

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





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



RELIANCE ARCADE

Brixton
Station



Keep your
business flying
with overdrafts
of up to £150k

STANLINE
BANK

LOVE





Road narrowed
to aid
social distancing
on footway





PEDESTRIAN
and CYCLE
ZONE



Mon - Fri
8.15 - 9.15 am
2.45 - 3.45 pm

Except for
permit holders

LET & MANAGED
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020 7272 9988
www.enfield.gov.uk



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

Monday
to
Friday

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

Warning: car streets, loading, unloading
and bus stop movements

Enfield Council



53
Frith Street

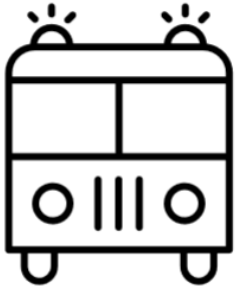
TAPESTRY

FOOD
DRINKS
20% OFF
WELCOME





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

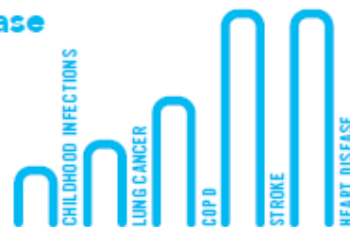
Diabetes

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

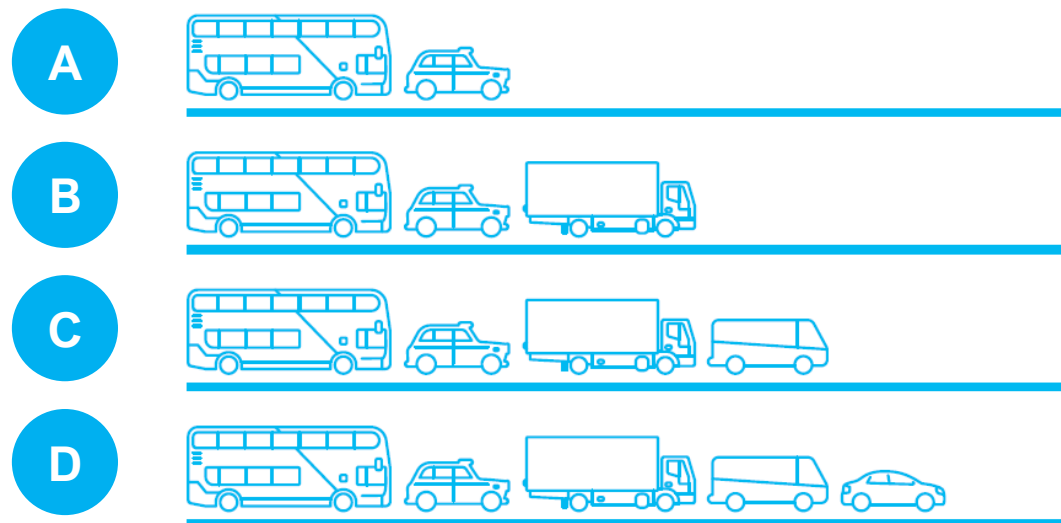
Clean Air Zones

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



Birmingham's Clean Air Zone

TYPE D

Includes all vehicle types



Daily charge will apply 24 hours a day

▪ Cars, taxis, vans

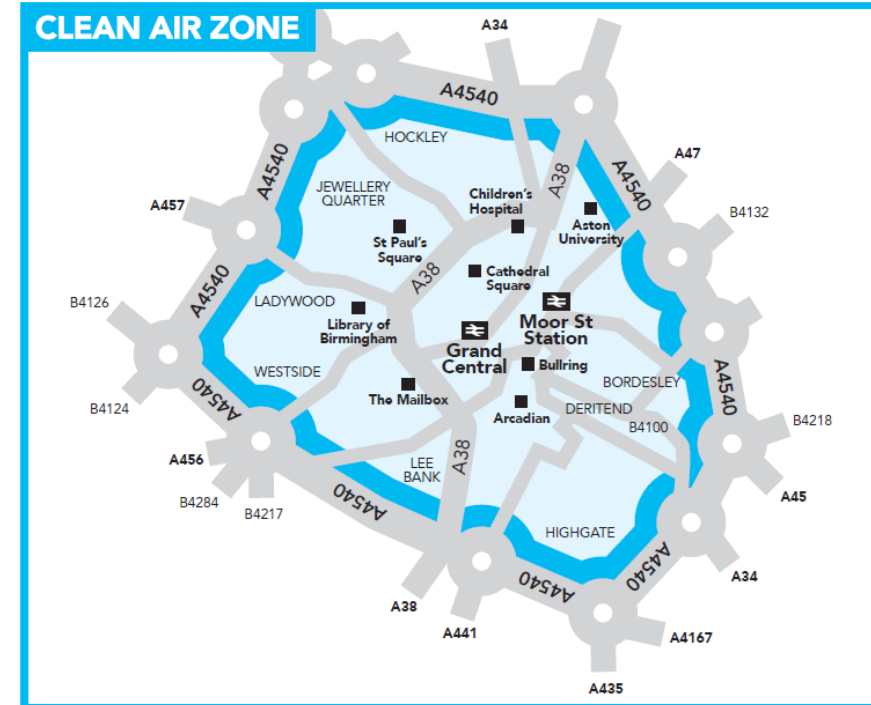
£8

▪ HGVs, coaches and buses

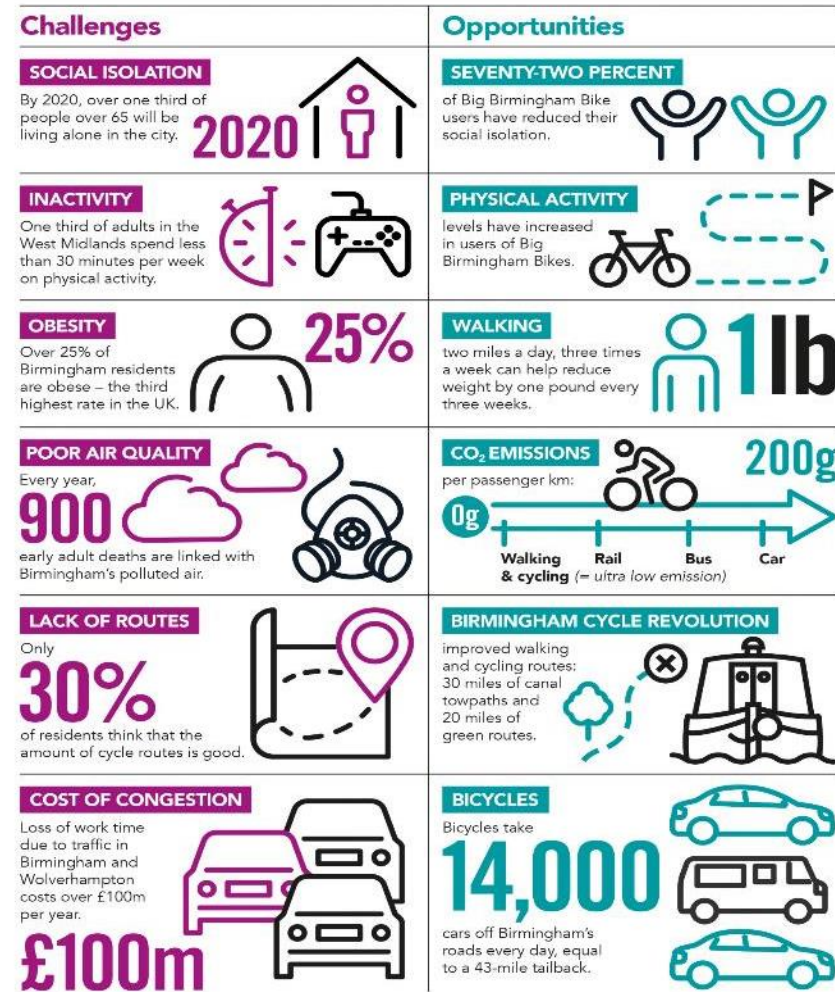
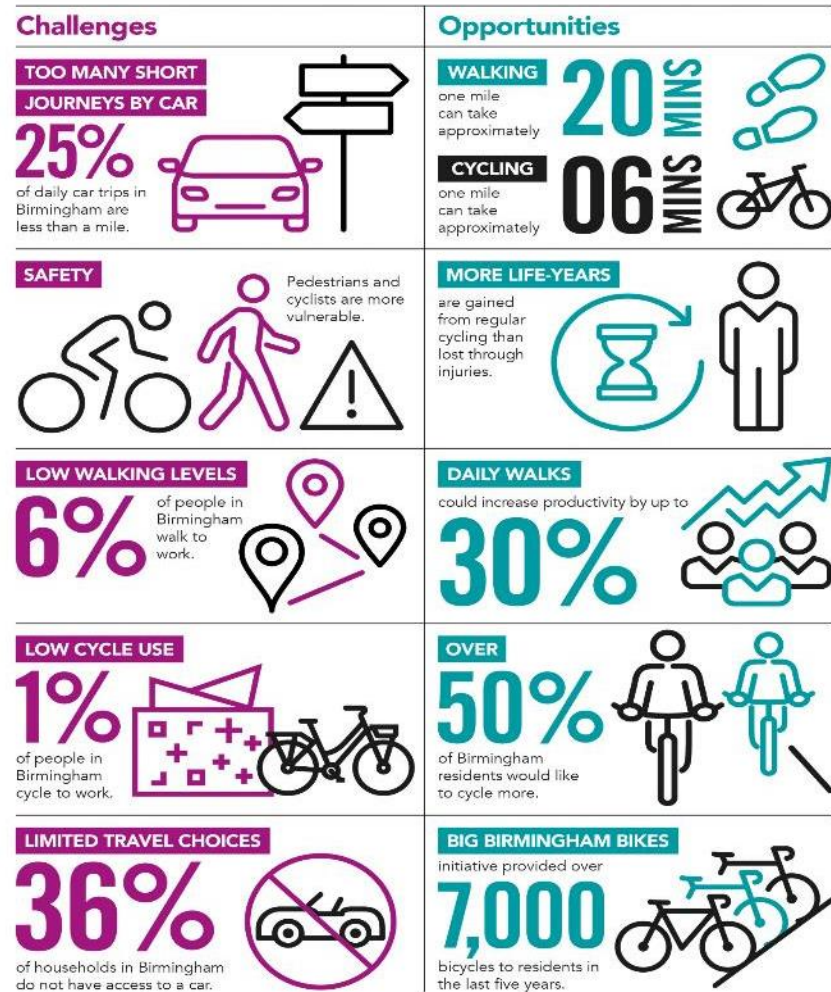
£50

Revenue generated to be re-invested in transport-related projects and policies

- Opportunities already identified:
 - Controlled Parking Zones to mitigate localised impacts of the Clean Air Zone
 - Funding for the Hydrogen bus pilot
 - City centre pedestrianisation and public realm improvements
 - Enhanced programme of bus priority, walking and cycling schemes



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

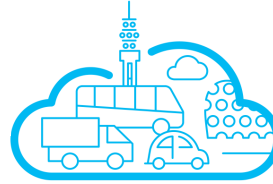
The council is committed to taking a leading role, playing its part, and working with individuals, communities, businesses, partners, and others across the city and region to act now on the causes and impacts of the climate emergency.

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



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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



A photograph of a busy city street, likely in East Asia, showing heavy traffic and tall buildings in the background. A blue semi-transparent box is overlaid on the right side of the image, containing a list of issues related to cars in cities. The RAMBOLL logo is in the bottom left corner.

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

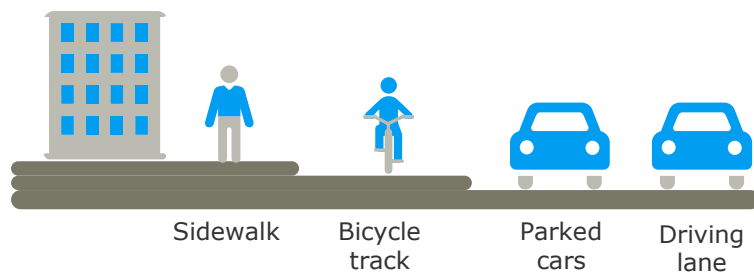
**Make cycling safe and easy
– from anywhere to
everywhere**

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RAMBOLL

Protected cycling network

- Safe
- Direct
- Convenient
- Coherent



A large outdoor bicycle parking area on a city street. Numerous bicycles of various colors (blue, white, gold, red, purple) are parked in rows, secured by a black metal rack system. The bicycles are parked on a paved sidewalk next to a street with buildings and pedestrians in the background. A blue rectangular overlay with the text "Bicycle parking" is positioned in the upper right corner.

Bicycle parking

RAMBOLL



Connection to public transport



RAMBOLL





Cater to the cyclists



RAMBOLL





**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**

• RÅMBØLL • TEST EN EL-CYKEL • RÅMBØLL

RAMBØLL

Bilkøer og transport er for et andet

Vi ved, at mere end over fem millioner danskere har en almindelig bil for samfundet og trængslen o

**BIKE WITH
BUSINESS
PARK
SKEJBY**

Derfor har Gate 21 sammen 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

General branding of cycling

**GIVE
ÅRHUS CYKELBY
EN VISUEL OG
VERBAL
IDENTITET**

MÅLGRUPPE:
ALLE
AKTIVE
ÅRHUSIANERE

ALLE
AKTIVE
ÅRHUSIANERE

MEDIER:
OUTDOOR
ONLINE
TASKFORCE
INSTORE
PR

OUTDOOR
ONLINE
TASKFORCE
INSTORE
PR


RESULTATER:

- 31% KENDSKAB
- 22.000 HITS PÅ WEBSITE
- 4.000 GLADE CYKLISTER

31% KENDSKAB
22.000 HITS
PÅ WEBSITE
4.000 GLADE
CYKLISTER

**NEJ TAK
TIL BIL NUMMER TO**

IN LITHN RESOLUT: FAMILIEN FRA BRABRAND ER ET GODT EKSEMPEL PÅ, HVORDAN EN FAMILIE MED KARRERE OG FIRE BØRN TIL AT FUNGERE MED EN BIL TILMANT AT CYKLER, EFTERSKOLERE, BARNESTOLL OG CYKELHÅNGERE



Women





Time

Trip cost

Health benefits

Accidents

Air pollution

Climate impacts

Noise

Wear

Tax consequences

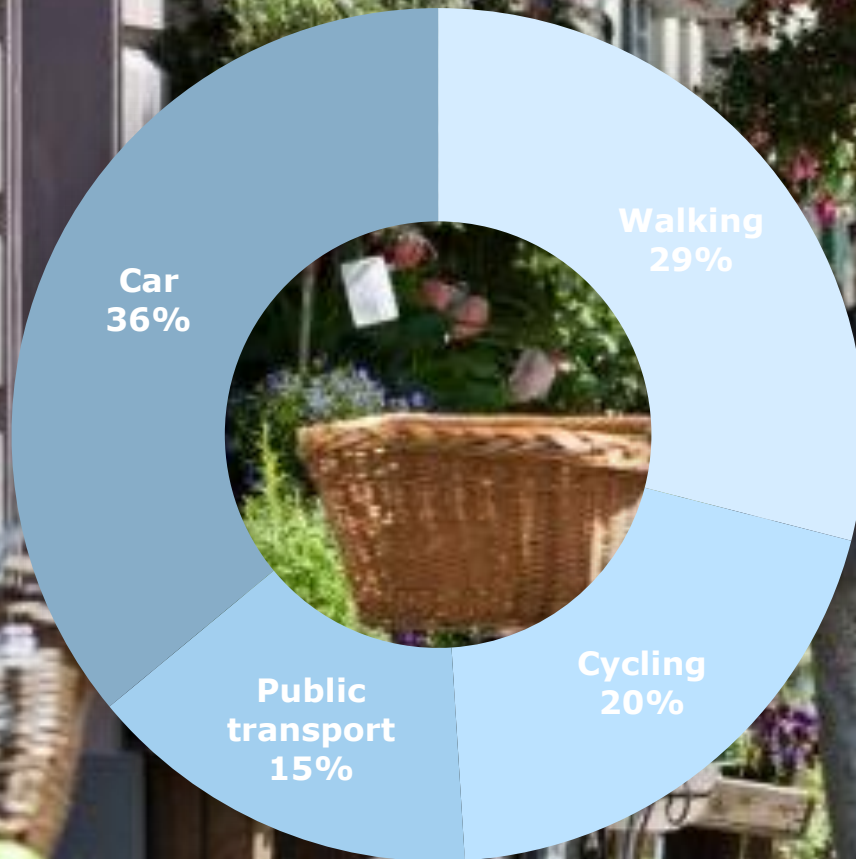
Labor supply distortion

Labor gains

Factors in cost/benefit analyses

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

Mode to shop



Cars don't shop – people do!

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



RAMBOLL

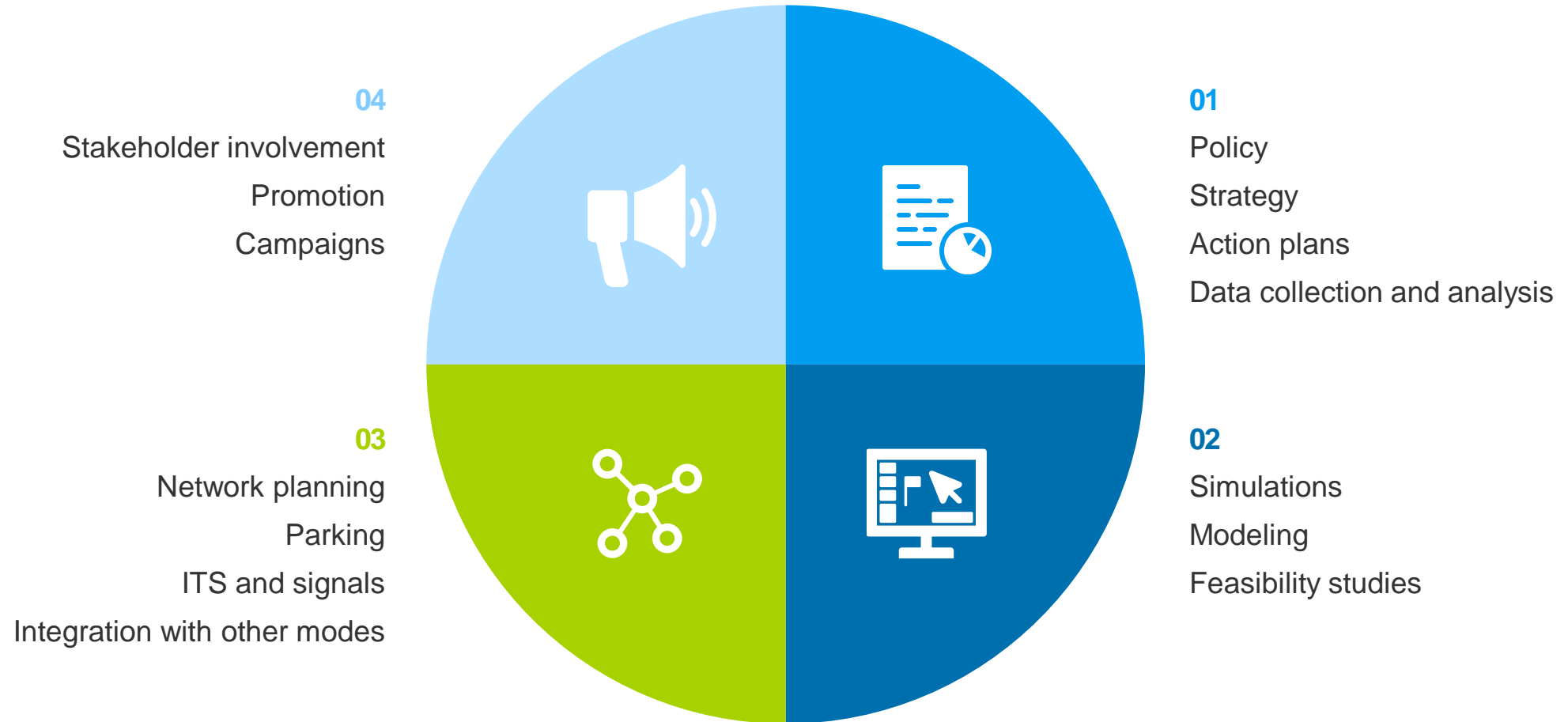


www.bededamerne.dk

Bright ideas. Sustainable change.



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

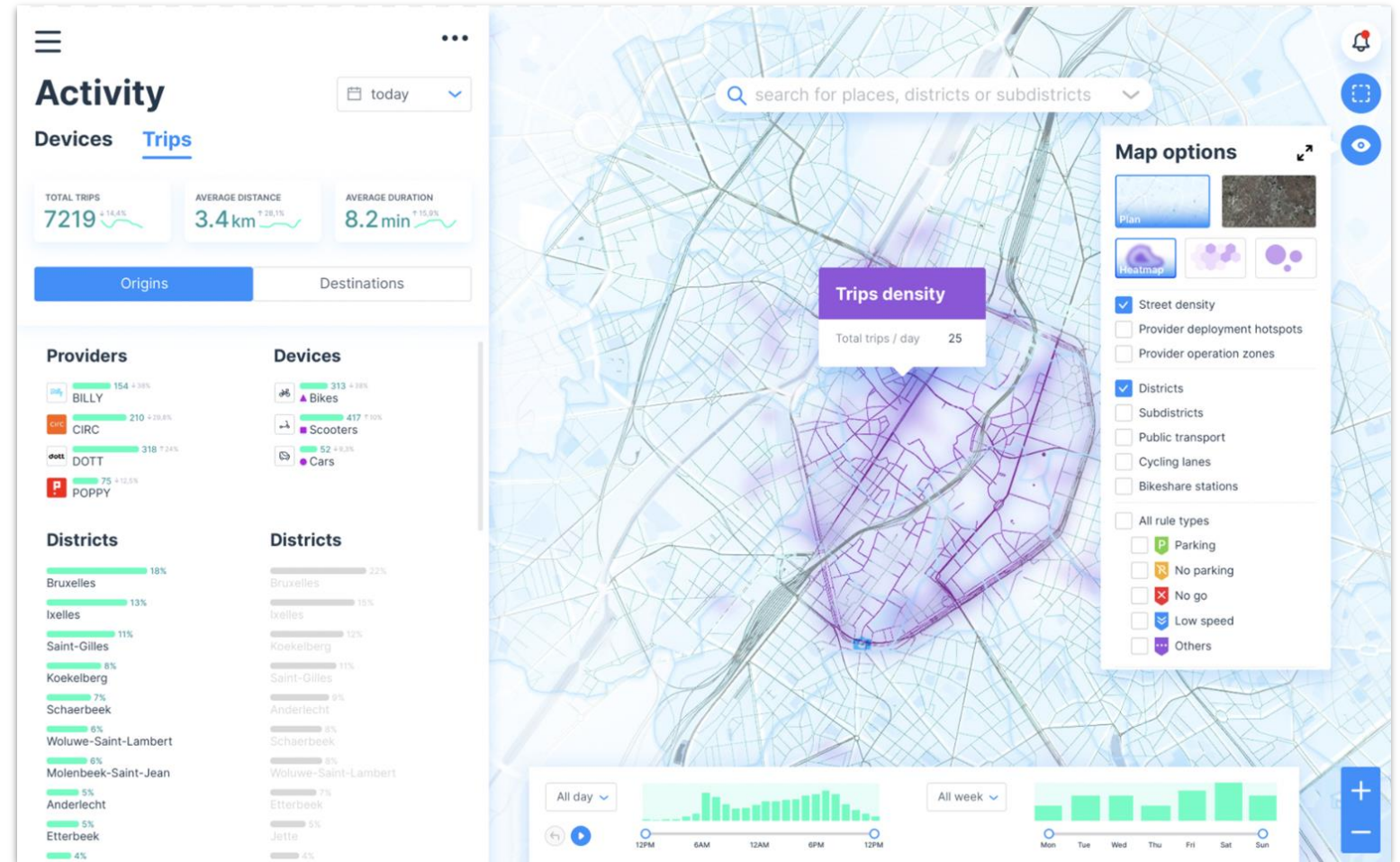


What's Working Well?

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!

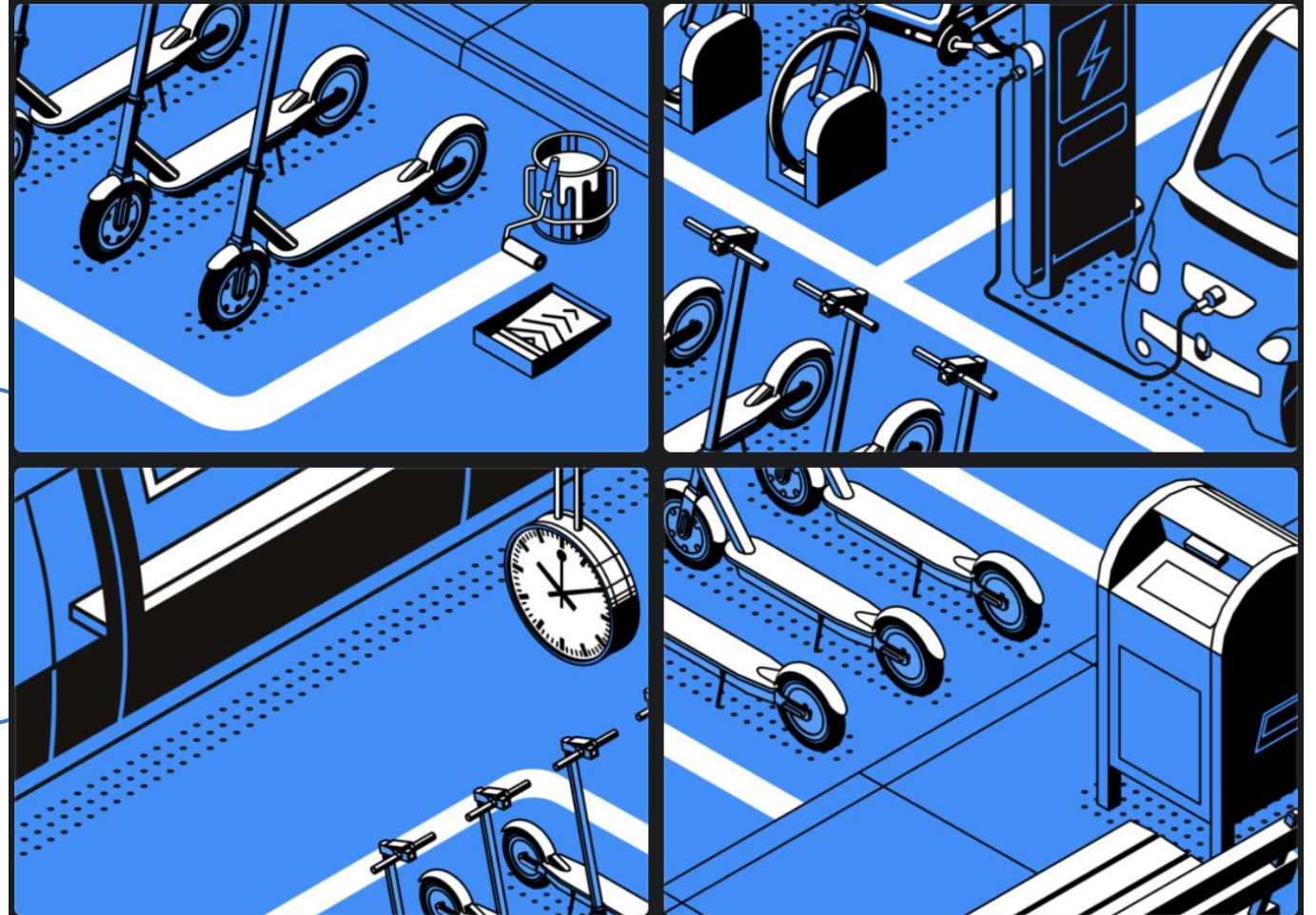


Alex Pazuchanics
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Success

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Paris, France





Erik Christian Hasselbalch
Senior Operations Manager UK & Ireland
Voi Technology



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

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

+TK
Active Users
in the UK

+TK
Voi-4-Heroes
registered users

+TK
Car trips avoided
on UK roads since
launch



Who is Voi?

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

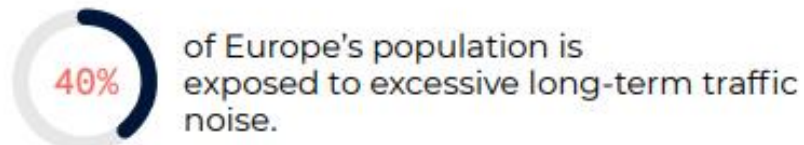
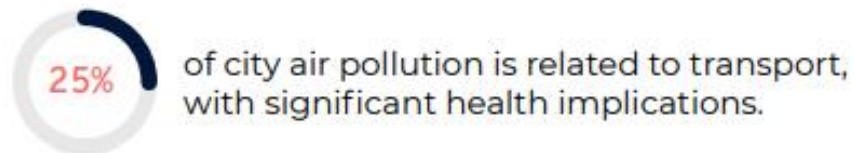


E-bike: Voiager 80

- 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)

voi. 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

- cars
- cycling
- public transport
- walking
- e-scooters

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.

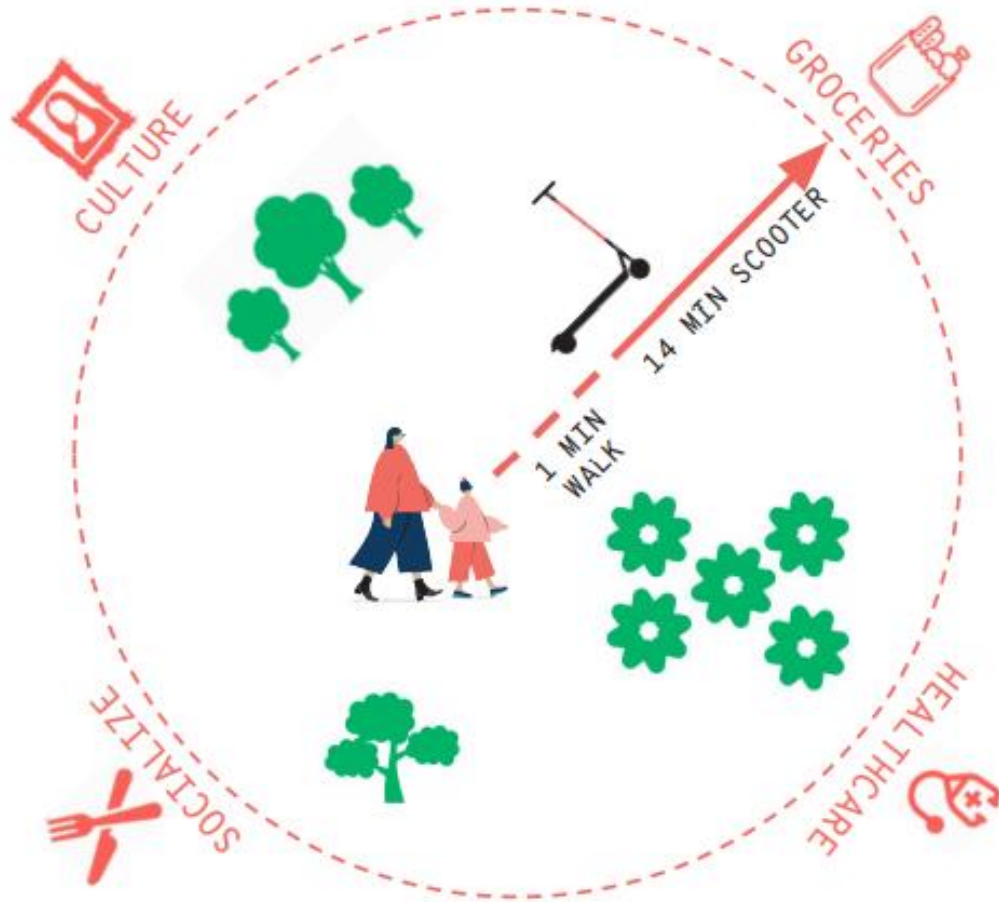
Alternative mobility combined with smart policies can foster **higher car replacement** driving key trends:

- **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