

Sustainable Smart Cities

Tale of Two Cities: Active Travel

21 May 2021

Agenda

Introduction:

- **Michael Rudd**, Chair of the Sustainable Smart Cities taskforce, Bird&Bird

Presentations by:

- **Richard Eason**, London Borough of Enfield
- **Steven Arnold**, Birmingham City Council
- **Marianne Weinreich**, Ramboll
- **Alex Pazuchanics**, Vianova
- **Erik Hasselbalch**, Voi

Q&A

Housekeeping

- To ask questions please use the **chat** box in your control panel.
- Ask your questions throughout the webinar, you don't have to wait until the end.
- Don't worry if you miss anything we will be uploading this to our website in the next few days, so if you want to listen again to us you can!



Richard Eason
Programme Director
London Borough of Enfield

Richard Eason
Healthy Streets Programme
Director



MAYOR OF LONDON



Mayor's Transport Strategy

MARCH 2018


Department
for Transport

Gear Change

A bold vision
for cycling
and walking





STREETSPACE FOR LONDON

MAYOR OF LONDON



TRANSPORT
FOR LONDON
EVERY JOURNEY MATTERS





Cyclists joined a protest to save the High Street Kensington cycle lanes
/ Daniel Hambury/Stella Pictures Ltd





Road narrowed
to aid
social distancing
on footway

Place
Reason
Ref.
No stopping at times
indicated above

general
waste





SHAKESPEARE ROAD



ROAD OPEN TO
骑自行车



PEDESTRIAN
and CYCLE
ZONE



Mon - Fri
8.15 - 9.15 am
2.45 - 3.45 pm

Except for
permit holders

LET &
MANAGED
BY

020 7272 9988

Enfield
School streets

School streets
are coming for Lavender

Lavender Road
will be closed

Monday - Friday
8:15am - 9:15am
2:45pm - 3:45pm
During school term time only

From
7th September
Lavender Road will become a
pedestrian and cycle only zone

Find out more at
www.enfield.gov.uk/schoolstreets

ENFIELD
Council

Enfield
School streets

School streets are coming!

This road
will be
closed

Starting
on Friday

During drop-off &
pick-up*
*Term time only

Working on streets, leaving with
and for 1st September

ENFIELD



Garlic

Richard Olsson's

Rasa Sayang

Beauty Clinic

Cosmetics

TAPESTRY

53 Frith Street

FOOD
DRINKS
201 Street



HOPPER & BEAN

HOPPER & BEAN

PROPER COFFEE

HUNTERS

CARDS

NEWS

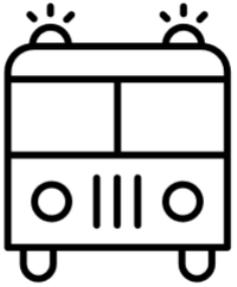
SWEETS



GIVE WAY



Ongoing challenges to work on



Enabling emergency services access



Developing how we communicate



Considering issues of equality



Monitoring the impact of projects



Steven Arnold
Head of Clean Air Zone
Birmingham City Council

BRUM BREATHES

BIRMINGHAM'S JOURNEY TO CLEAN AIR



Stephen Arnold
HEAD OF CLEAN AIR ZONE



Making a positive difference every day to people's lives

The impact of poor air quality

Up to

900 DEATHS



per year linked to man-made air pollution

LINKED TO

Heart disease
Diabetes
Asthma
Obesity
Cancer
Dementia



Deaths due to air pollution worldwide per year

LINKED TO

Still births
Infant deaths
Low birth weight
Organ damage
Premature deaths



CHILDREN IN HIGH POLLUTION AREAS

x4

more likely to have reduced lung function when they become adults



61%

OF JOURNEYS TO WORK ARE BY CAR OR VAN

Exposed to **21%** higher levels of pollution



Affects the

VULNERABLE & DEPRIVED

areas most



BUS & TAXI DRIVERS

are exposed to

3x



more pollution than anyone else

Tackling poor air quality

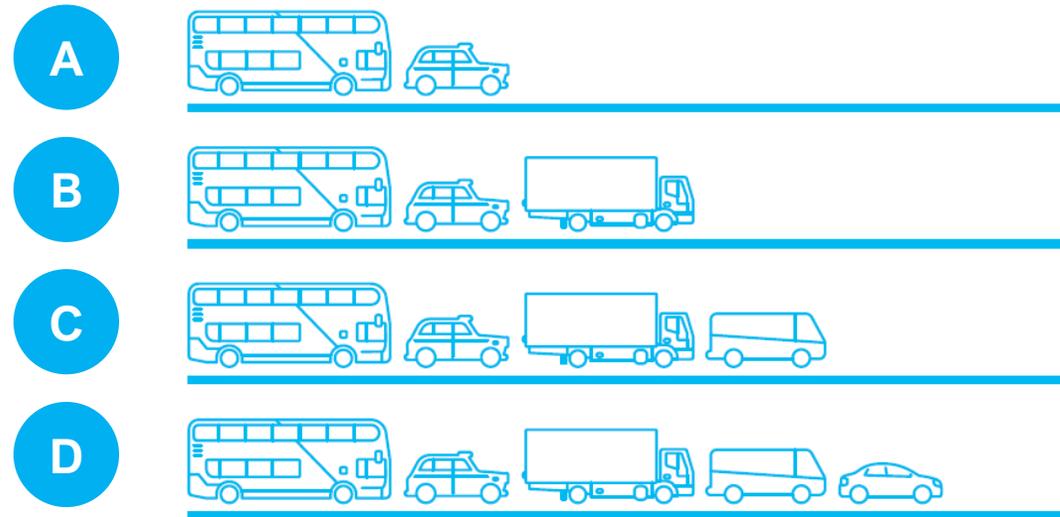
Clean Air Zones

A Clean Air Zone defines an area where targeted action is taken to improve air quality and resources are prioritised and coordinated in order to shape the urban environment in a way that delivers improved health benefits and supports economic growth.

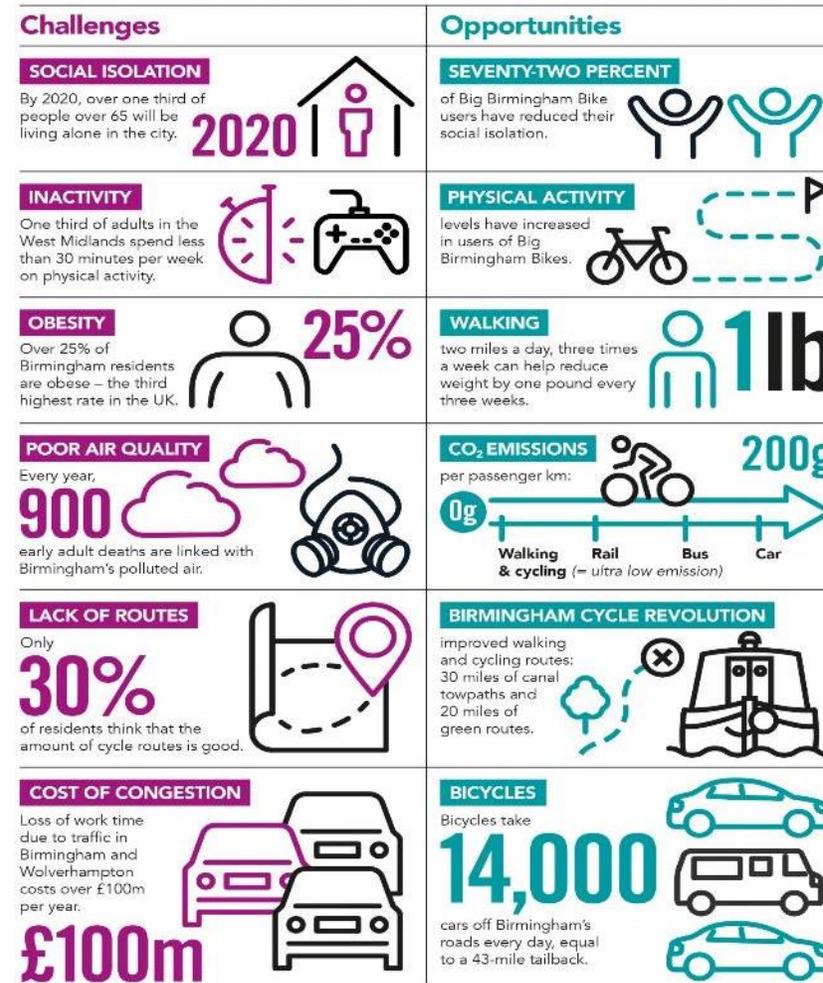
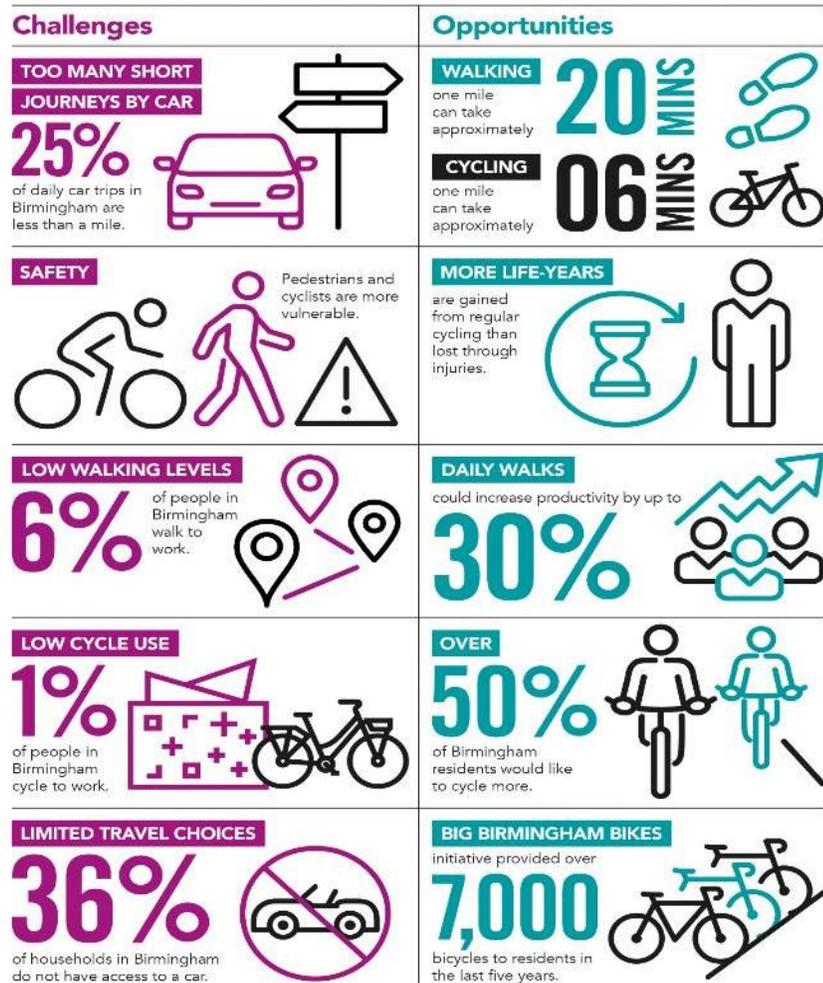
Non-charging Clean Air Zone

- These are defined geographic areas used as a focus for action to improve air quality.
- This action can take a range of forms but does not include charge based access restrictions

Chargeable Clean Air Zones



Creating a more sustainable city



The bigger picture

BIRMINGHAM'S TRANSPORT PLAN

Published for consultation in January 2020

The vision

A smart, innovative, carbon neutral and low emission transport network that will support sustainable and inclusive economic growth, tackle climate change and promote the health and well-being of Birmingham's citizens.

Delivered through four 'big moves'



**Reallocate
road space**



**Transform the
city centre**



**Prioritise
active travel**



**Manage
demand**

The Clean Air Zone as an enabler of change



A long term ambition for zero emissions

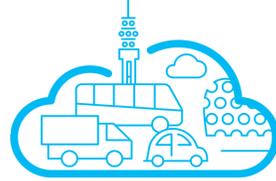
The council is committed to taking a leading role, playing its part, and working with individuals, communities, businesses, partners, and others across the city and region to act now on the causes and impacts of the climate emergency.

The ambition was set for the council and city to become net zero carbon by 2030. This is the city's 'route to zero' (R20).

Additional programmes supported by the Clean Air Zone team include:

- Significant expansion of the city's electric vehicle charging points
- Purchase of 20 hydrogen buses to encourage the adoption of the technology in the city
- Purchase of up to 50 electric hackney carriages to encourage adoption of this technology within the taxi fleet

brumbreathes.co.uk



STAY CONNECTED

birmingham.gov.uk



@BhamCityCouncil
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@birminghamcitycouncil
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@birminghamcitycouncil



Making a positive difference every day to people's lives



Marianne Weinreich
Market Manager
Cycling Embassy Denmark/Ramboll

RAMBOLL SMART MOBILITY

Marianne Weinreich, Market manager
mwein@ramboll.dk

RAMBOLL

MARKET MANAGER, SMART MOBILITY RAMBOLL

*Chair of Cycling
Embassy of Denmark*

RAMBOLL



Normalizing cycling – based on Danish practice





City of cars

- Bad air quality
- Noise
- Traffic safety problems
- Poor quality of space
- Congestion
- CO₂ emissions
- Obesity



City of cyclists

- Good for people
- Good for the city
- Good for mobility
- Good for the climate
- Good for business
- Cycling = liveable sustainable cities

FACE
OF COPENHAGEN

**Make cycling safe and easy
– from anywhere to
everywhere**

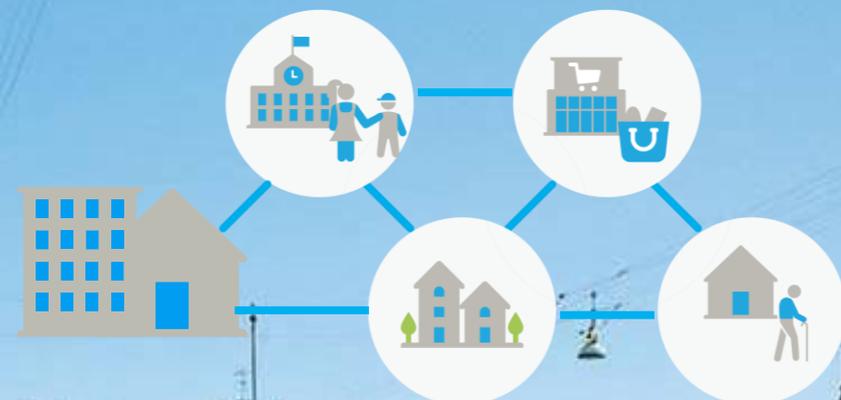
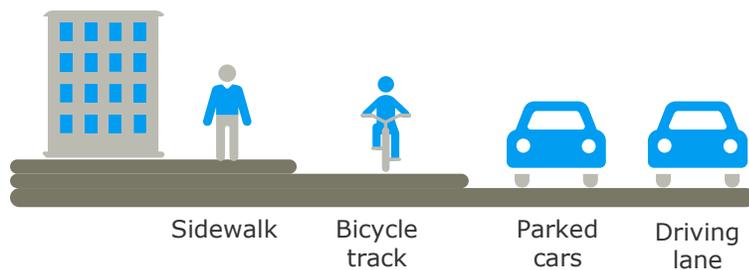
33 916 916 www.facecph.dk

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Protected cycling network

- Safe
- Direct
- Convenient
- Coherent



A long, neat row of bicycles parked in a city street. The bicycles are of various colors and styles, including blue, black, and red. Many have baskets attached to the handlebars. The street is paved with cobblestones, and there are buildings and pedestrians in the background. A blue text box is overlaid on the right side of the image.

Bicycle parking

RAMBOLL





Cater to the cyclists





**Include companies,
shopping centres, stores,
schools, etc.**

TEST EN

Resultater Test en Elcykel

Læs meget mere om Test en Elcykels resultater i folderen her:



**SUND OG AKTIV
HVERDAG PÅ EN
ELCYKEL**

• • • • •

RAMBOLL

Bilkøer og transport er for et andet

Vi ved, at mere end over fem millioner danskere har en almindelig cykel for samfundets trængsel og

**BIKE WITH
BUSINESS
PARK
SKEJBY**



Derfor har Gate 21 sammen med med otte danske kommuner og otte hospitaler i Region Hovedstaden over tre år udlånt elcykler til næsten 1.700 personer, som tidligere kørte i bil til arbejde.

Gennem Test en Elcykel har vi undersøgt, om gratis udlån af elcykler over en længere periode kan skabe nye, sunde og grønne transportvaner blandt medarbejdere og borgere. Deltagerne har vist, at det sagtens kan lade

Women





Time

Trip cost

Labor gains

Health benefits

Gain for society of 1 km cycled = 0,64€
Cost for society 1 km in a car = 0,71€
Gain for society pr. car km replaced by bicycle = €1,34

Factors in cost/benefit analyses

Accidents

Labor supply distortion

Tax consequences

Air pollution

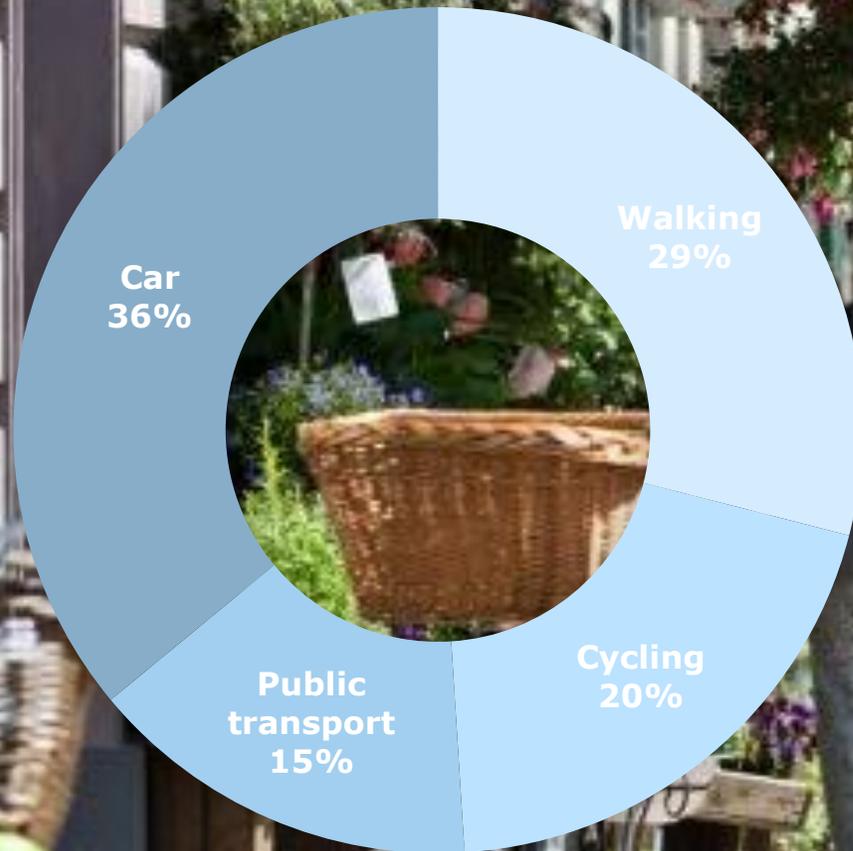
Wear

Climate impacts

Noise

Cars don't shop – people do!

Mode to shop



Annual turnover in Copenhagen

- DKK 22 billion by car
- DKK 18 billion by bike
- DKK 12 billion on foot
- DKK 9 billion by public transport

Shoppers by bike and car

- Cyclist spend less per trip, but shop more often and are more loyal
- Street level shops car drivers + cyclists same turnover. Shopping malls more car drivers (half non-residents)



Life cycling



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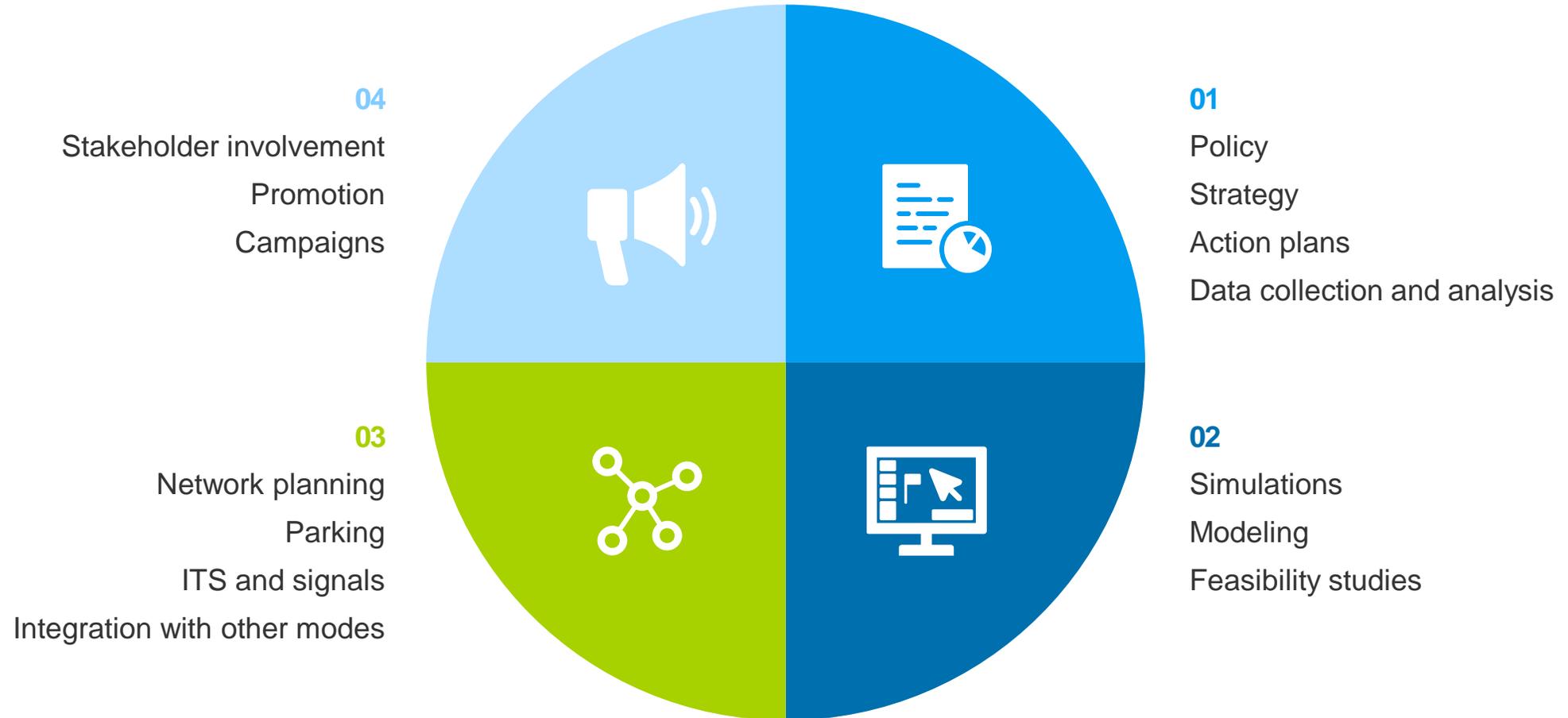
www.bededamerne.dk

Bright ideas. Sustainable change.

RAMBOLL

RAMBOLL

CYCLING SERVICES





Alex Pazuchanics

Head of Policy and Partnerships
Vianova



Better integrating future mobility

SUSTAINABLE SMART CITIES

Environmental Industries Commission

Vianova: Managing Mobility Data



A “silver buckshot” approach to better cities

Active and shared mobility both benefit from similar policies:

- Education
- Enforcement
- Engineering
- Equity

Both support more pleasant, more sustainable transport networks

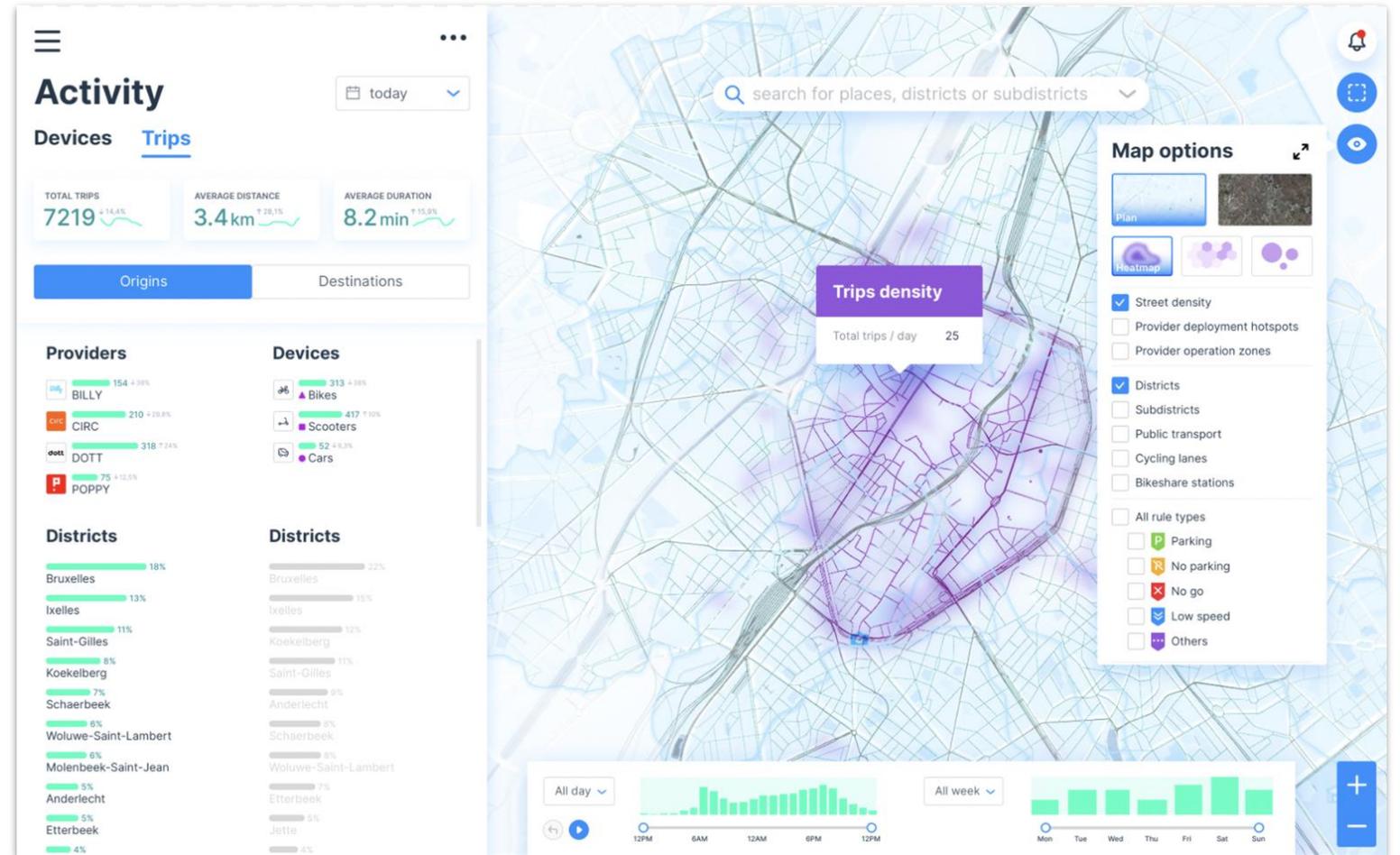


What's Working Well?

Adding new “Coronalanes”- temporary or permanent

Allocation of parking spaces to other purposes (“streeteries”, public space, etc)

Decarbonisation targets are inspiring cities to make big improvements



What Are the Outstanding Challenges?

- **Parking** tends to be a major challenge for all cities
- **Safety** of riders and non-riders
- Evaluating whether policies are being followed and **holding operators accountable**
- **Understanding the actual value** that shared mobility brings in terms of sustainability
- Making use of **data**



Thank you!

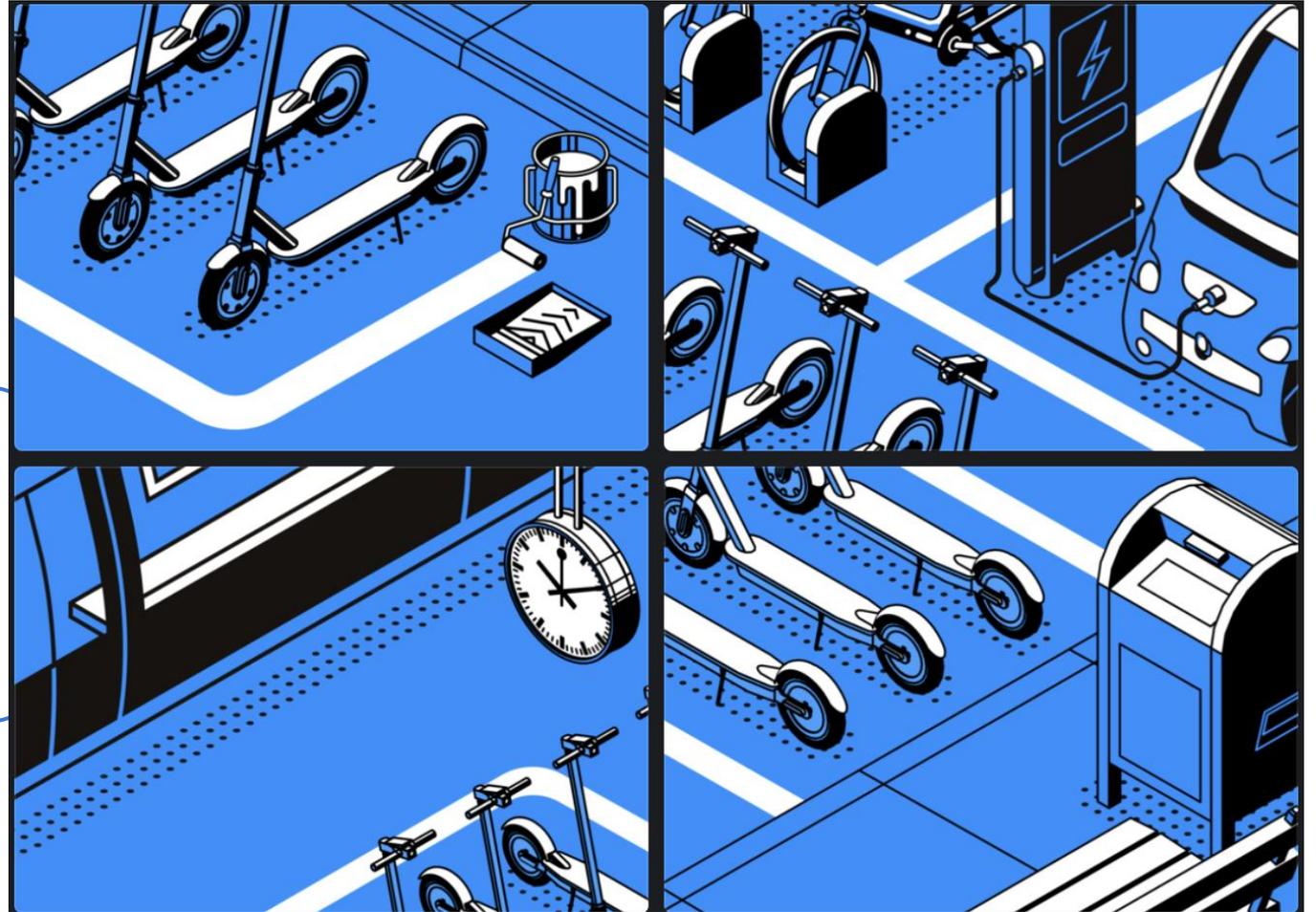


Alex Pazuchanics
Head of Policy & City
Success

alex@vianova.io

+ 44 7494 68 07 55

Paris, France





Erik Christian Hasselbalch
Senior Operations Manager UK & Ireland
Voi Technology

voi.



Voi by the numbers:

2018

FOUNDED IN SWEDEN

+6

MILLION USERS

4

LIGHT-ELECTRIC VEHICLE
TYPES ON-OFFER
(including accessible model)

0

CARBON NEUTRAL SINCE JAN 2020

+85%

LIFECYCLE EMISSION REDUCTION
IN 2 YEARS

+60

CITIES ACROSS 10 COUNTRIES

0

GIG-ECONOMY WORKERS

+45

MILLION JOYFUL RIDES

0

ROGUE LAUNCHES

4.8

USER SATISFACTION RATING
(HIGHEST IN THE INDUSTRY)

+30

PUBLIC TRANSPORT AND
MAAS PARTNERSHIPS

+500

EMPLOYEES

Who is Voi?

voi. Voi is live in 16 UK cities and the largest e-scooter operator

Liverpool



Cambridge



Birmingham



Bristol



Bath



Northampton



+2m
Trips

7,500
E-scooters in
Operation

+5m
km travelled

+TK
Active Users
in the UK

**(equivalent distance
from earth to the
moon)*

+TK
Voi-4-Heroes
registered users

+TK
Car trips avoided
on UK roads since
launch

We collaborate with cities.

Wherever we work we consider ourselves locals, integrating into the transport and business landscape, supporting city regulation and policy, sharing data transparently, engaging with local people and groups, and championing their concerns.

Our impact on cities and communities is highlighted by:



A strong local presence and dedicated teams.



Preferred city partner to European cities



Public transport collaborations



Data Sharing

voi. Multimodality

Multimodal shared mobility catered to all urban & intra-urban journey distances

Working together, e-scooters, e-bikes and e-mopeds cater to different use cases and journey distances for seamless intermodality and increased modal shift from cars..



1-5 miles



5-10 miles



E-scooter: Voiager 4

- Designed for journeys 1-5 miles
- +5-year lifespan
- Turning indicators
- Phone charging and phone holder
- Beacon / status lights on the handlebars
- Adjustable seat and basket
- Swappable li-ion battery

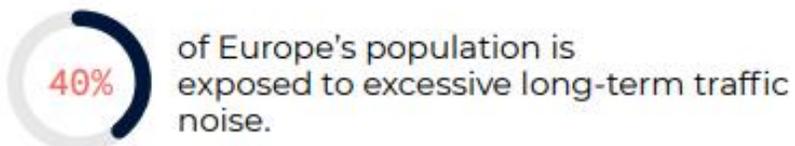
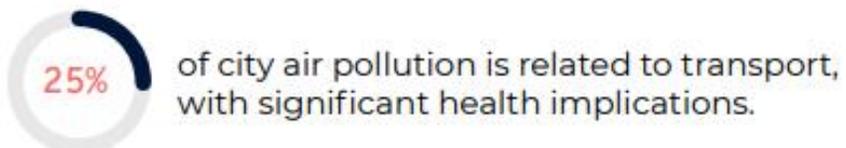


E-bike: Voiager 80

- Designed for journeys 5-10 miles
- +5-year lifespan
- Phone charging and phone holder
- Beacon / status lights on the handlebars
- Adjustable seat and basket
- Swappable li-ion battery (same as V3X)

Burden of car-centric mobility

Ending car dependency is key for reducing city carbon footprints.



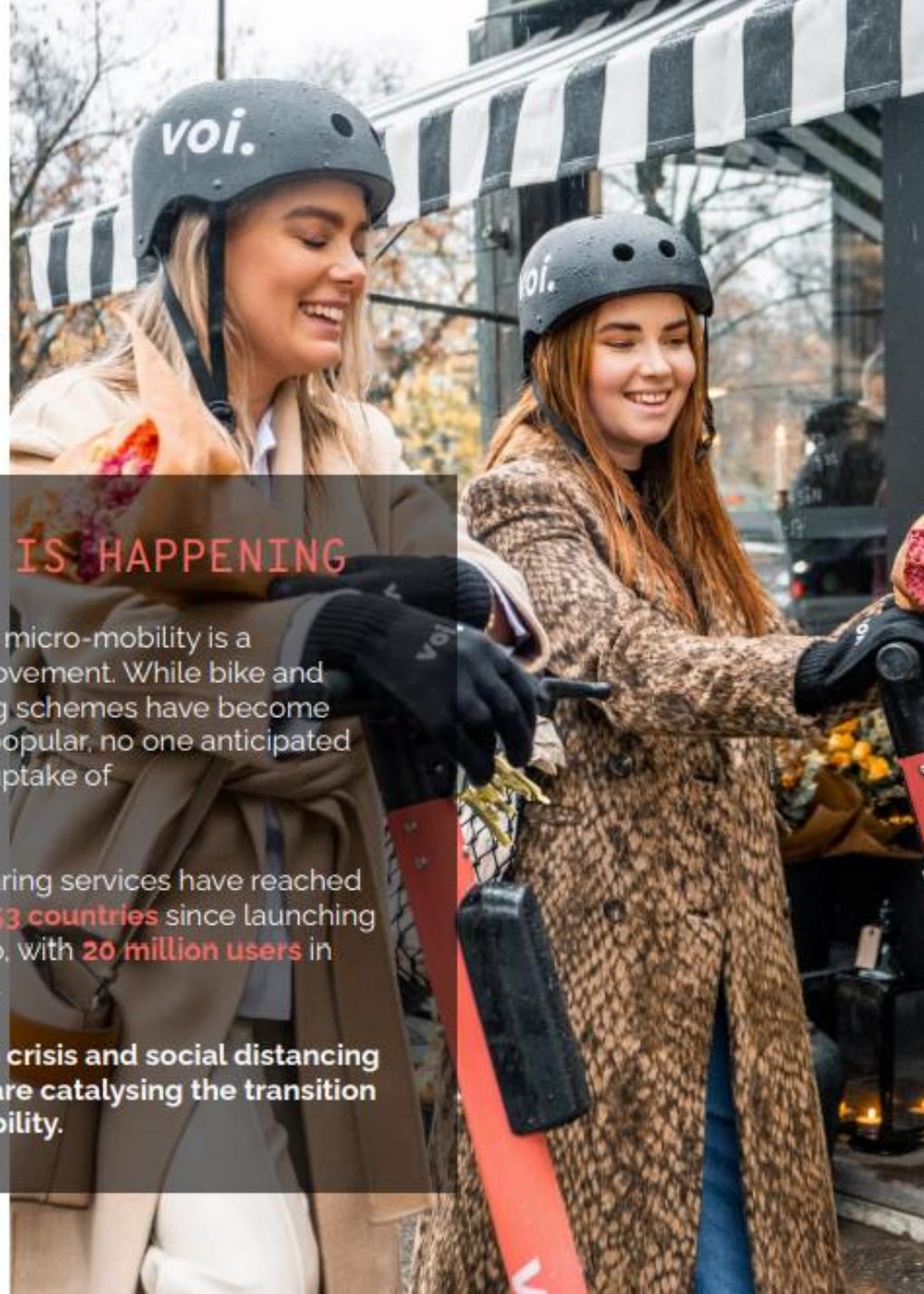
in 2018 UK drivers spent 178 hours on average stuck in traffic.

CHANGE IS HAPPENING

The switch to micro-mobility is a grassroots movement. While bike and e-bike sharing schemes have become increasingly popular, no one anticipated the massive uptake of e-scooters.

E-scooter sharing services have reached **626 cities** in **53 countries** since launching two years ago, with **20 million users** in Europe alone.

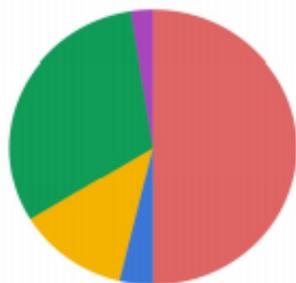
The Covid-19 crisis and social distancing imperatives are catalysing the transition to micro-mobility.



Sustainability at Voi

Intermodality & Modal shift

Mode share in European cities. With transport driving 25% of Europe's GHG emissions, decarbonising transport and reducing car trips is a main focus of many city climate plans.



Today's European cities

63% of users report combining Voi with public transport

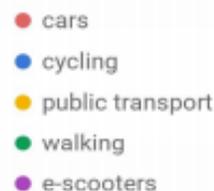
12% of users report replacing cars or taxis

Alternative mobility still < 10% mode share in most European capitals



Post-car cities?

90% alternative mobility & public transport share
10% shared car share for transporting goods and other needs



The e-scooter opportunity

Catalyst for change

Rapid adoption shows power of e-scooters for mobility behavior change. E-scooters can **service as catalyst** towards post-car, sustainable urban transport.

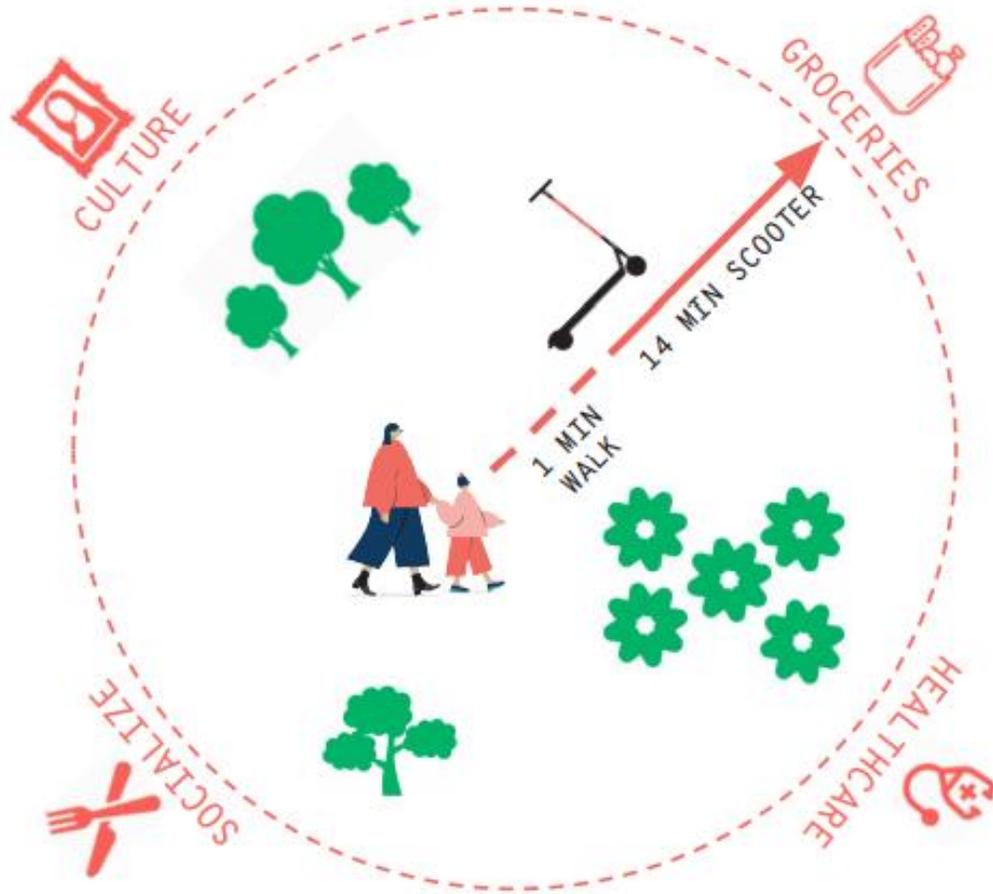
Alternative mobility combined with smart policies can foster **higher car replacement** driving key trends:

- **Access** vs. ownership
- **Light weight** vs. heavy weight
- **Electric** vs. fossil fuel

Solutions & policy need to work together

We are an enabler of the cities of the future

VOI TIES INTO THE 15 MINUTE CITY



- A Voi in every neighborhood & transport interchange
- Makes Voi the key that connects people with their city
- We help citizens reclaim the city space from cars



Q&A