirkegaards plads 1999
- Kalvebod brygge 1998 - 2001
- Christiansbro 1998-1999
- Sønder Boulevard 1999-2003
- Islandsbrygge havnebad 2005-2003

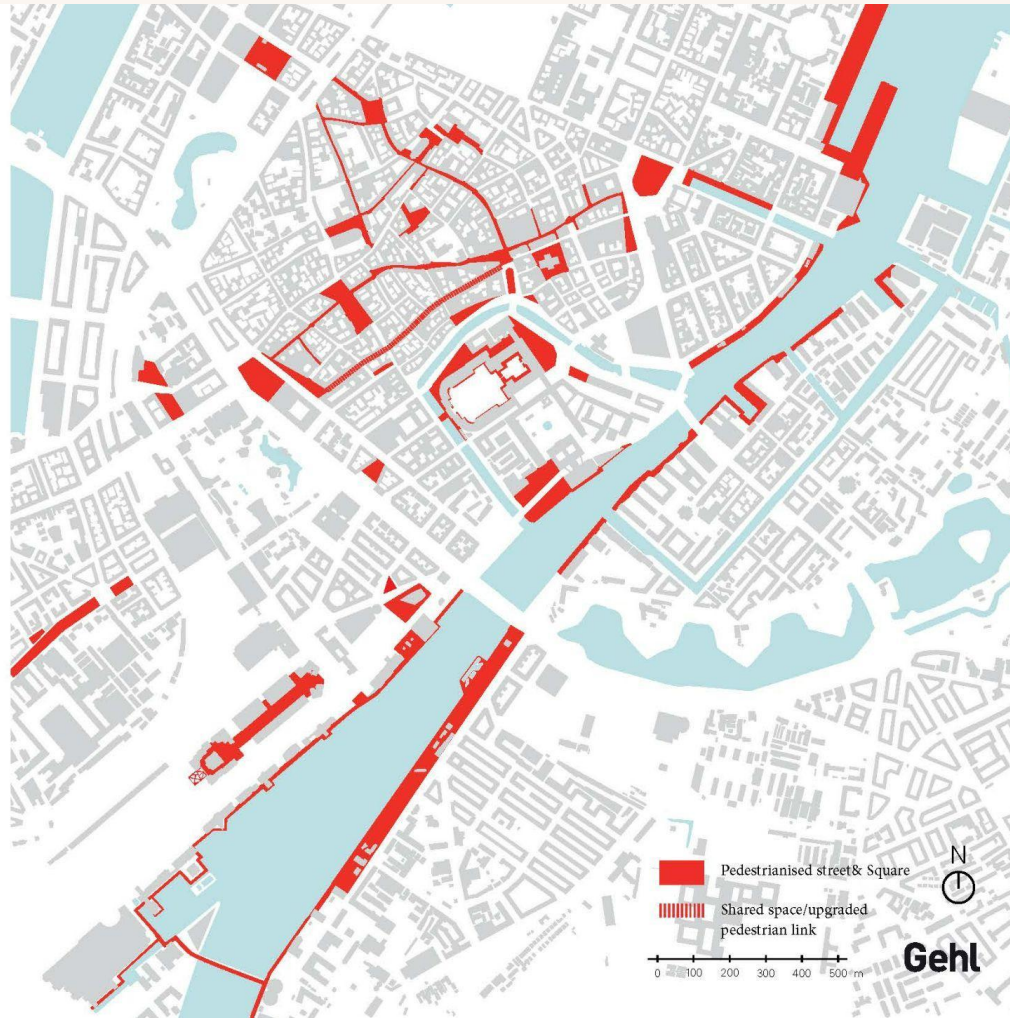


Copenhagen - The City to the waterfront

2011

Waterfront city emerging

- Skuespilhuset 2007
- Havnepromenaden 2011
- SEB bank og pension 2011
- Krystallen 2011
- Torvehallerne 2011



Copenhagen - The City to the waterfront

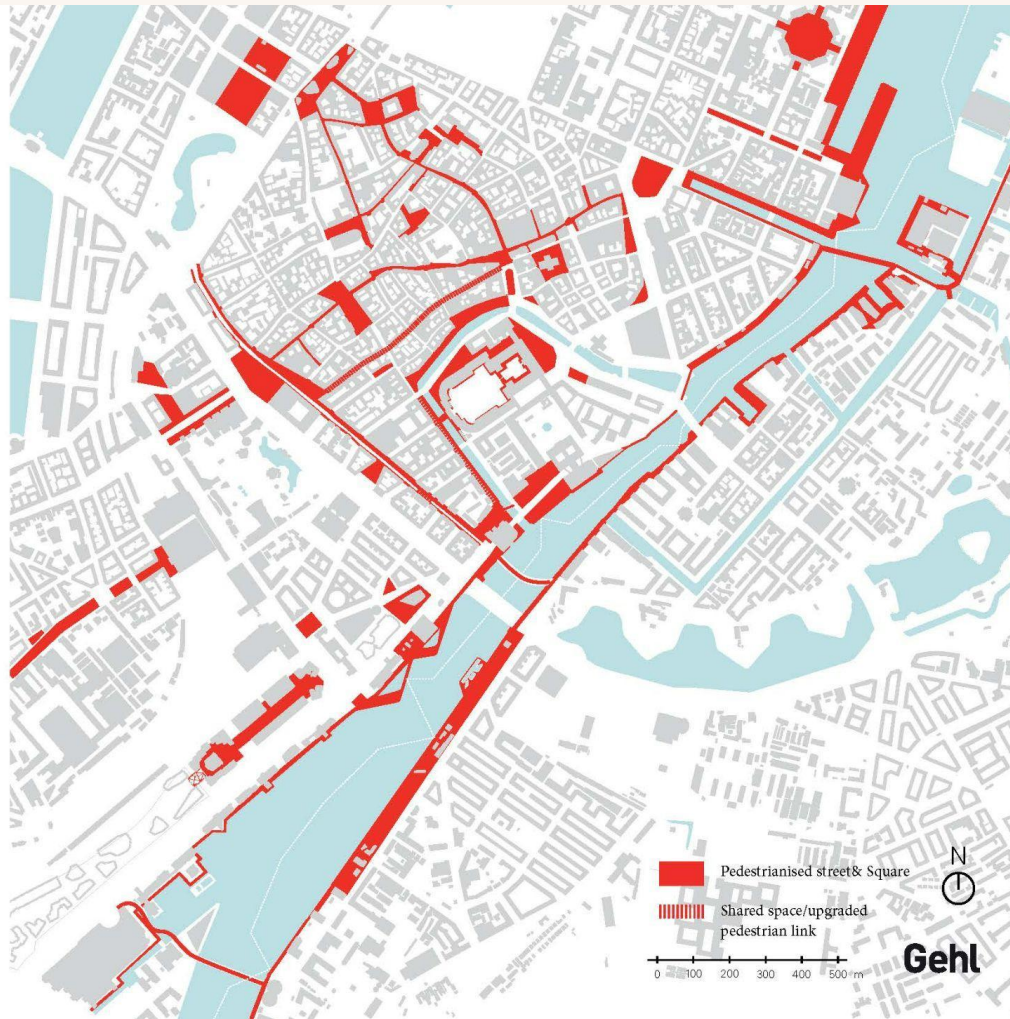
2021

Connecting to and over the waterfront

- Kalvebod bølge 2012
- Vester Voldgade 2013
- Vesterbro passagen 2014
- Israels plads 2014
- Hauser Plads 2014
- Nørreport Station 2015
- Kvæsthusbroen & Ofelias Plads 2016
- Nyhavn, last piece
- Blox & public spaces 2018
- Frederiksholms kanal 2019
- Metro stations; Gammel Strand, Rådhuspladsen, Københavns H 2019

Connecting over the waterfront; new pedestrian & bicycle bridges

- Cykelslangen 2014
- Trangravsbroen & Proviantbroen 2014
- Cirkelbroen 2015
- Indrehavnsbroen 2016
- Frenriksholmskanalbro 2016
- Lille Langebro 2019





CPH
Before



CPH
After

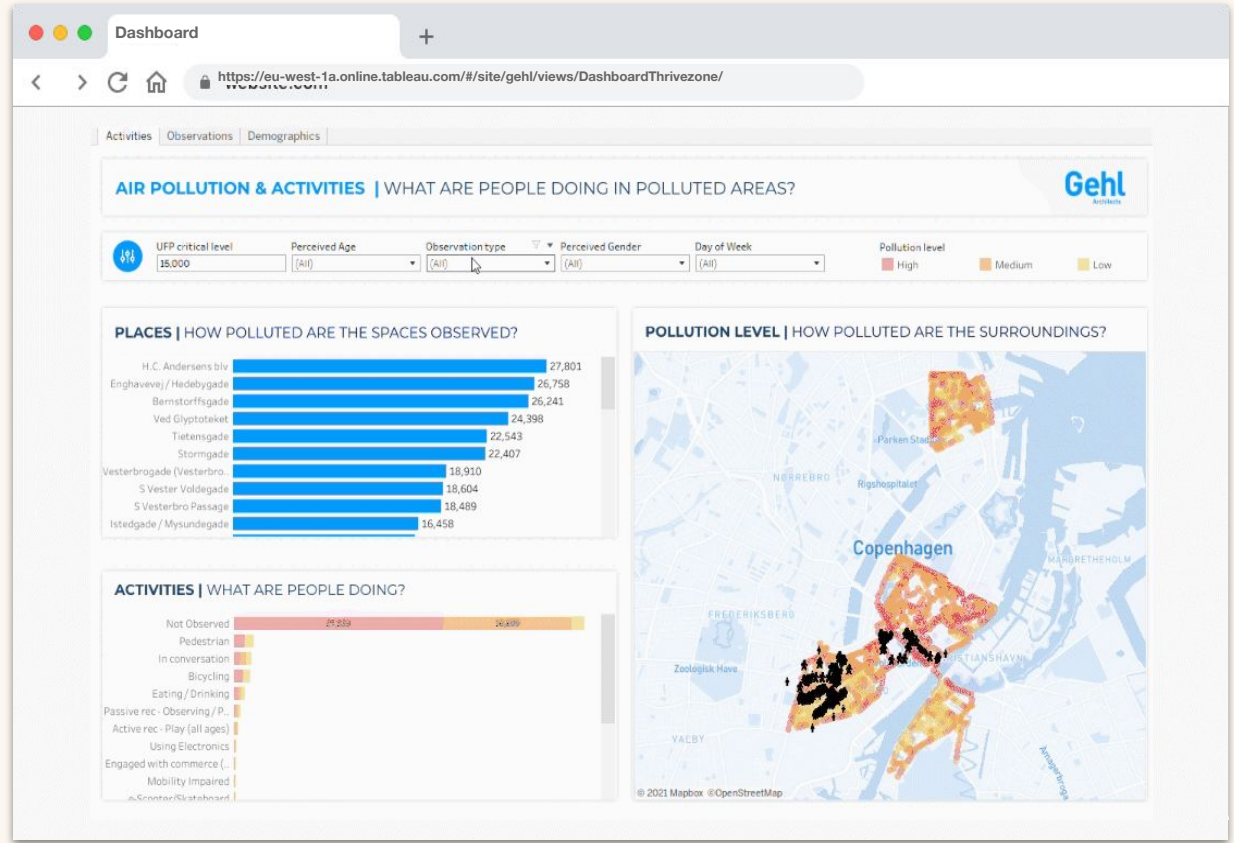
Lived experience data



Air quality data



Understanding the quality of the air we breathe



Many small children spends time on streets with a lot of air pollution



Average UFP levels
Colours have been changed to highlight local variability



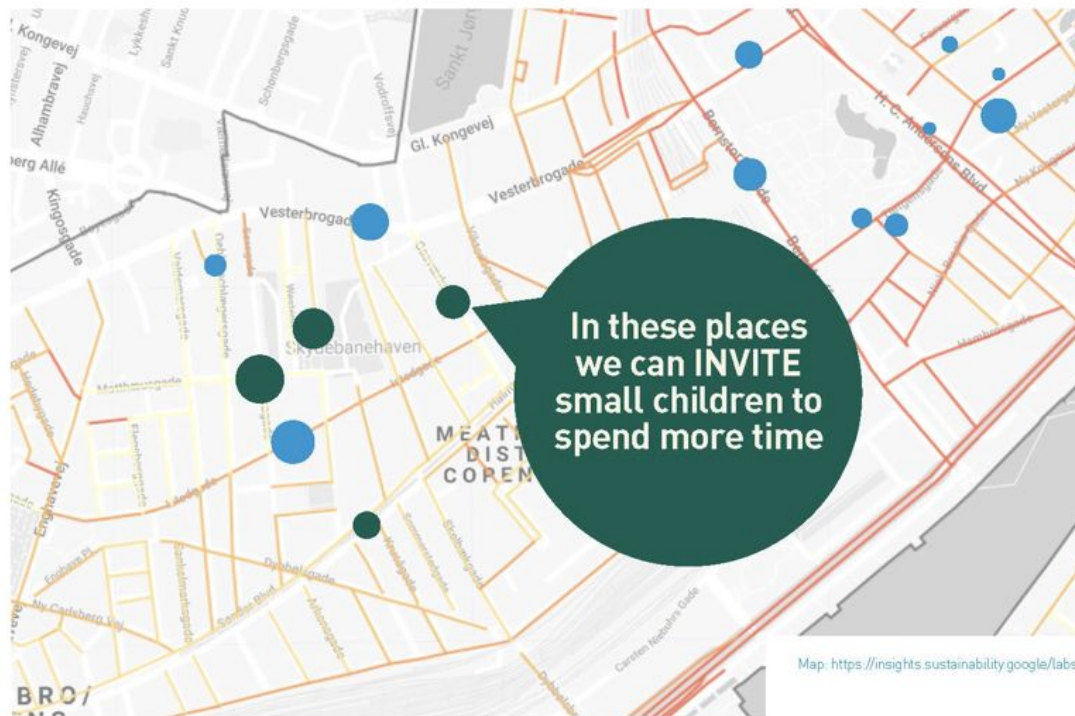
We also found streets with better air quality where many small children are

0 - 6 year olds passing per day



Average UFP levels

Colours have been changed to highlight local variability



Map: <https://insights.sustainability.google/labs>

Handlingsplan:

The cleaner air network

Reduce exposure to air pollution

Invite to cleaner air routes and spaces





We measured poorer air quality here

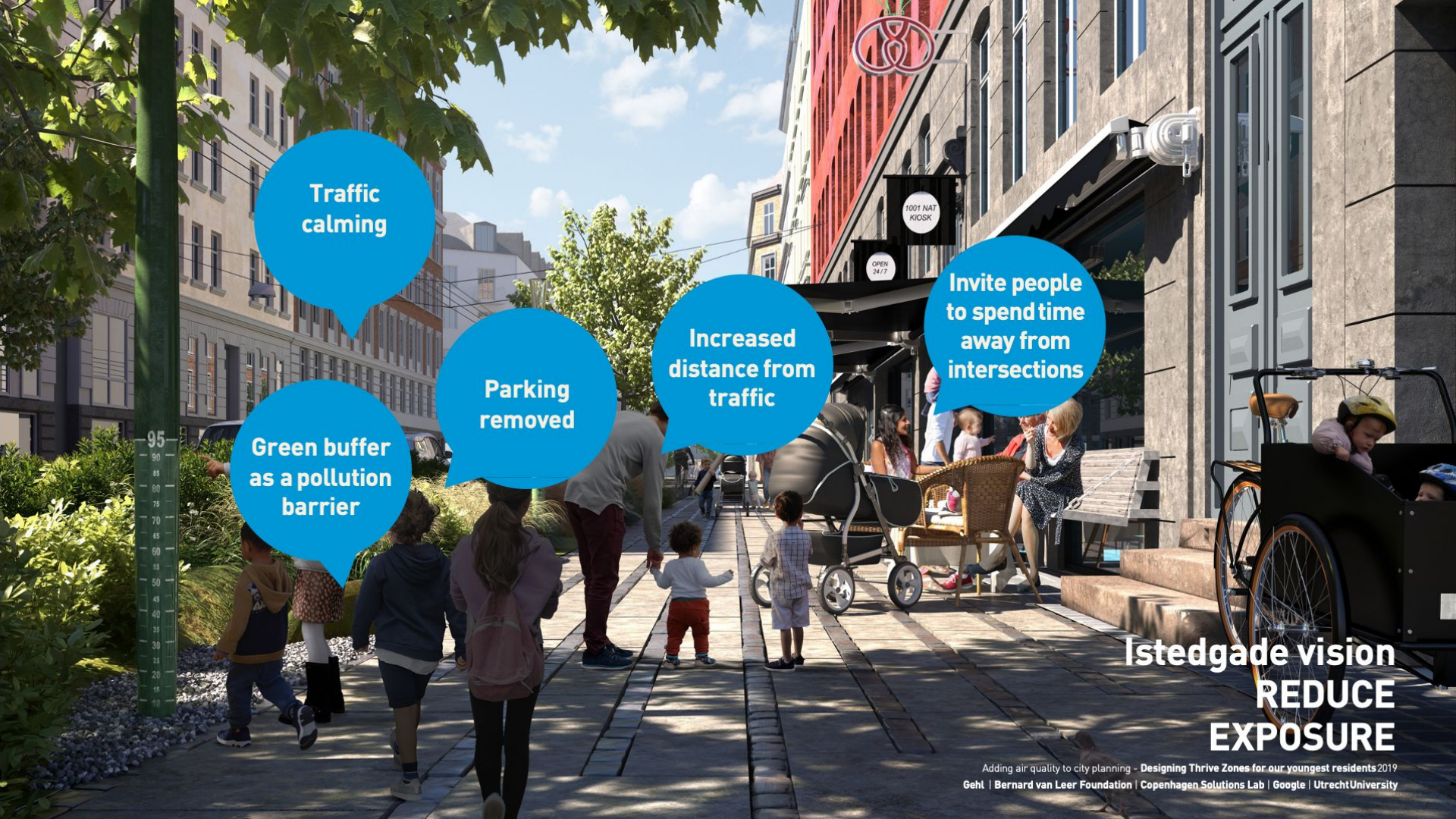
Heavy car traffic at peak times

On street Parking

Babies and their caregivers spend a lot of time here

Istedgade Today

Adding air quality to city planning - Designing Thrive Zones for our youngest residents 2019
Gehl | Bernard van Leer Foundation | Copenhagen Solutions Lab | Google | Utrecht University



Traffic
calming

Green buffer
as a pollution
barrier

Parking
removed

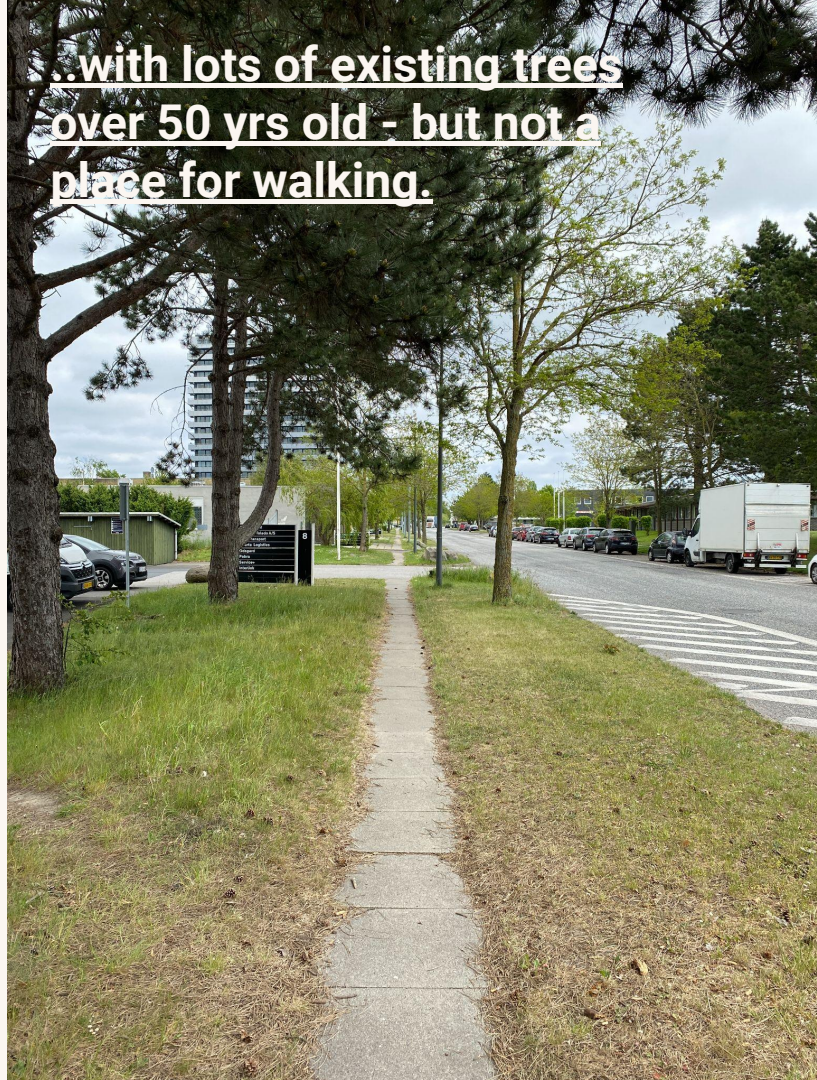
Increased
distance from
traffic

Invite people
to spend time
away from
intersections

Istedgade vision
**REDUCE
EXPOSURE**

Transformation of an industrial site from 1960s, build for industry and heavy traffic...





Understanding the life of the future users

Livet i Smedeland

Målgruppens værdier

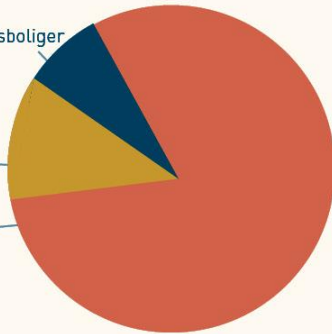
Hvilke funktioner og destinationer skal understøtte det gode liv?

Dagsinstitution (1000 boliger = 1000 børn)
 Friarealer - dobbeltudnyttelse - åbent om aftenen - dispensation - udflytter.
 Bemærk at det er 40 m2/ barn udeareal i kommunen.

Andet
 - fleregenerationsboliger

Senior
 - flytte fra parcelhuse i nærområdet

Børnefamilier



ØVELSER FORTID-NUTID-FREMTID
Livet i Smedeland

Hvem er de potentielle brugere?
 Hvilke liv og aktiviteter skal vi skabe plads for?
 Hvilke funktioner og målepunkter skal understøtte det ønskede liv?

Sæt et kryds på de brugergrupper som I vil invitere ind:

- Børnefamilier
- Studenter
- DINKIES
- Raske seniorer
- Særlige plejebenhov

max 90%
 Hvilken type af boliger og indbyggere skal vi planlægge for?
 Sæt et kryds på de brugergrupper som I vil bygge for:

- Iskiosk
- Børnehave
- Ølbryggeri
- Lampefabrik

min 10%
 Hvilke andre funktioner og målepunkter skal understøtte det ønskede liv?

Handlingslivet
 De regelmæssige brugere er dem, der enten bor eller arbejder i Smedeland. Der er en rigtig brugergruppe, de fleste vælger læsning og en lille tur til byen og tilbage om aftenen. De kommer her på grundlag af akkumuleret venskab og de samme grundlag for et vellykket liv. De mere eller mindre regelmæssige gæster og besøgende vil udvælges, og mere vil de tilføje smid.

Næder
 De lokale brugere bruger rekreative og kommercielle områder. Denne gruppe bruger området enten fordi det ligger tæt på deres kvaliteter.

Førhåbende
 En del mennesker vil passere gennem Smedeland for at besøge et andet sted af betydning eller for at rekreativt område i nærheden. Dette er små kommercielle aktiviteter som butikker, kaffebarer og transportforbindelser.

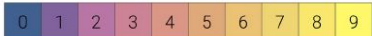
Senere
 Denne brugergruppe vil de mennesker, der kommer til Smedeland specifikt på grund af deres kvaliteter og faciliteter. De vil være et stort bidrag til området og på den måde vil de være et vigtigt led i et succesfuldt område.



Using microclimate analysis to program the public spaces

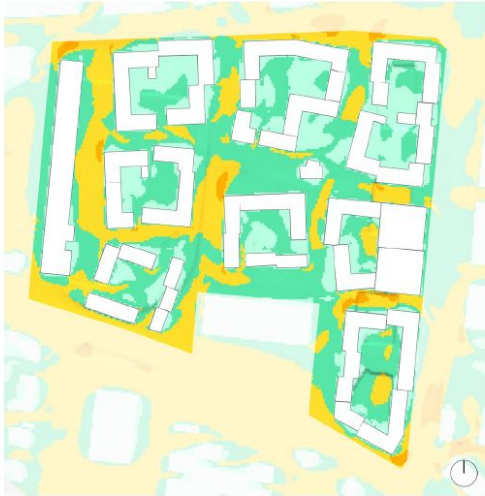


SOLLYS [TIMER] PÅ TERRÆN VED JÆVNDØGN D. 21. MARTS (KLAR HIMMEL)



BEGRÆNSET SOLEKSPOSITIONERING LAV SOLEKSPOSITIONERING HØJ SOLEKSPOSITIONERING MEGET HØJ SOLEKSPOSITIONERING

+



LAWSON LDDC VINDKOMFORTKATEGORISERING 1.75 METER OVER TERRÆN, BASERET PÅ ÅRLIG VINDSTATISTIK



EGNET TIL AT SIDDENED EGNET TIL AT STÅ OP EGNET TIL LANGSON GANG EGNET TIL HURTIG GANG UKOMFORTABELT

=



A	B	C	D
Længerevarende ophold	Kort ophold	Gående eller aktivt ophold	Gennemgang



Building volumes
adjusting to context and
microclimate, creating
liveable spaces in a
human scale...



...creating local streets
that build the community



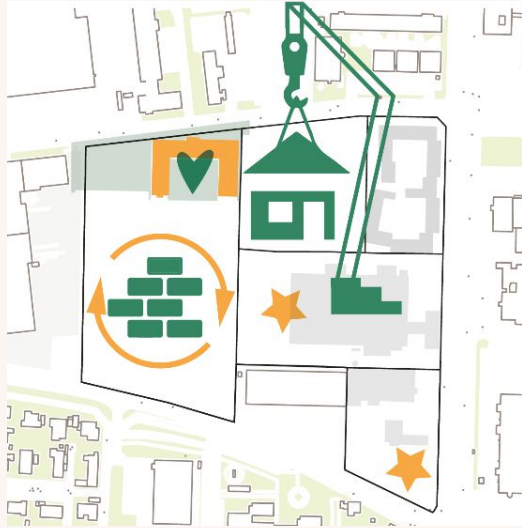


Growing a central
biodiverse green space for
children to run and play

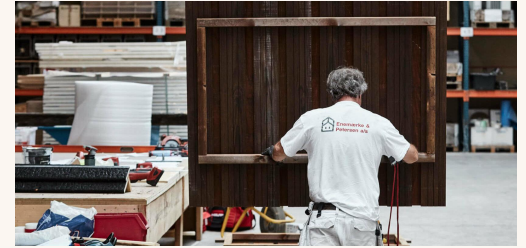


...that also works as rain
water management

With E&P's wood frame factory located on site...



...the district can be build almost entirely on site.



**We dare to design cities with a
'Life-First' approach, prioritizing
people, place & planet**

The background of the slide is filled with a repeating pattern of small, stylized human figures. These figures are depicted in various poses and activities, representing a wide range of people and their interactions. Some are walking, some are sitting, some are pushing a stroller, some are riding a bicycle, and some are using a wheelchair. The figures are rendered in a flat, illustrative style with a limited color palette of blues, greens, oranges, and greys. The overall effect is one of a busy, diverse community.

Thank you!