POLIS ANNUAL CONFERENCE 2024
CITIES AND REGIONS FOR TRANSPORT INNOVATION

4D.
Discovering the dimensions of a just transition

09:00 AM - 11:15 AM

Just Transition

TRANSPORT POVERTY, THE LESS SEXY SIDE OF MOBILITY

Annual POLIS Conference 2024 - Karlsruhe

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28.11.2024

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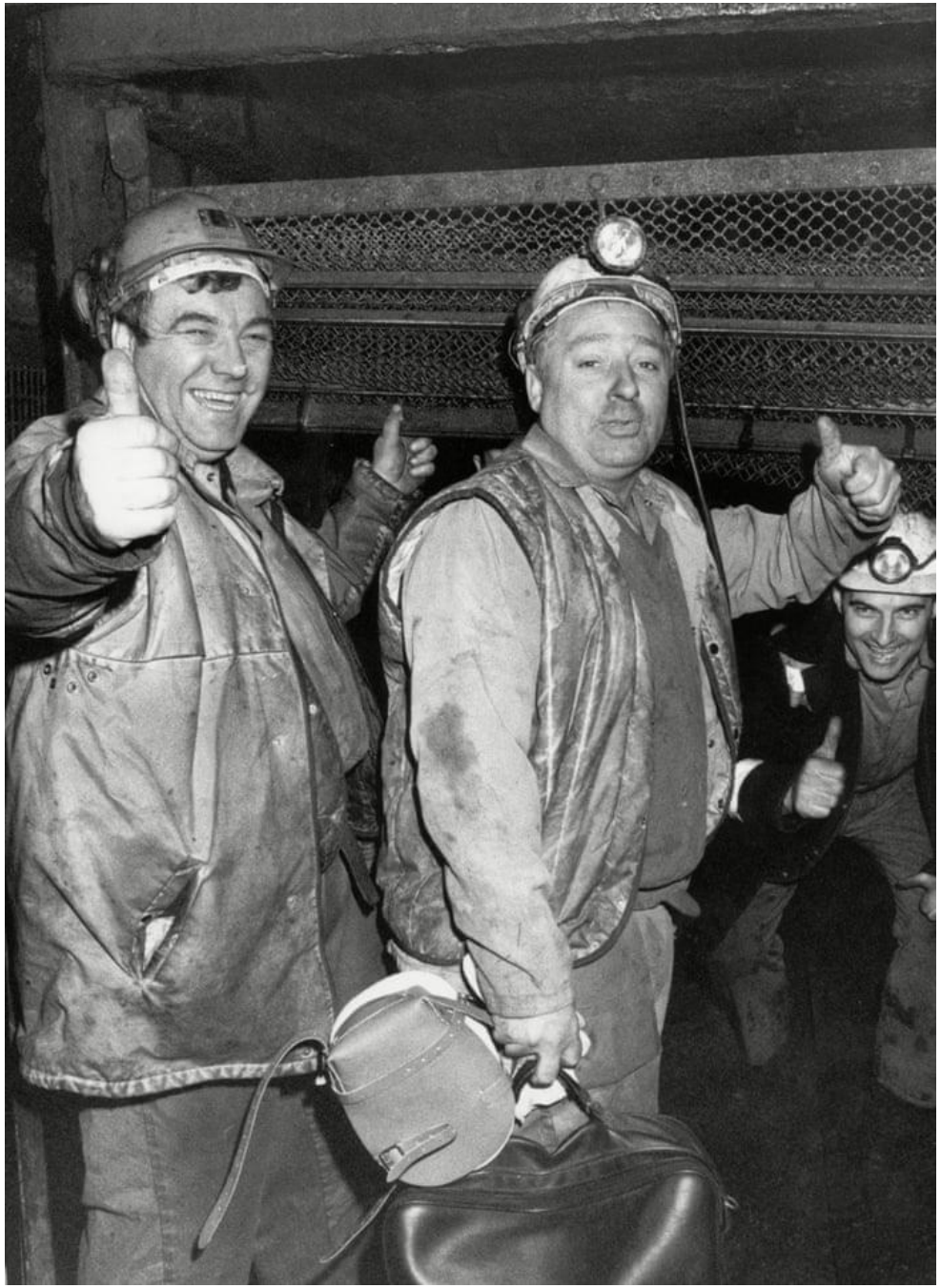
CITIES AND REGIONS FOR TRANSPORT INNOVATION

WHO AM I?

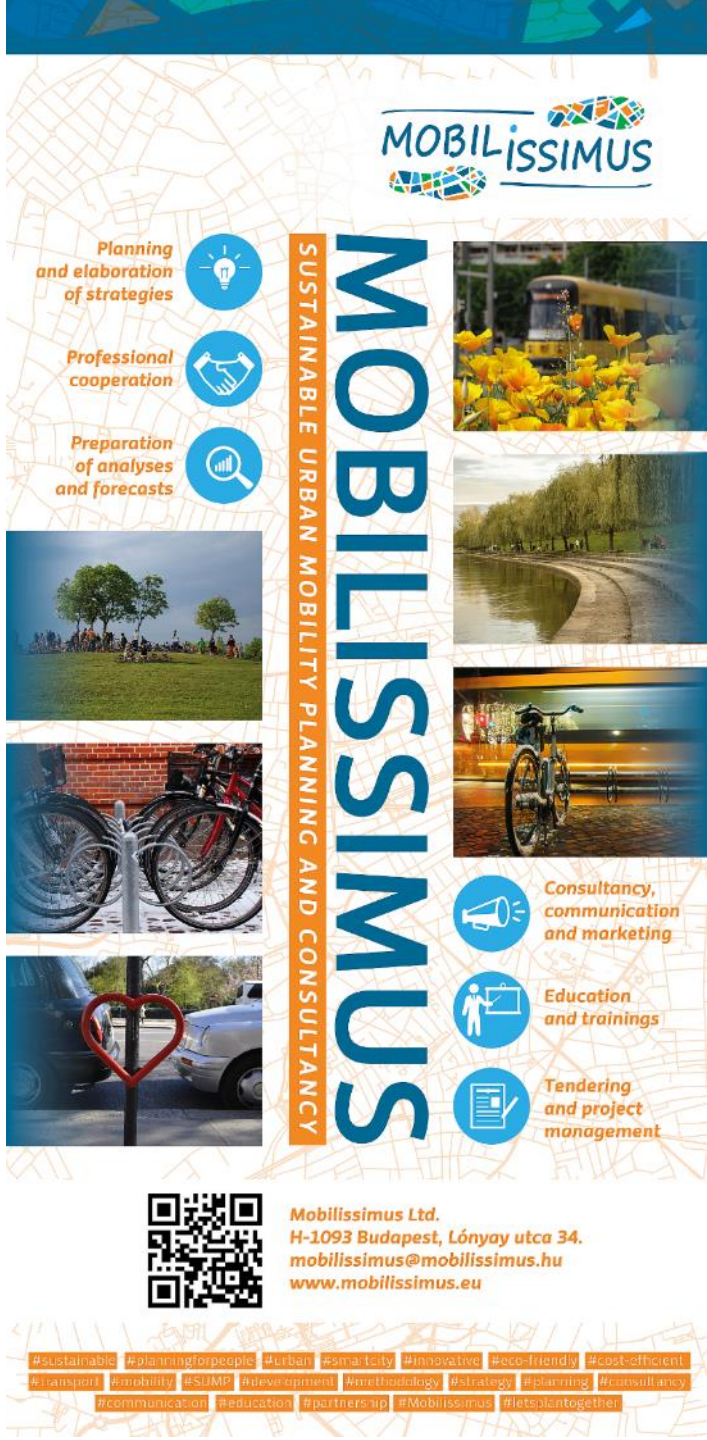
PARIS 1991



HAVE A JOB THAT I'M HAPPY TO DO ON SUNDAYS!

MOBILISSIMUS AND MOBILISSIMUS.RO

- MOBILITY PLANNING AND CONSULTANCY COMPANY
- EXPERTS WITH DIFFERENT BACKGROUNDS
- WORKING IN LOCAL, REGIONAL AND INTERNATIONAL CONTEXT
- SECRETARIAT OF „MAGYAR CIVINET”



FAIRTIQ – THE EASIEST MOBILE TICKETING

THE SEXY SIDE OF MOBILITY

BRIGHT SIDE OF MOBILITY

BRIGHT SIDE OF MOBILITY

BRIGHT SIDE OF MOBILITY

THE LESS BRIGHT SIDE OF MOBILITY

HOW DOES AI SEE TRANSPORT POVERTY?

HOW DO WE SEE TRANSPORT POVERTY?

HOW DO WE SEE TRANSPORT POVERTY?

HOW DO WE SEE TRANSPORT POVERTY?

METHODOLOGY AND OUR COMPARATIVE RESEARCH

OVERVIEW OF TRANSPORT POVERTY

„Lack of adequate transport services necessary to access general services and work, or to the inability to pay for these transport services (European Parliament 2022).”

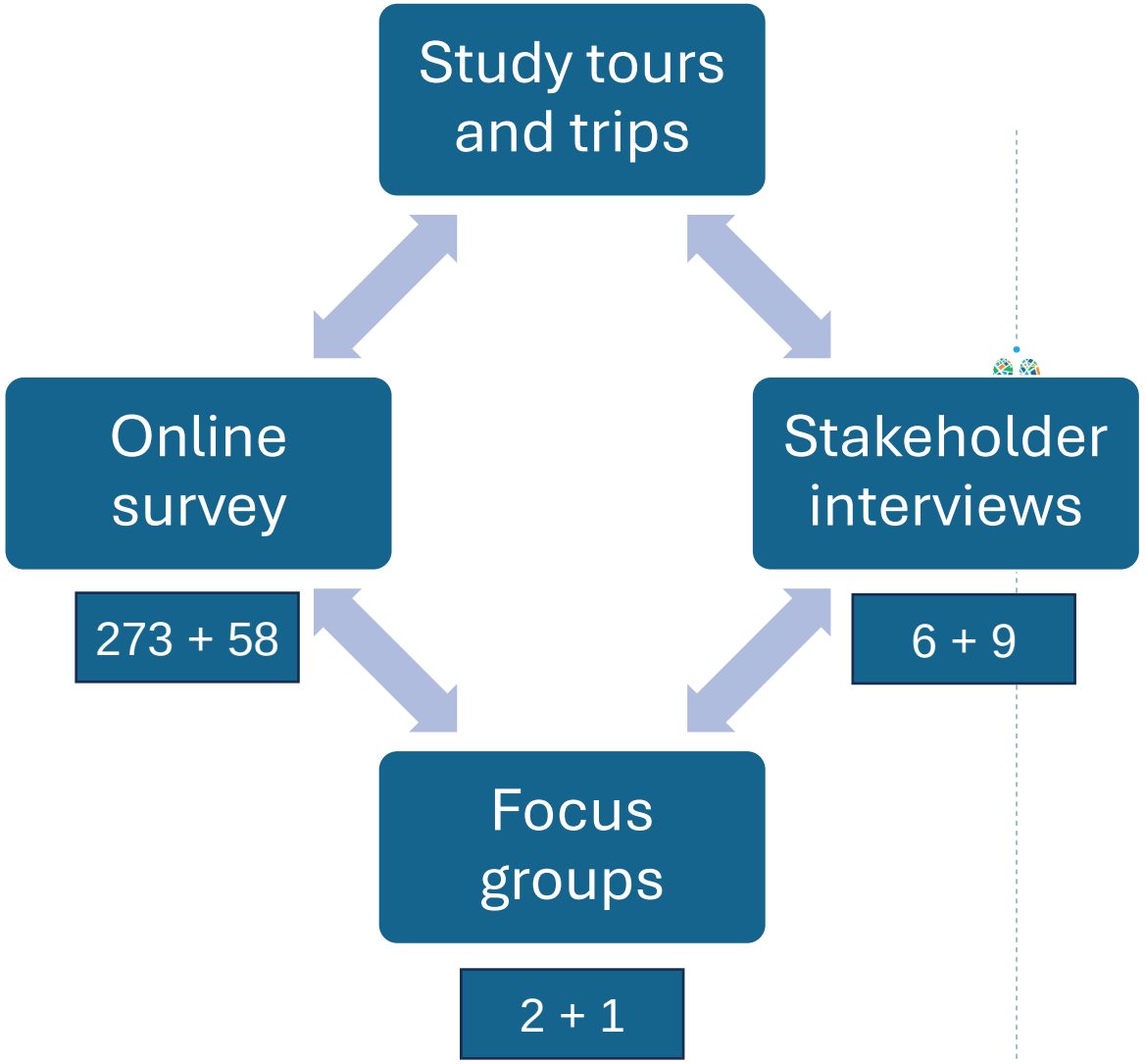
COMPONENTS OF TRANSPORT POVERTY

APPERANCE OF TRANSPORT POVERTY IN HUNGARY AND IN ROMANIA – OUR RESEARCH

Borsod-Abaúj-Zemplén County, Hungary – 670.000 people

Brasov County and Întorsura Buzăului (Covasna County), Romania – 560.000 people

RESEARCH METHODOLOGY



OUTPUT: SST - SURVEY & SOLUTION TOOLKIT

- INPUTS, MAIN INDICATORS
- REGIONAL BENCHMARK-BASED CATEGORIES
- CUSTOMISED RECOMMENDATIONS AND SOLUTIONS

Instructions	Type	Measure	Unit	1 (least desirable)	2	3	4	5 (most desirable)
Percentage of passengers with concession / subscription tickets (trips made with concession / subscription tickets as a % of all trips on the network)	Percentage		%	under 5%, over 19%	5 to 7 and 19-17	7 to 9 and 17-15	9 to 11 and 15-13	11 to 13
Calculate the ratio between a monthly pass versus 21 daily tickets for rural-urban trips	Percentage		%	under 20	20-30	30-40	40-50	over 50
Do the local public transport operators offer a shared use of tickets across their services?	Yes/ No	Yes/ No						
Affordability of public transport for the lowest income quartile, as proportion of income spent for monthly transport needs	Percentage		%	over 22.5	22.5 to 20	20 to 18.5	18.5 to 15	under 15
When was the last time the public transport strategy for the area was revised?	Numerical	Time	Months	more than 5 yrs. ago/ no strategy	last 5 yrs.	last 2 yrs.	12 mths	last 3 mths

OUTPUT: SST - SURVEY & SOLUTION TOOLKIT

- USER-FRIENDLY TOOL TO EVALUATE THE LEVEL OF MOBILITY POVERTY
- BASED ON DEMOGRAPHIC, MOBILITY- AND PUBLIC TRANSPORT RELATED DATA
- AFFORDABILITY AND ECONOMIC PARAMETERS TO DEFINE ADEQUATE ANSWERS AND SOLUTIONS TO THE RESPONDENT
- FUTURE ADAPTABILITY OF THE SST FOR OTHER COUNTRIES IN THE EU
- SEVERAL AWARENESS RAISING EVENTS AND PRESENTATION TO RELEVANT STAKEHOLDERS

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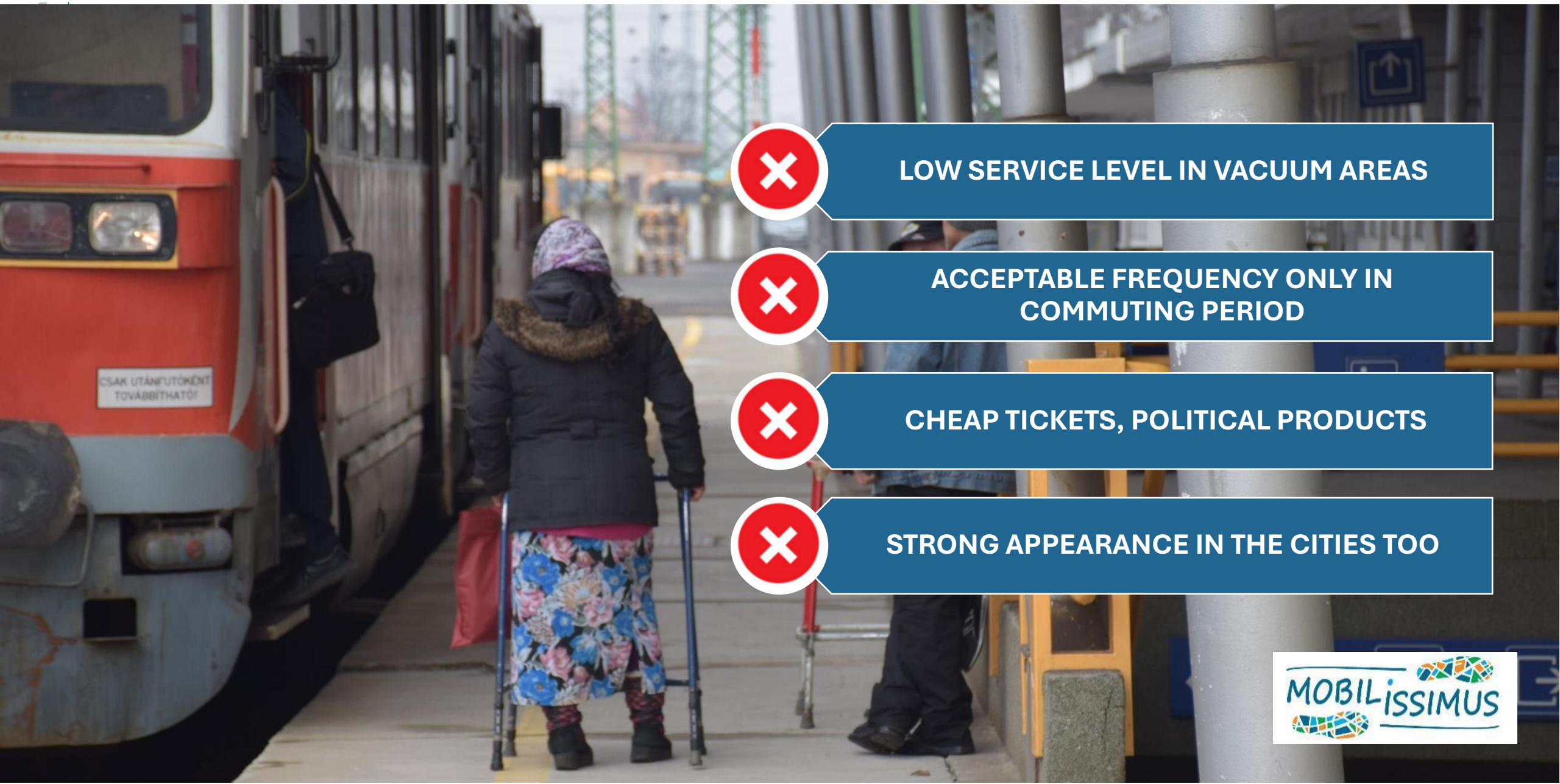
HUNGARY:
BORSOD-ABAÚJ-ZEMPLÉN COUNTY

HERITAGE BASED, OUTDATED NETWORK AND SERVICES

URBAN AND RURAL DIFFERENCES



- LOW SERVICE LEVEL IN VACUUM AREAS
- ACCEPTABLE FREQUENCY ONLY IN COMMUTING PERIOD
- CHEAP TICKETS, POLITICAL PRODUCTS
- STRONG APPEARANCE IN THE CITIES TOO

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SPARSE PUBLIC TRANSPORT AND INADEQUATE ACCESSIBILITY

- HIGH DEGREE OF DISSATISFACTION
- POVERTY ISLANDS ALSO IN CITIES
- BUS/ TRAIN TRIPS LONGER THAN CAR TRIPS
- PERCEPTION: BEING HOSTAGE OF PUBLIC TRANSPORT

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ROMANIA:
BRASOV COUNTY AND COVASNA COUNTY

QUALITY AND QUANTITY RELATED ISSUES

QUALITY AND QUANTITY RELATED ISSUES

- SECOND HAND ROLLING STOCK
- LOW SERVICE FREQUENCY AND OPERATION TIME
- LACK OF PHYSICAL ACCESSIBILITY
- LACK OF REGIONAL INTEGRATION, OPERATOR-DEPENDENT PRICING

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TACKLING ACCESSIBILITY IN DISPERSED COMMUNITIES

- MARGINALISATION
- PERSONAL SAFETY CONCERNS
- ADMINISTRATIVE BOUNDARIES AND OPERATORS GENERATE ADDITIONAL ISOLATION

TOWARDS THE SOLUTIONS

BUILD ON POLICY AND GOVERNANCE

- COMMITMENT TO TRANSPORT POLICIES AND STRATEGIES
- IMPLEMENTATION BASED ON SUMP HAVING A STRONG SOCIAL OVERVIEW
- RAISE THE AWARENESS OF DECISION MAKERS
- INTEGRATE MOBILITY POVERTY ASPECTS INTO THE PLANNING

EASE THE DAILY COMMUTING

INTERGRATE SYSTEMS AND SERVICES

- AMONG AUTHORITIES, OPERATORS, SERVICES AND ADMINISTRATIVE SYSTEMS
- ENSURE COST-EFFICIENT INTERMODALITY
- INTEGRATE NETWORKS, TIMETABLES, TICKETING AND TECHNOLOGIES

IMPROVE FLEETS AND ACCESSIBILITY

- QUANTITY + QUALITY BASED RENEWAL
- NEW TECHNOLOGIES, ZERO EMISSION
- HIGHER COMFORT, CUSTOMIZED SIZE

IMPROVE NETWORKS AND SERVICES

- NEW DIRECT LINKS, LESS INTERCHANGE NEEDED
- INTERVAL-BASED TIMETABLES, IMPROVESCAPACITIES
- NEW LINES TO WORKPLACES AND TOURISTIC AREAS
- LAUNCH OF NIGHT SERVICES, LAUNCH OF DRT
- CUSTOMISED TARIFFS

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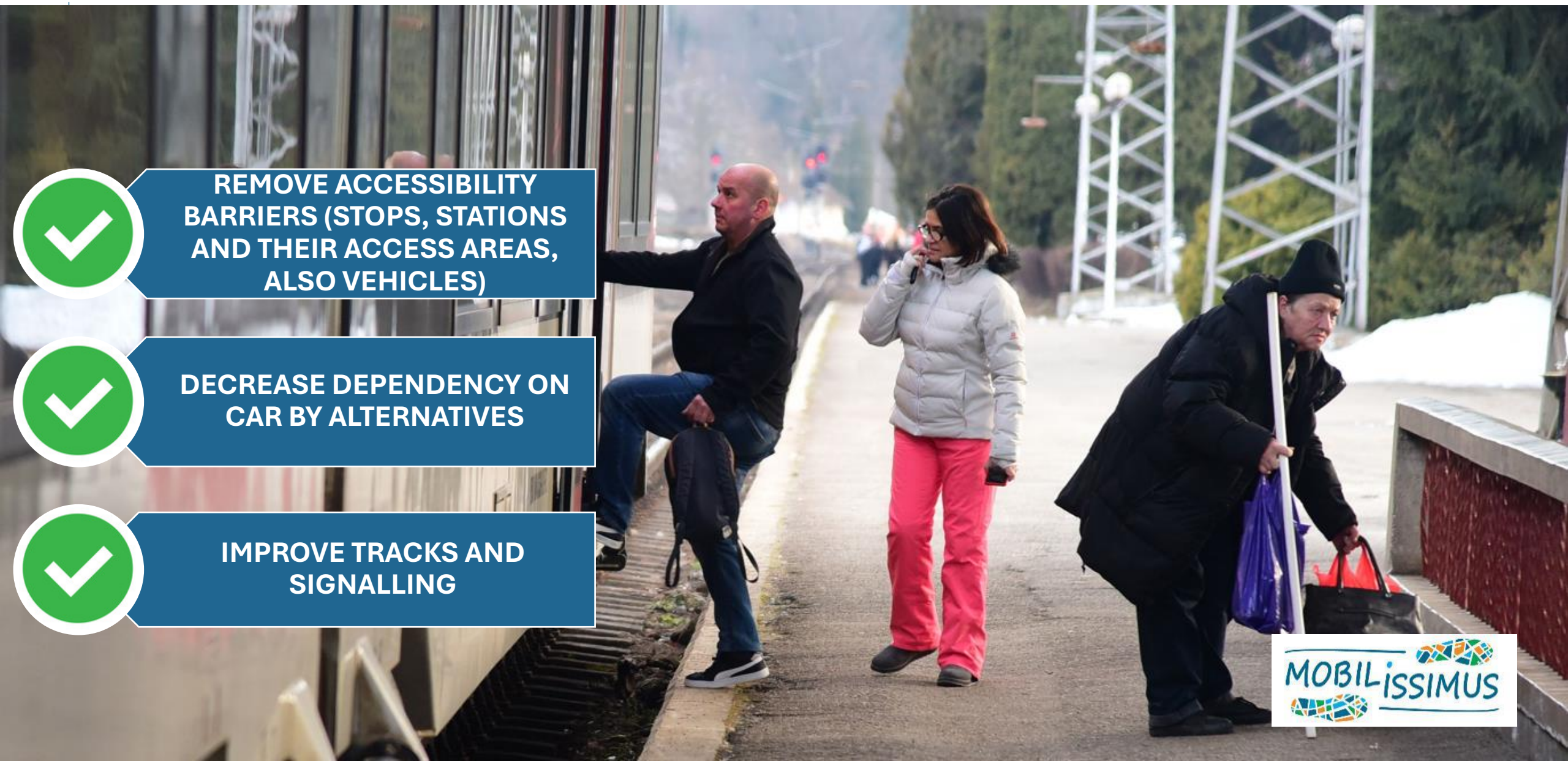
ACCESSIBILITY AND INFRASTRUCTURE



- REMOVE ACCESSIBILITY BARRIERS (STOPS, STATIONS AND THEIR ACCESS AREAS, ALSO VEHICLES)
- DECREASE DEPENDENCY ON CAR BY ALTERNATIVES
- IMPROVE TRACKS AND SIGNALLING

AFFORDABILITY AND SOCIAL EQUITY

- OFFERING ALTERNATIVES, LIKE SAFE CYCLING, SHARED SERVICES
- EASE THE ACCESS TO HOUSING, HEALTHCARE, EDUCATION BY IMPROVED SERVICES
- IMPROVE MOBILITY CONSCIOUS EDUCATION AND TEACH DIGITALISATION SKILLS

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IMPROVE RELIABILITY AND QUALITY OF SERVICE

- RENEW AND MAINTAIN PUBLIC TRANSPORT RELATED AREAS
- IMPROVE SERVICE RELIABILITY
- DECREASE OPERATIONAL UNPREDICTABILITY

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ENSURE FINANCIAL SUSTAINABILITY

APPLY TECHNOLOGY-LED SOLUTIONS

USE NEW TECHNOLOGIES, LIKE DRT WITH EDUCATION AND DIGITALISATION

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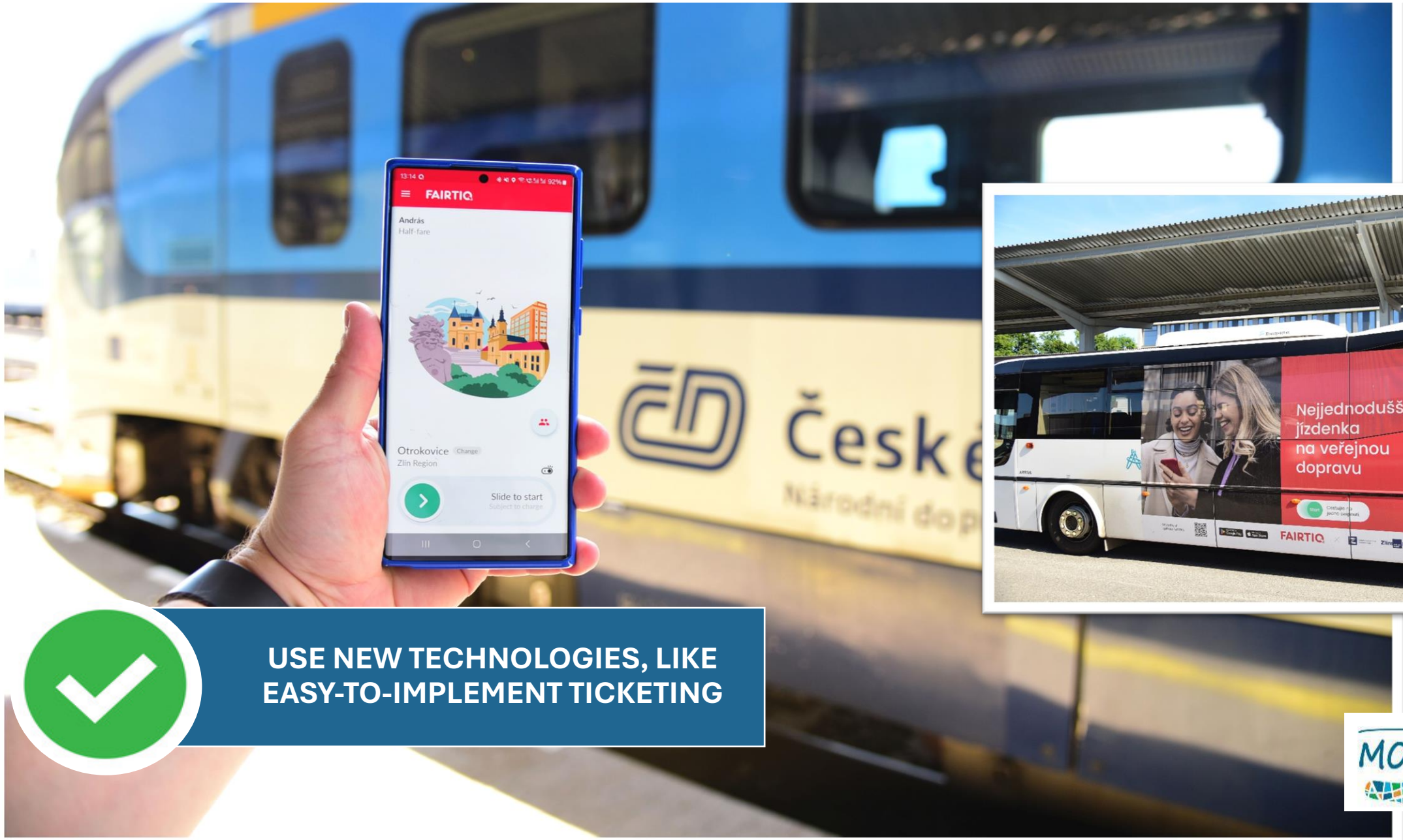
Interreg CENTRAL EUROPE
Co-funded by the European Union
DREAM_PACE

APPLY TECHNOLOGY-LED SOLUTIONS



USE NEW TECHNOLOGIES, LIKE EASY-TO-IMPLEMENT TICKETING

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WATCH OUR MOBILITY POVERTY VIDEO

Link: https://drive.google.com/file/d/1GHCv-EDUs_DFJAY9Z5BGyIF8Y_36EbJQ/view?usp=sharing

THANK YOU FOR YOUR ATTENTION!

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Discovering the dimensions of a just transition

A paradigm shift towards accessibility justice: The case of job accessibility in the low countries

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Josefien Hoerée

Universiteit Antwerpen
Onderzoeksgroep voor Stadsontwikkeling

Design Sciences Hub

MOBIEL21
ZET MENSEN IN BEWEGING

Why accessibility?

- ‘The role of mobility in society revolves around accessibility. Mobility allows people to actively participate in society and reach certain basic activities such as school, work, care facilities, shopping and social contacts.’
- Accessibility shortage => Limits participation in society

Approach of accessibility and mobility

- Utilitarian approach prioritizes the greater good for the greatest number of people
  - Overlooks distribution effects among different societal groups
  - Leads to improved accessibility for socially already advantaged groups
  - Looks too much at travel times
  - Overlooks the fact that for low incomes the cost of traveling is much more a threshold for accessibility than travel times

Integrated Perspective on Accessibility (IPOA)

- Considers different social functions, like school, work, hospital, …
- Looks at the functioning of the entire Daily Urban System
- Includes spatial choices (like proximity)
- Looks at the interests and differences between (groups of) people
- Looks not only at travel times, but also at costs

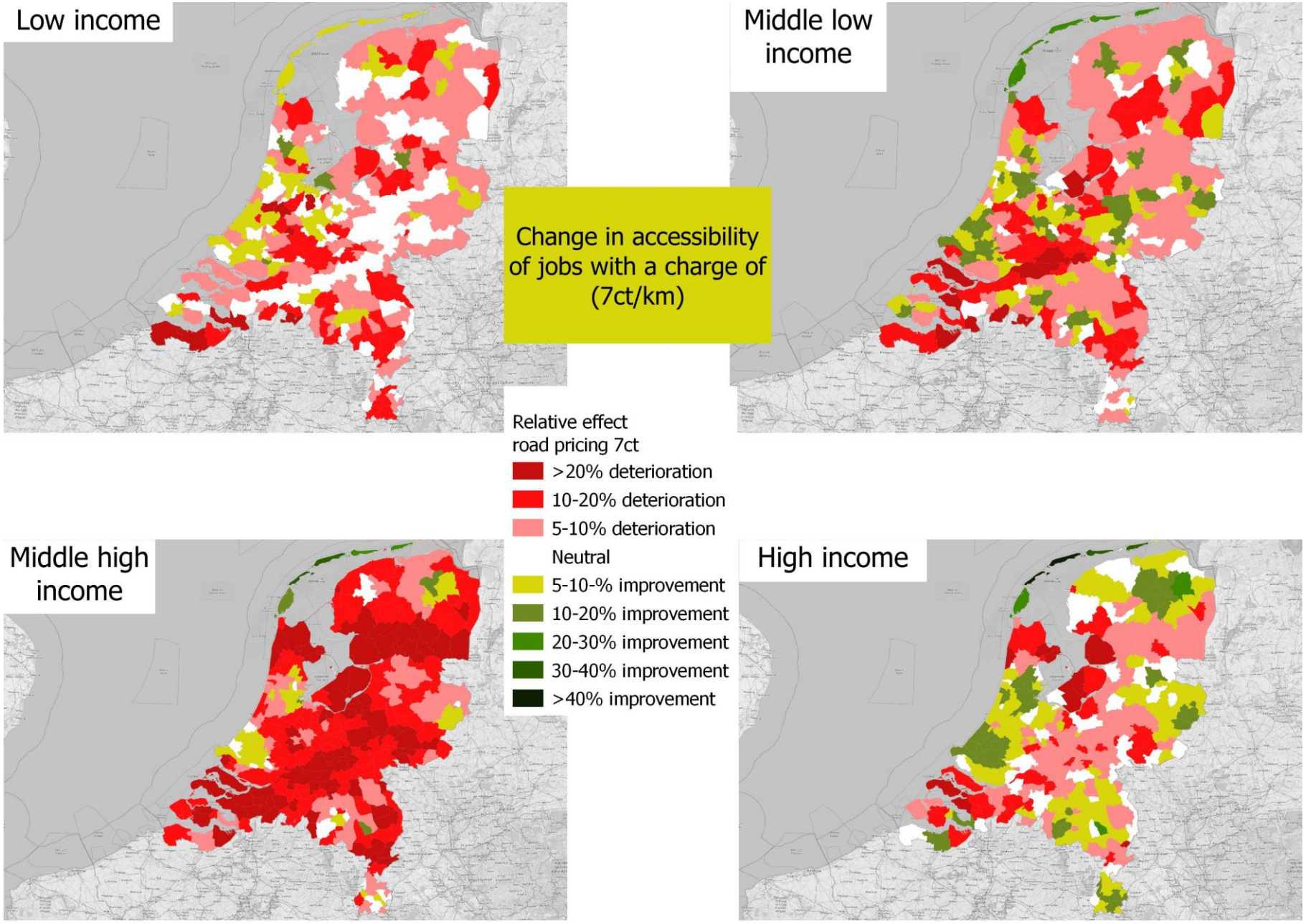
=> To calculate different policy measures

How does IPOA work?

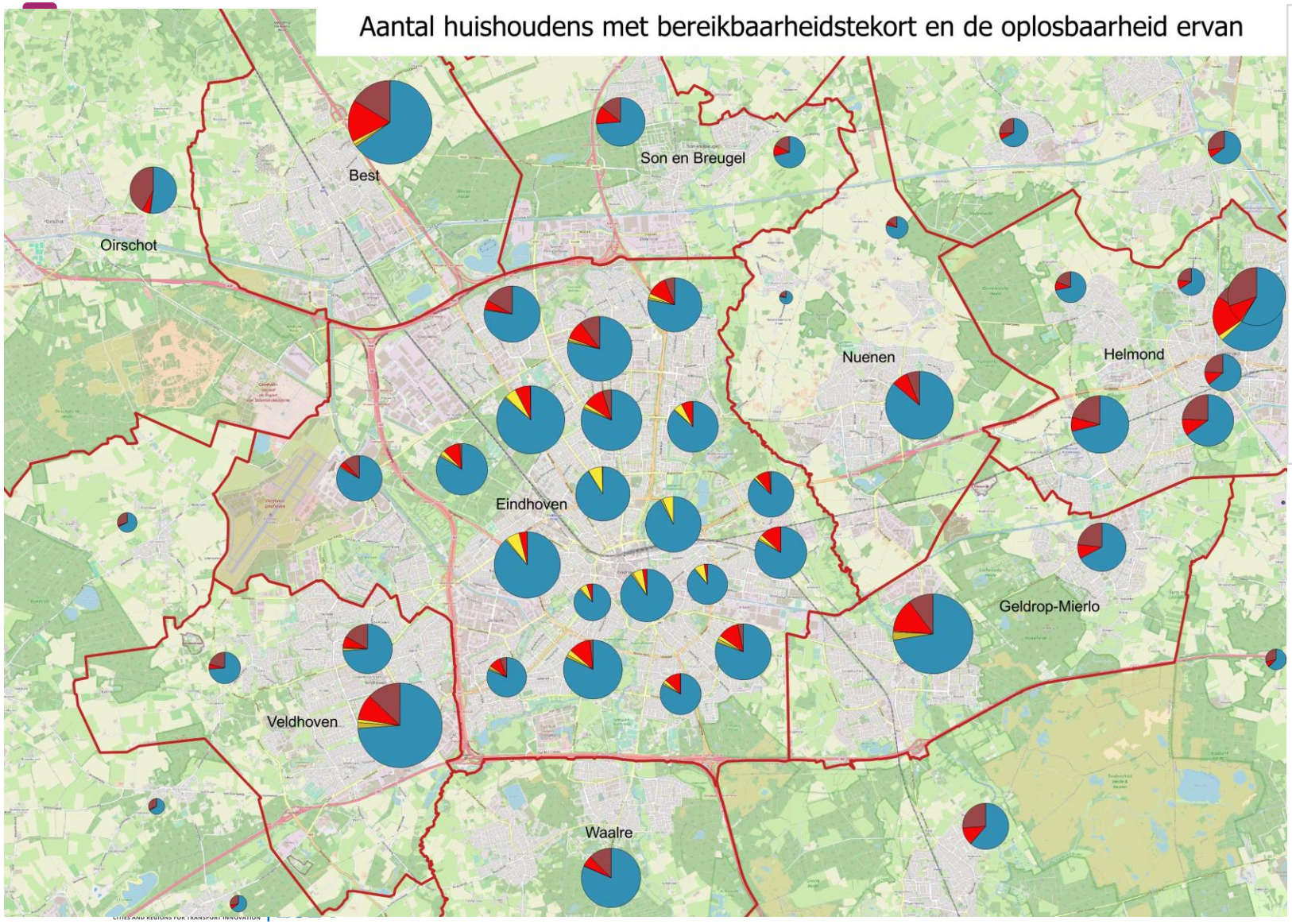
- Social economic input:
  - Data on housing location per zone and income group
  - Data on jobs, schools, … per zone
  - Data on car ownership, driver license, public transport subscription, …
  - Cost of car and public transport

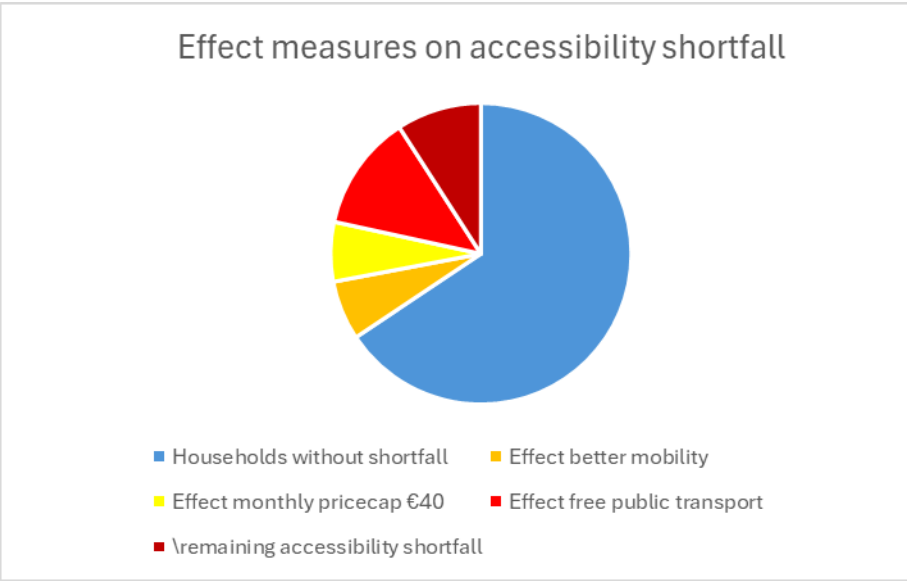
- Travel time and distance for car, bike and public transport

Effect of road pricing



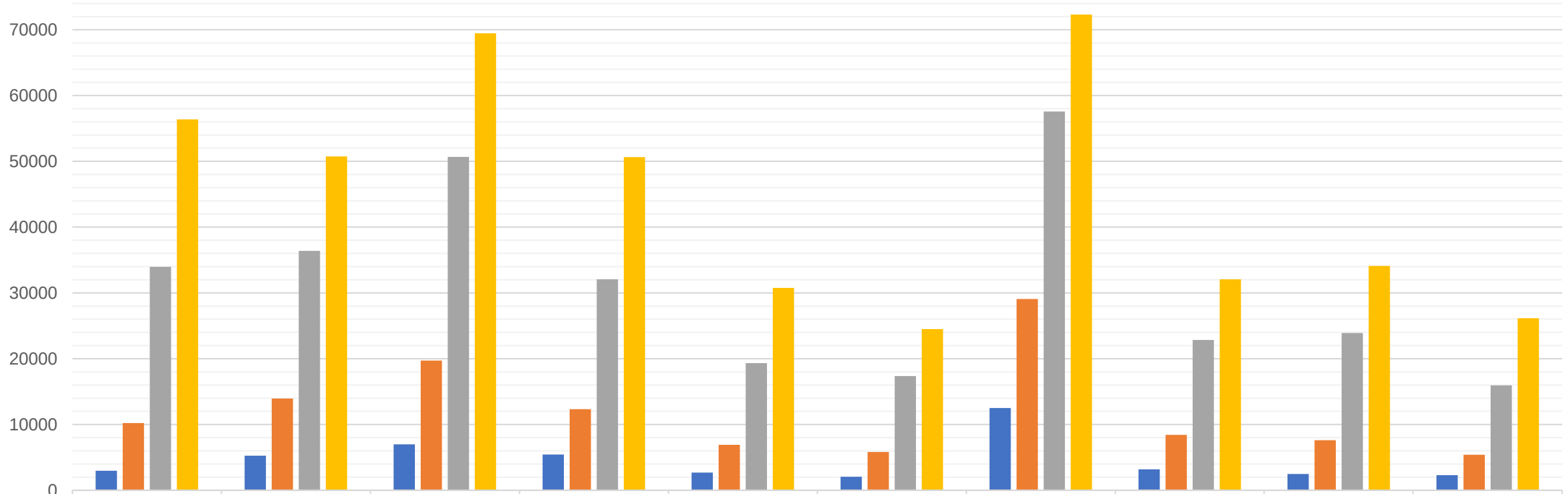
Effects of measures on accessibility shortage





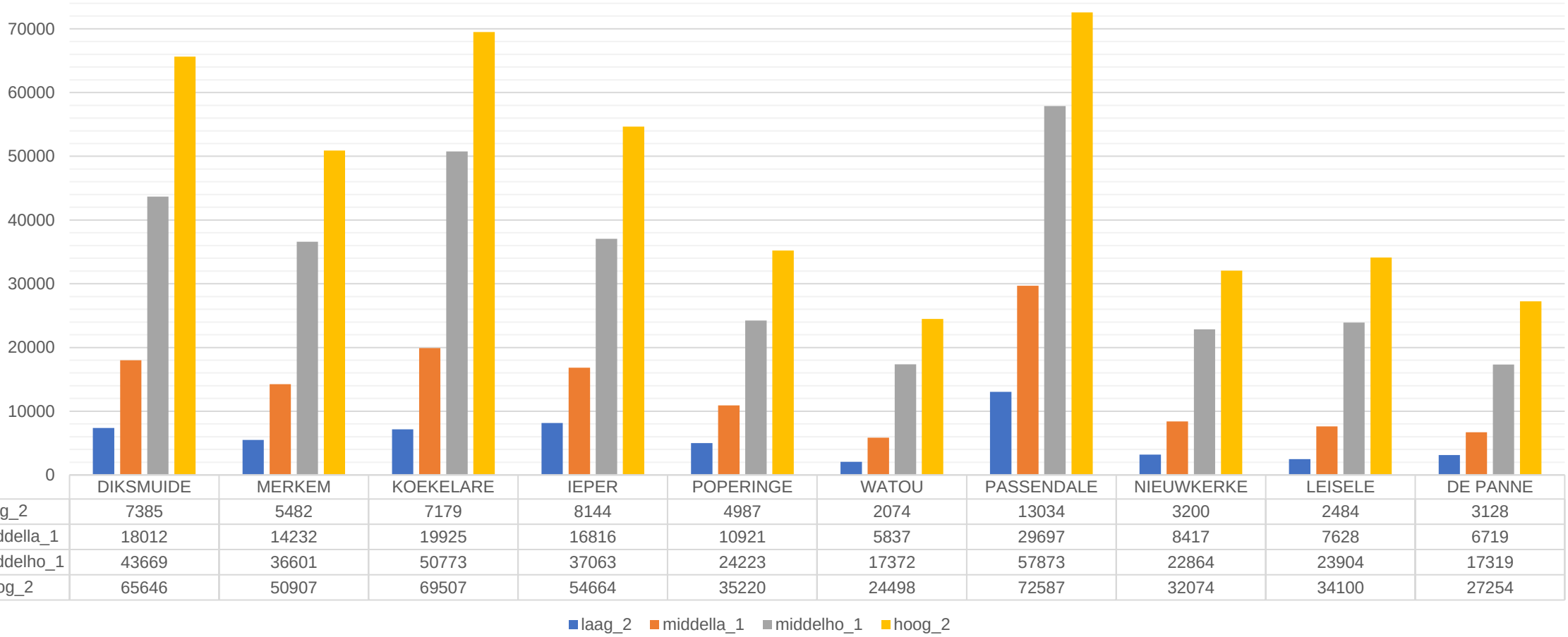
- Shows the extent to which the various measures provide a solution for low-income people
- Different impact of measures in the center of Eindhoven and the municipalities around

Job accessibility



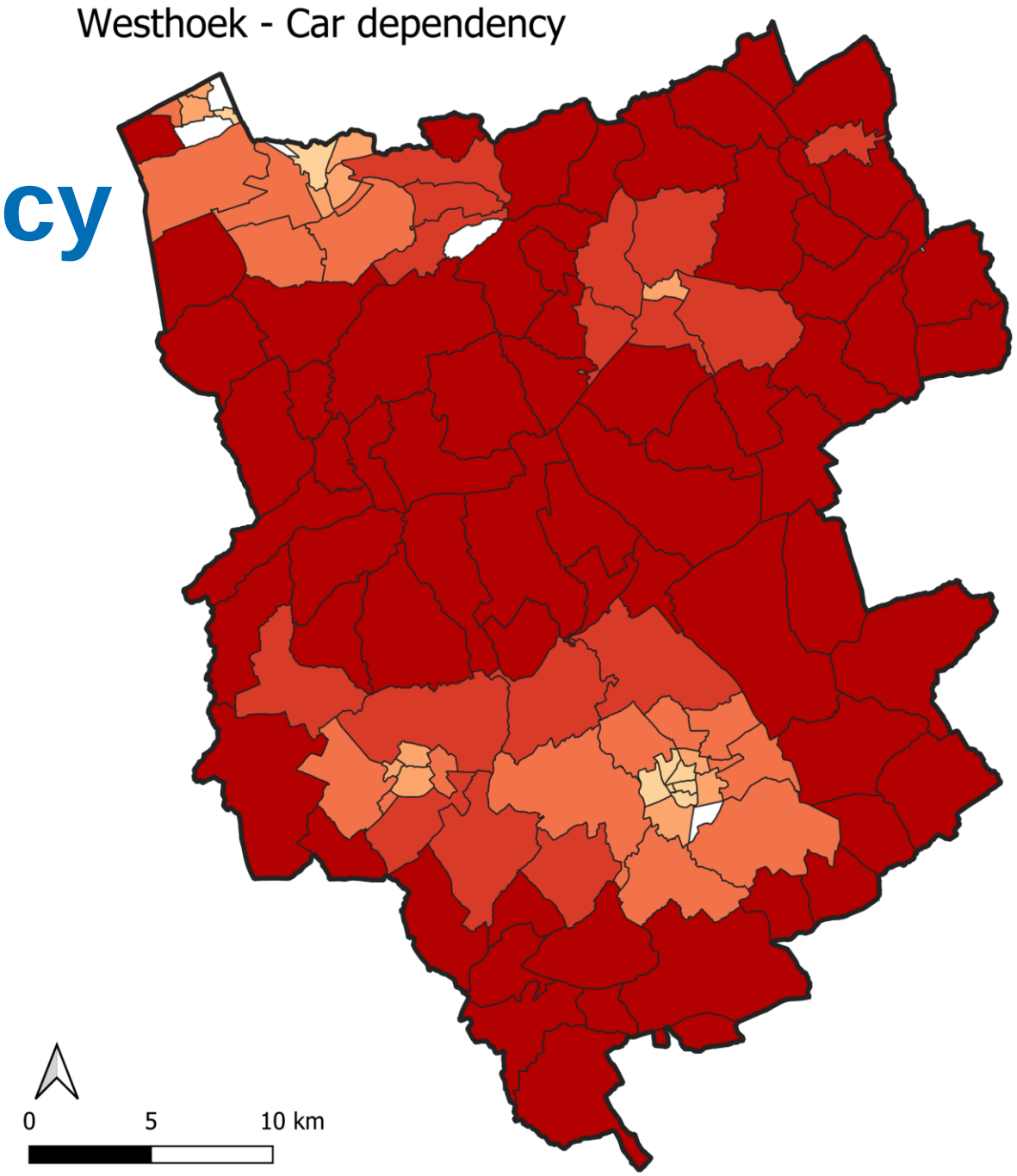
	DIKSMUIDE	MERKEM	KOEKELARE	IEPER	POPERINGE	WATOU	PASSENDALE	NIEUWKERKE	LEISELE	DE PANNE
Low	2962	5248	6981	5454	2701	2074	12517	3200	2484	2292
Middle low	10226	13940	19719	12329	6922	5837	29091	8417	7628	5416
Middle high	33950	36407	50681	32076	19348	17372	57557	22864	23904	15949
High	56363	50750	69451	50647	30776	24498	72301	32074	34100	26149

Job accessibility- effect of faster Public transport & Pricecap of 0.5euro



	DIKSMUIDE	MERKEM	KOEKELARE	IEPER	POPERINGE	WATOU	PASSENDALE	NIEUWKERKE	LEISELE	DE PANNE
laag_2	7385	5482	7179	8144	4987	2074	13034	3200	2484	3128
middella_1	18012	14232	19925	16816	10921	5837	29697	8417	7628	6719
middelho_1	43669	36601	50773	37063	24223	17372	57873	22864	23904	17319
hoog_2	65646	50907	69507	54664	35220	24498	72587	32074	34100	27254

Car dependency



Potential

IPOA can be used:

- On every issue where accessibility inequality is at stake:
  - public transportation concessions
  - urbanisation strategy
  - chain mobility
  - …
- Comparing policy measures
- Providing insight into mobility measures

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Thank you for your attention!

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27-28 NOVEMBER 2024

KARLSRUHE (DE)

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Baden-Württemberg
Ministry of Transport

Karlsruhe

Impact and design of Barcelona LEZ from a social justice perspective

Jordi Jové Palou, Àrea Metropolitana de Barcelona

Núria Pérez Sans, Institut Metròpoli

Index

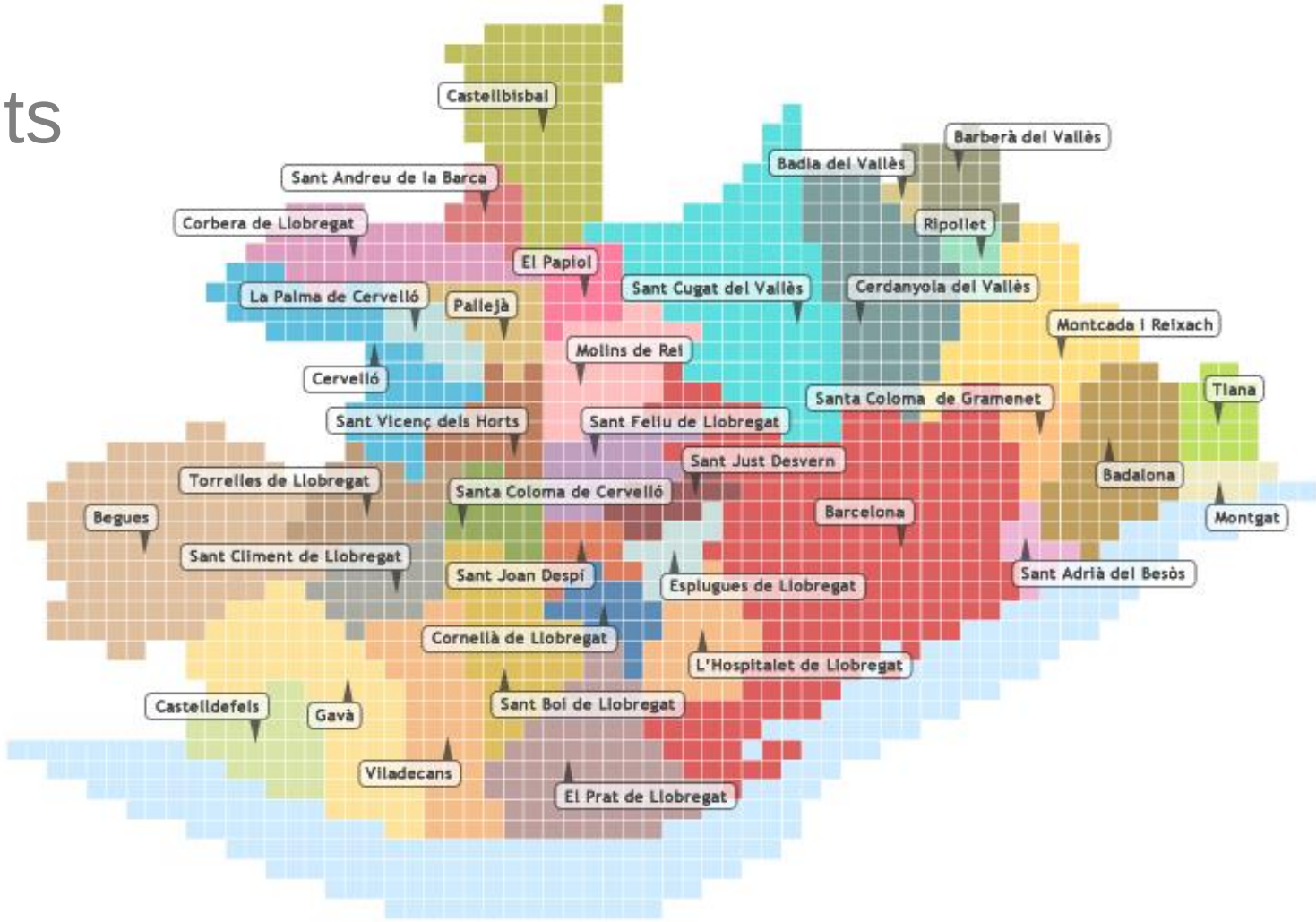
0. Introduction
1. The low emission zone
2. Social side: authorizations and exemptions
3. Social acceptance
4. Social impact according to income
5. Take-away messages

0. Introduction

3.239.337 inhabitants

36 municipalities

636 km^2



1. The low emission zone

The AMB, as an administration with competences in the protection of the environment and in mobility, has carried out initiatives, in collaboration with other administrations, to alleviate the effects of pollution on the health of the population.

In the Political Agreement for the improvement of air quality in the conurbation of Barcelona (2017) it was agreed to launch the *ZBE-Rondas de Barcelona* and, it established other LEZ not started.

- LEZ in Area 40 (Zone of special protection of the atmospheric environment)
- Metropolitan LEX (Municipalities of the AMB outside the ring of Barcelona)

On July 25, 2017, the AMB approved the conditions for traffic restrictions in the Low Emission Zone of the Ring of Barcelona in the event of a pollution episode from December 2017. On January 1, 2020, the ZBE Rondes de Barcelona came into operation permanently.

2. Social side: authorizations and exemptions

People

People on low incomes

Temporary authorisation for vehicles of low-income persons.

Daily permits

Registration of vehicles to be able to request up to 24 driving permits per year

Health

Medical conditions or disabilities

Vehicles for people with health requirements or recognized disabilities.

People with reduced mobility

For vehicles transporting people with reduced mobility.

Periodic medical treatments

Vehicles that transport persons to undergro periodic medical treatments within the ZBEs.

Business

Grace period for replacement

Vehicles replaced for a new one can have a temporary authorization to access in the ZBEs.

Professionals approaching retirement age

Vehicles in categories M2, M3, N1, N2 and N3 whose owners are retiring within five years.

Special vehicles

Adapted vehicles used for the provision of special services which need temporary access.

City life

Dynamic tests in repair whorkshops

Vehicles in dynamic tests in authorised maintenance and repair workshops.

Activities with municipal authorization

Vehicles with municipal authorization to provide service in singular activities or events on public roads.

Emergency services and other essential services

Medical services, funeral services, civil protection, firefighters, police and law enforcement agencies.

3. Social acceptance

- The **majority of respondents agree** that **pollution is a problem** in the metropolitan area of Barcelona.
- **Almost 45% claim to have changed some habit** to reduce pollution.
- **80% agree with placing traffic restrictions** on the most polluting vehicles (without an environmental label).
- **70% positively assess** the measure of traffic restrictions in **the ZBE**.

- 93% of respondents who have changed their vehicle have done so for a vehicle with a C, ECO or ZERO label
- **61%** of respondents **consider themselves satisfied or very satisfied** with the ZBE.
- **75%** of respondents say that **the implementation of the ZBE has not affected them**.

- **86%** of the people surveyed declare **that the Zone of Low Emissions** Rounds of Barcelona **has not affected them.**
- **Buying a vehicle with an environmental label** is the solution with the most answers, followed by **using public transport**. These two solutions make up 53% of the total answers

4. Social impact according to income

Data Source

- **Weekday mobility survey (Enquesta de mobilitat en dia feiner, EMEF) (official statistics):** Mobility flows on working days and sociodemographic profiles of the population over 16 years of age.
- **National Institute of Statistics (INE):** average income per consumption unit by census section of residence.

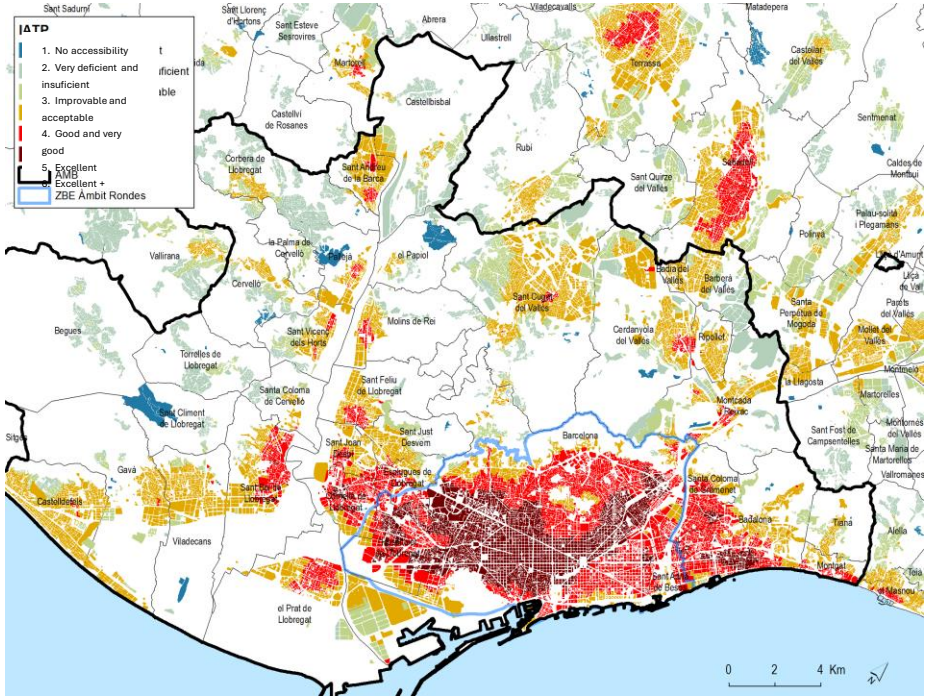
  3 residential areas according to population income (according to quintiles):
  - People living in low-income areas (1rst quintile)
  - People living in middle income areas (2nd, 3rd, 4th quintile)
  - People living in high income areas (5th quintile).
- **Public Transport Accessibility Index (IATP). Metropolitan Transport Authority (ATM).**
- **It doesn't include professional mobility related to freight transport and other professional sectors (1,5%, in 2019).**

Access to the document

4. Social impact according to income

Social perspective on mobility (context)

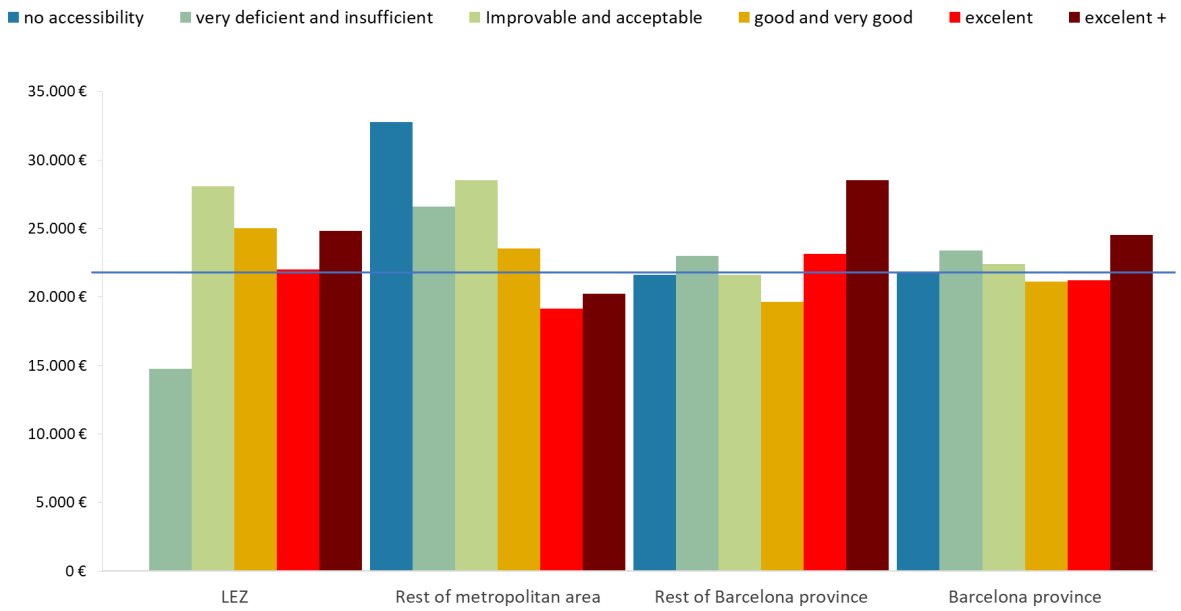
- 99% of the population residing in the LEZ has accessibility public transport levels between Good and Excellent.



Institut Metròpoli from Public Transport Accessibility Index (IATP). Metropolitan Transport Authority (ATM).

- A good public transport service can be a good redistributive mechanism (regardless of income, access to services can be guaranteed).
- In the LEZ area, better accessibility is not directly related to income.

Level of accessibility to public transport and median income level

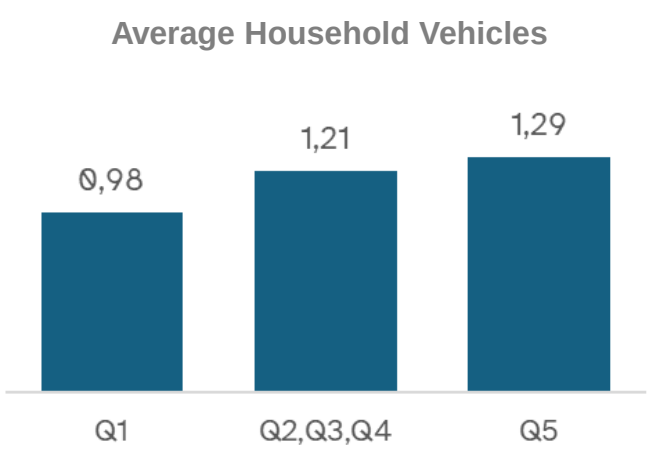


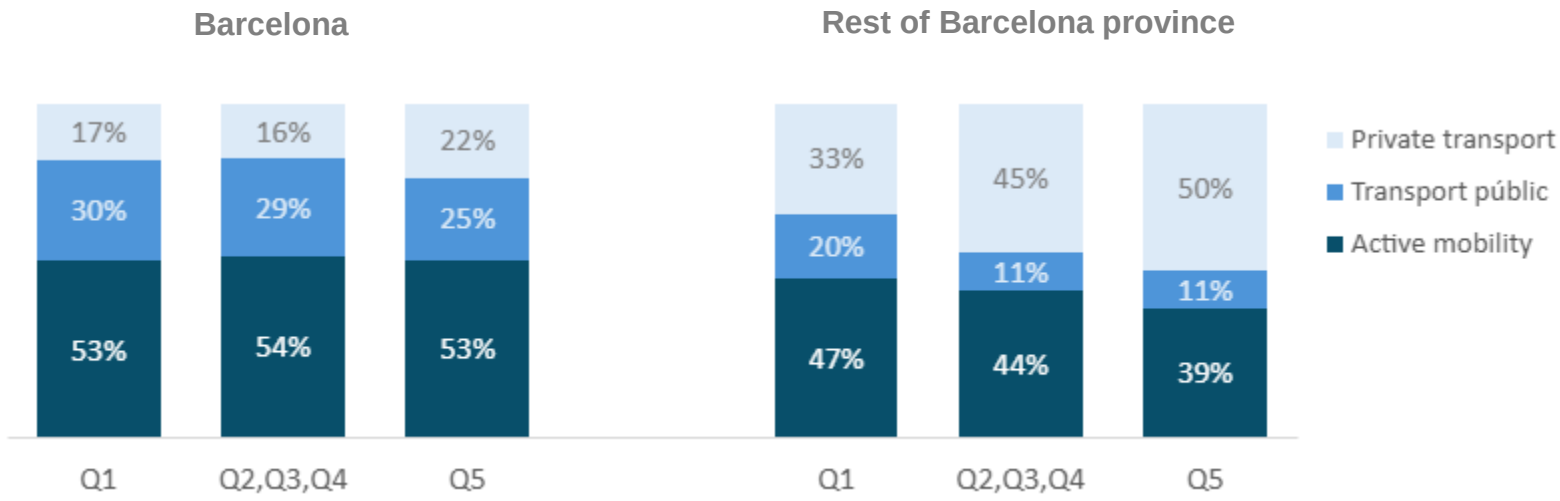
Font: Institut Metròpoli, from ATM, INE and Idescat.

4. Social impact according to income

Social perspective on mobility (context)

- Less income, less access to a driver's license and a private vehicle.
- The lower the income, the less use of private vehicles and more of public transport (particularly outside Barcelona city)





Institut Metròpoli, from EMEF 2019 (ATM, Institut Metropoli and Idescat) and INE (2019)

4. Social impact according to income

Impact of the ZBE according to income

- Only 1.2% people (58.000) residing in the province of Barcelona over the age of 16 were affected* by the restriction on movement (scenario 2019 – before implementation).
- The rest of the people travelled by authorised private vehicle (38%), 54% did not travel by private vehicle and 7% did not leave home.
- 86% of the affected people correspond to people with high or medium incomes.

	Q1	Q2,Q3,Q4	Q5
Total people (thousands)	778	2.890	1.021
People not affected (% of the total number)	99,0%	98,8%	98,6%
Affected people (% of the total number)	..	1,2%	1,4%

Instiut Metròpoli, from EMEF 2019 (ATM, Institut Metropoli and Idescat) and INE (2019)

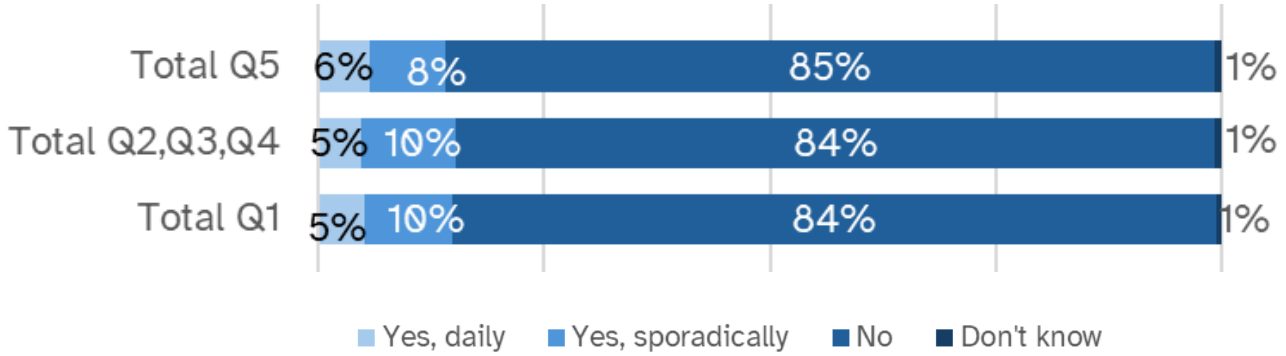
* Affected people:
- Step into the area of the LEZ Rondes: make a trip to or from the area of the LEZ
- In some of the stages of the journey he has used a private vehicle without an environmental label from the DGT
- It is carried out on a day and time when the restriction is active: working day and time slot between 7 a.m. and 8 p.m.

4. Social impact according to income

Impact of the ZBE according to income

- 15% of people living in the province of Barcelona say they have been affected by the LEZ (Scenario 2021 – after implementation, direct question).
- There are no substantial differences in the percentage of people affected according to income

Percentage of people who declare that they have been affected or not by the restrictions of the LEZ-Rondes according to socioeconomic class and place of residence.

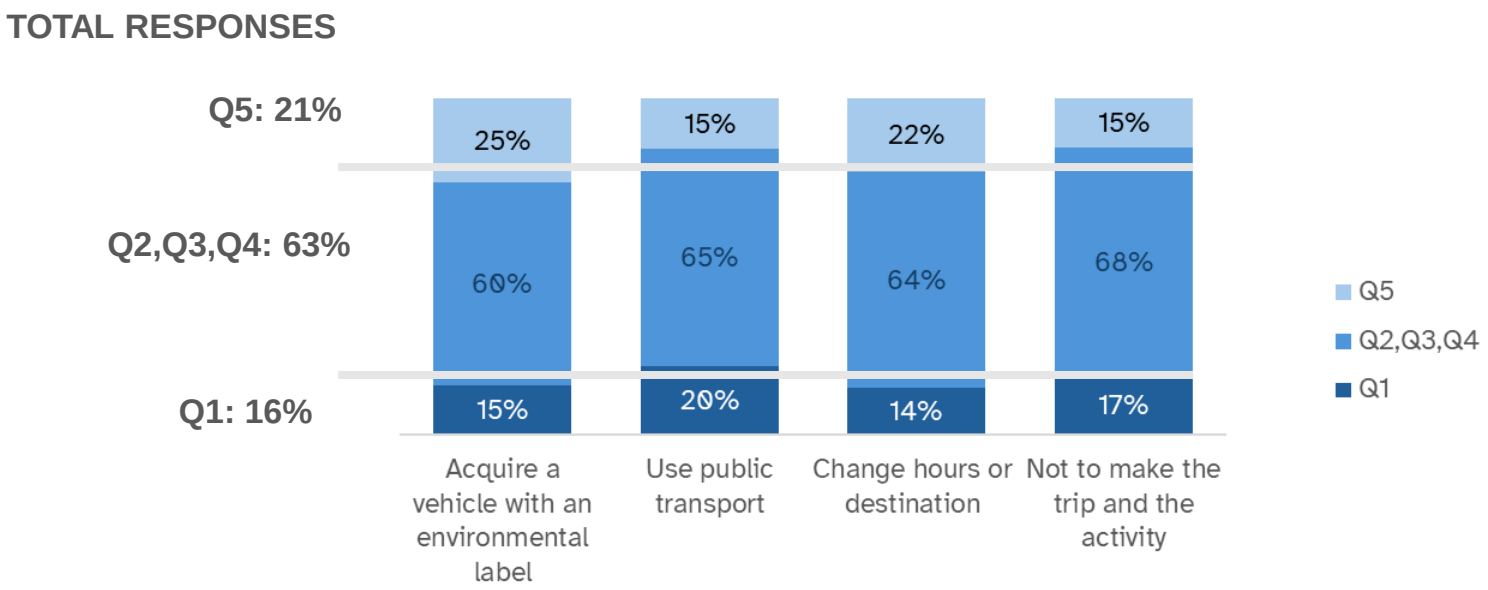


Instiut Metròpoli, from EMEF 2021 (ATM, Institut Metropoli and Idescat) and INE (2019)

4. Social impact according to income

Impact of the ZBE according to income

- The majority solution was to purchase a new vehicle with an environmental label (28%), but 25% switched to public transport (Scenario 2021 – after implentation, direct question)
- The solutions adopted to the problem are indicators of social inequalities: High incomes--> + Vehicle renewal
  - Middle and low incomes--> + modal change public transport



Instiut Metròpoli, from EMEF 2021 (ATM, Institut Metropoli and Idescat) and INE (2019)

5. Take-away messages

- In the Political Agreement for the improvement of air quality in the conurbation of Barcelona (2017) it was agreed to launch the ZBE-Rondes de Barcelona and, it established other LEZ not started.
- On January 1, 2020, the ZBE Rondes de Barcelona came into operation permanently.
- Most respondents agree that pollution is a problem in the metropolitan area of Barcelona.
- The Barcelona LEZ incorporates various **social aspects to ensure inclusivity and support for all residents**.
    - Among others, the social dimension of the policy design includes a tax rebate for daily driving authorizations for low-income persons, as well as exemptions from driving restrictions according to the needs of the users, the activity they perform, or the purpose of the trip.

5. Take-away messages

- The impact of the LEZ-Rondes de Barcelona on mobility – journeys and people **– has been rather low and transversal both in terms of social groups**.
- Despite having a **good supply in public transport**, the **majority solution has been to acquire vehicles with an environmental label** (28%) and switched to public transport (25%).
  - People living in affluent areas have renewed their vehicles more frequently than those in other population sectors. The solutions adopted to the problem are indicators of social inequalities: High incomes results in higher vehicle renewal, and middle and low incomes results in higher modal change public transport.
- Before assessing the impact of a measure such as the LEZ on income, it is necessary to have a good understanding of the context in which it is implemented:
  - Motorization, access to private vehicles and mobility patterns according to income, sociodemographic profile or transport public offer.
  - Urban social segregation of the population and accessibility to public transport.
  - Design of the measure (% vehicles affected).

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Baden-Württemberg
Ministry of Transport

Karlsruhe

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Navigating accessibility

Lisbon’s journey towards inclusive urban mobility solutions

Hugo Costa, Manuel Banza, Sofia Taborda

EMEL - Municipal Company for Mobility and Parking of Lisbon

28 November 2024

emel

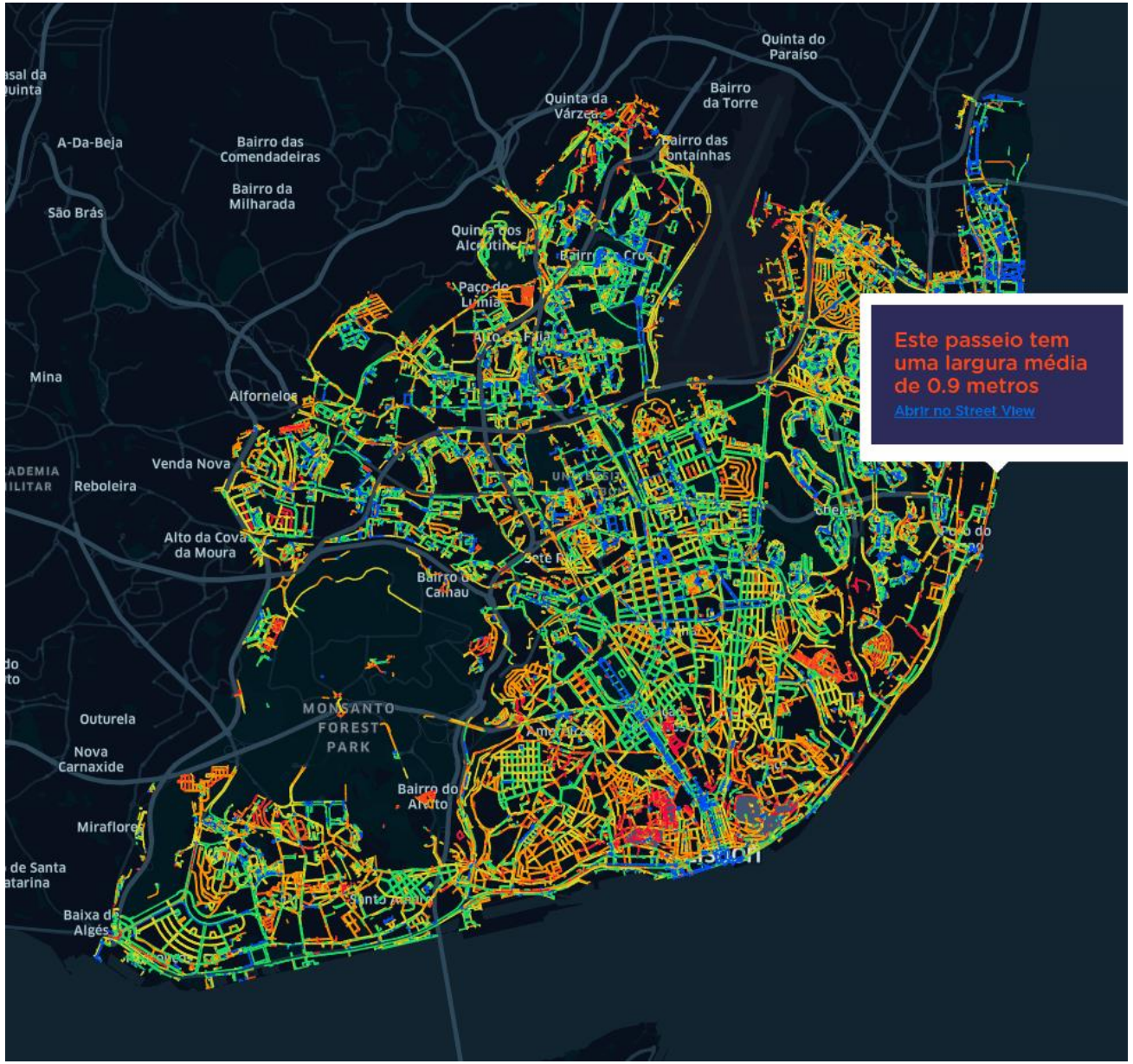
About the project

- deploy an operational data space to facilitate data access, pooling and sharing for more efficient, safe, sustainable and resilient transport
- through the development of a decentralised technical infrastructure and common governance mechanisms
- use cases in 9 cities and regions across Europe
- co-funded by the Digital Europe Programme

deploy
EMDS

Background

- an (open-source) model to calculate sidewalk gross width of all streets in the city of Lisbon
- for the identification of streets not in line with the recommendations of Lisbon's Pedestrian Accessibility Plan

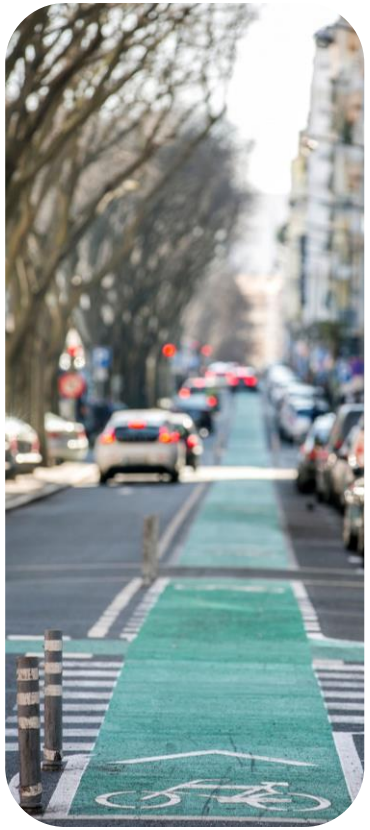


Goal

- build up layers of information to enrich the model
- harness data to:
  - enable reliable door-to-door route planning for People with Reduced Mobility (PRM)
  - better inform decision-making in Lisbon

How we are addressing the challenge






Methodology

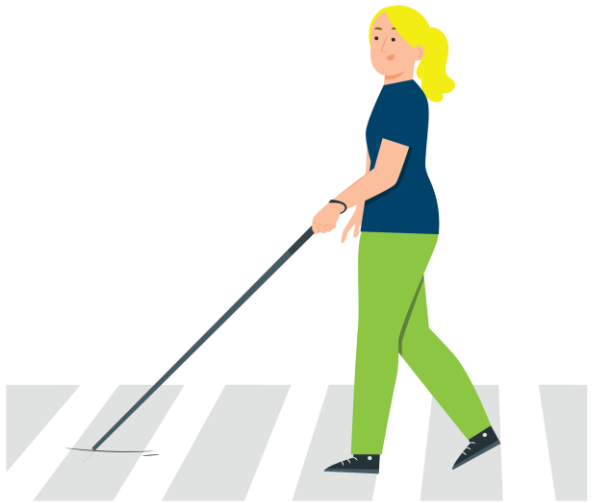
Literature review to outline of PRM groups according to their type of needs: physical, sensorial, cognitive

Consultation with PRM representatives to validate the approach

Experimentation with three different user groups to assess obstacles and barriers

Adopting a people-centred approach

- focus on both visible and invisible diversities
- select «extreme» use cases (or user groups) to maximise the range of specific needs



Blind people

Manual wheelchair users

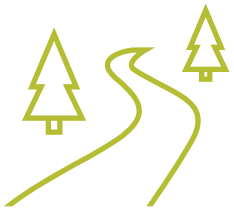
Neurodivergent people
(with visual and/or noise hypersensitivity)

Our method

- each user group will experiment a set of services through a list of predefined tasks
- gather all the data attributes necessary in the task
- this exercise will be carried out in two ways

Natural route

executed autonomously and without interference, adapted to their specific needs



Most efficient route

as close as possible to the recommended by a journey planner

Task

What will come next?

Gap analysis to understand data that needs to be generated

Harmonise and standardise (existing and new) data

Data sources will feed the visualisation map on and shared through the European Mobility Data Space

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MOBIEL21
SETTING PEOPLE IN MOTION

Cycling Mothers Paving the Way to Safer, Inclusive Cycling

28/11/2024
Elke Franchois
Project Leader | Mobiel 21 (Belgium)

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Any parents in this room?

Parents drive transport choices with safety in mind

- Parents play a crucial role in choosing the **means of transport** and route to school.
- Parents are key figures in **teaching cycling and traffic skills**.
- Parents' **sense of safety** is decisive in how children travel to school.

Belgian moms feel unsafe

Data City Monitor Leuven

- Women agree less than men that they can **cycle safely** in Leuven.
- Women agree less than men that the **traffic in their neighbourhood** is safe enough for children to go to school alone.
- Women agree more than men that cars, trucks and motorbikes **drive too fast** in their neighbourhood.

Belgian moms feel unsafe

Sustainable mobility survey by Mobiel 21

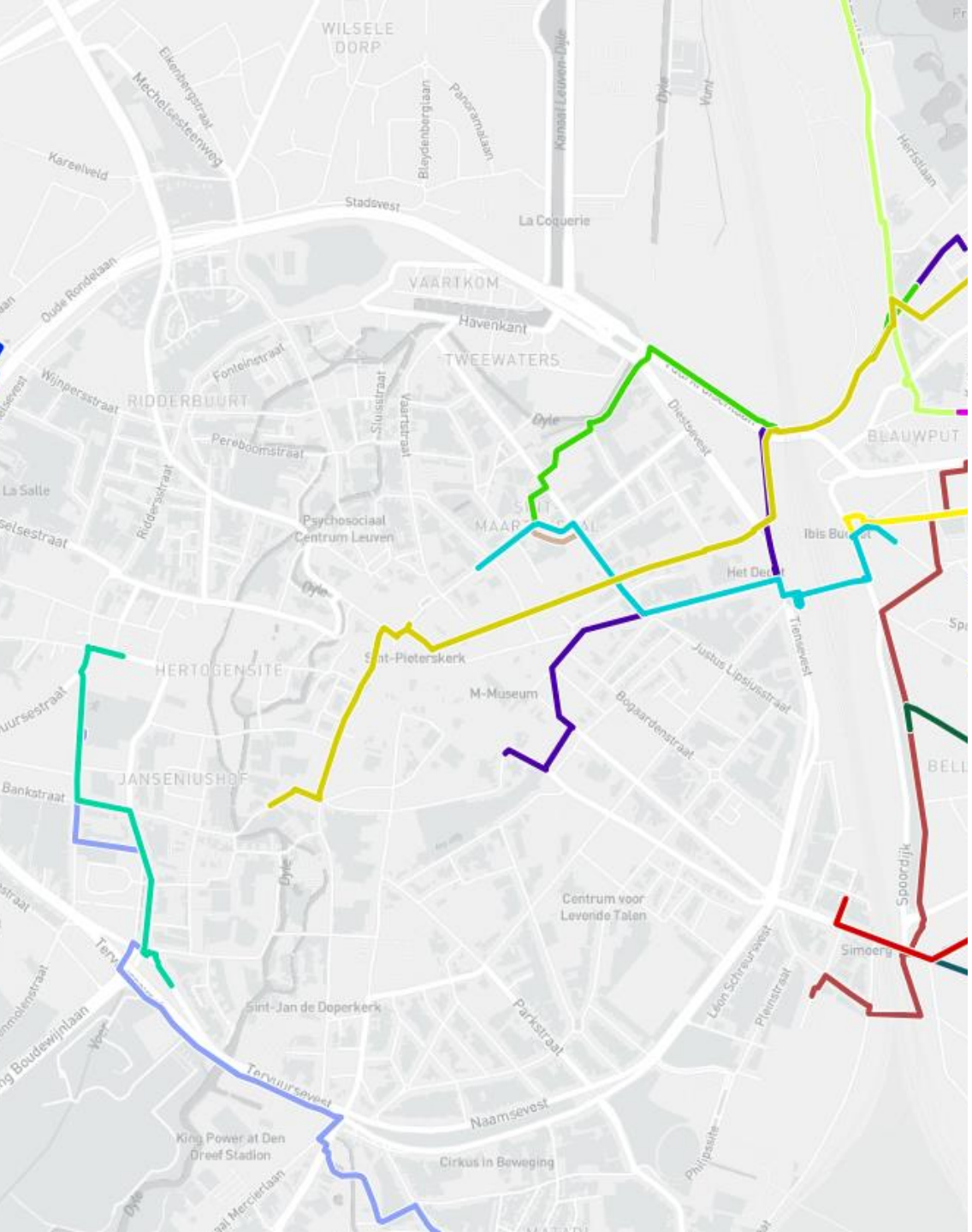
- 18% of all respondents indicate ‘**unsafe school environments**’ as one of the top three problems in mobility.

- 41% of **women with children under 12** indicate unsafe school environments as the most important mobility problem, ranking it second after ‘traffic unsafety’.

Cycling mothers lead the way

How can we **remove barriers** for children to cycle independently with confidence?

Let’s follow the journey of our cycling moms!



Customer Journey Mapping

- **18** diverse participants
- Preliminary **telephone intake**
- **Bike ride** in the morning together to school
- Scoring **5 contact points** along the way
- **In-depth interviews** right after the bike ride

MOBIEL21
SETTING PEOPLE IN MOTION

1

Getting the kids ready to go

SCHOOL

2

SCHOOL

Crossing an

3

Too little space for cyclists of different speeds

SCHOOL

4

Motorised vehicles closeby in mixed traffic

SCHOOL

5

Unclear traffic signs and rules along the way

SCHOOL

Impatience and stress in morning rush

6

SCHOOL

7

SCHOOL

Arriving in a chaotic but safe haven

“The end of the road is not the end of the journey”

Policy recommendations

- Create protected or **separated cycle paths**
- Make intersections and **crossings conflict-free**
- Prioritise **low-traffic streets**
- **Reduce the speed** of motorized traffic
- Avoid mixing **heavy traffic** with bicycle traffic
- Ensure unambiguous regulations and **clear signage**
- Create **campaigns** to increase understanding, amongst all road users, of the different types and speeds of cyclists
- **Communicate** about traffic rules that protect cyclists, and ensure that those rules are properly enforced

MOBIEL21
SETTING PEOPLE IN MOTION

Get ready for the sequel!

Funded by

all for zero

MOBIEL21
SETTING PEOPLE IN MOTION

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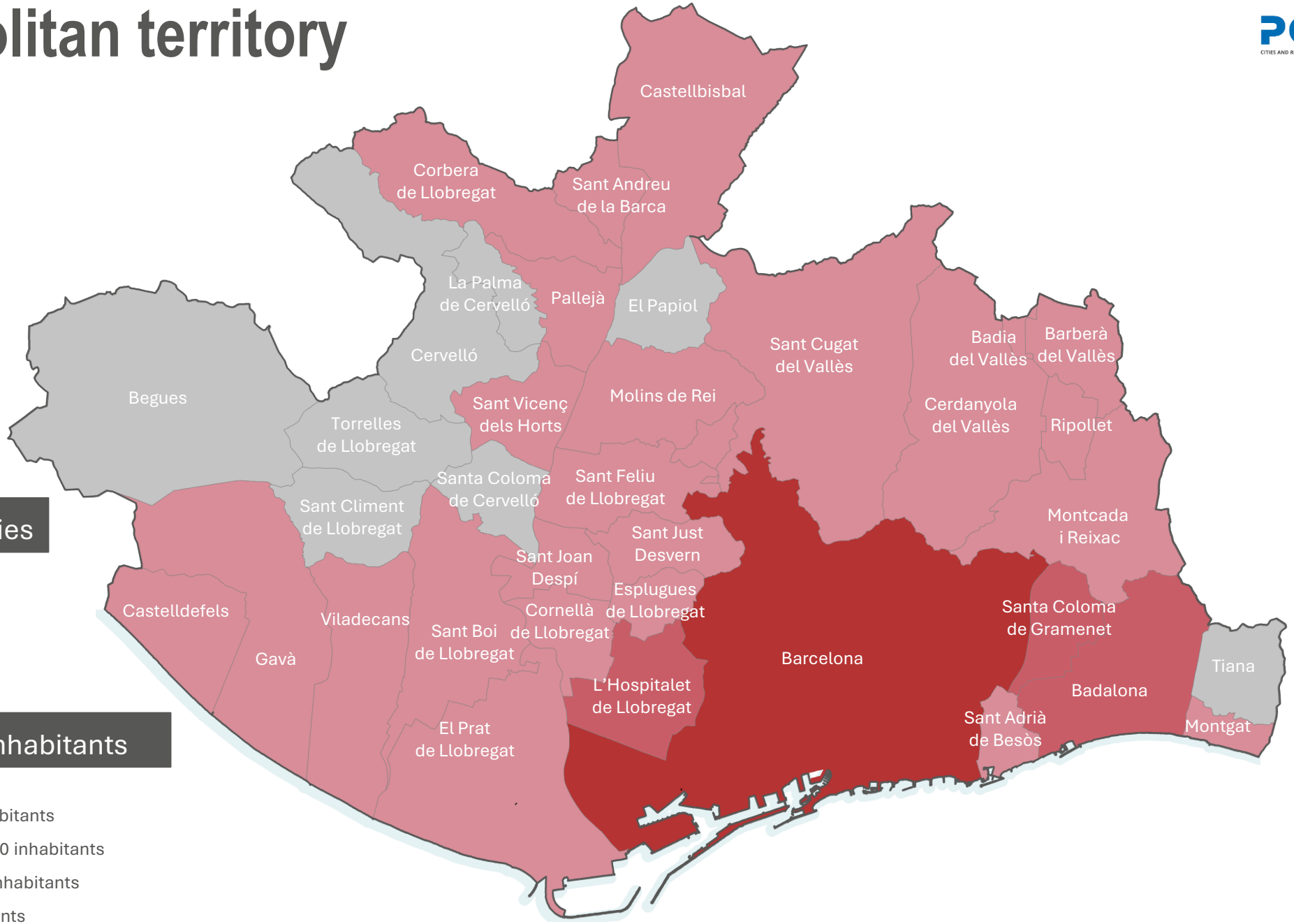
Session 4D. Discovering the Dimensions of a Just Transition

Adding a feminist perspective into AMB's transport and mobility policies

AMB Àrea Metropolitana de Barcelona

Metropolitan territory



36 municipalities

636 km²

3.35 million inhabitants

More than 1,000,000 inhabitants

From 100,000 to 1,000,000 inhabitants

From 10,000 to 100,000 inhabitants

Less than 10,000 inhabitants

11.2 M
daily trips of metropolitan area of Barcelona's residents (2022)

754 M
metro and bus passengers

545 km
Bicivia network

74.9 %
sustainable mobility trips

5,534
bus stops

- Collective urban public surface transport
- Underground public transport service
- Planning and administrative operation of the Taxi service
- Metropolitan Urban Mobility Plan
- Planning and management of cultural and tourist transport
- Promotion of sustainable transport and mobility
- Traffic programming in the basic road network

239
bus lines

Direct management
TMB Transports Metropolitans de Barcelona

Indirect management
Soler i Sauret
Baixbus
avanza
moventis
TUSOsal
MONBUS

8
metro lines

Direct management
TMB Transports Metropolitans de Barcelona

10,517
taxi licenses

Administrative licenses
AMB Taxi

Data for the year 2023

What does “the feminist view” means?

What is “La Mirada” in the Mobility, Transport and Sustainability Department in AMB?

Why?

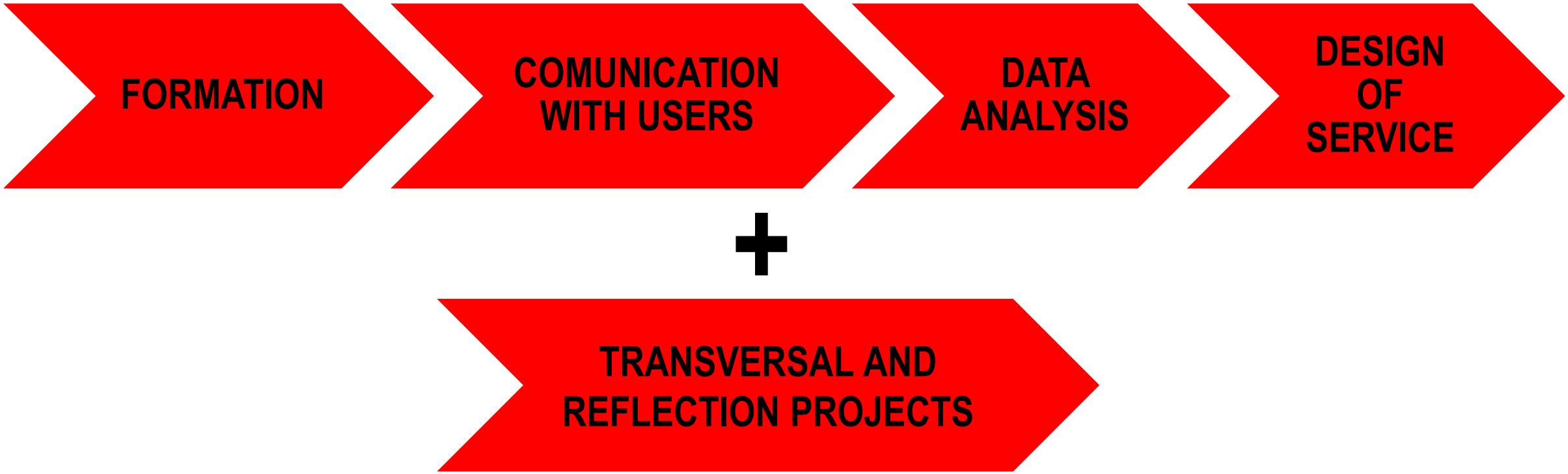
Because we are the Public Administration responsible for mobility services and public transport in the Barcelona Metropolitan Area, motor of the society daily movement.

Who?

A group of 6 women, mobility engineers and a legal technician working in AMB that dedicate part of our job on improving mobility and transport with feminist perspective. (Starting in July 2020)

"THE BUS IS OURS!"

What do we do?


FORMATION
COMUNICATION WITH USERS
DATA ANALYSIS
DESIGN OF SERVICE
+
TRANSVERSAL AND REFLECTION PROJECTS

FORMATION

FORMATION FOR PERSONNEL OF BUS OPERATORS

PREPARATION OF EDUCATION PROGRAM IN PROJECTS WITH GENDER PERSPECTIVE FOR PEOPLE OF THE MOBILITY AND TRANSPORT DEPARTMENT

COMUNICATION WITH USERS

COMMUNICATION CAMPAIGN (*in progress*)

INCLUSIFY (EIT project) → COMUNITY "AMBVOSALTRES"

Consorci: AMB Àrea Metropolitana de Barcelona · ierm · AMB INFORMACIÓ · WeSolve BETTER TOGETHER · WALK21

DATA ANALYSIS

METROPOLITAN SURVEY TO WOMEN AND NON-BINARY PEOPLE ABOUT CYCLING MOBILITY

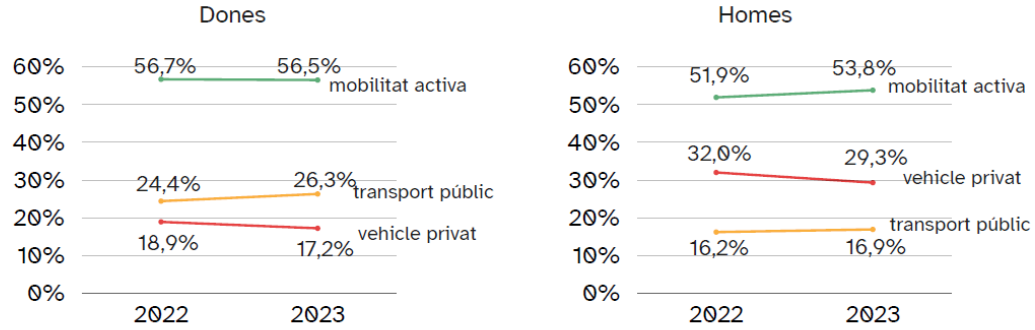
ANALYSIS OF METROPOLITAN INDICATORS ABOUT FEMINIST MOBILITY

Institut Metròpoli

Una mirada de gènere en les polítiques de mobilitat de l'AMB

Indicadors metropolitans de mobilitat amb perspectiva de gènere. Una aproximació a partir d'infografies

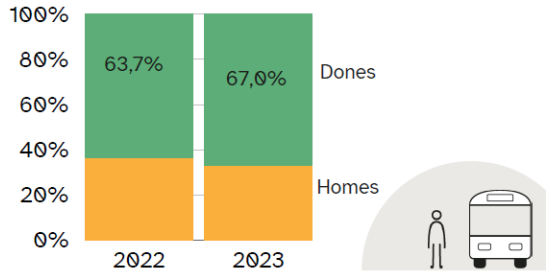
Distribució modal dels desplaçaments



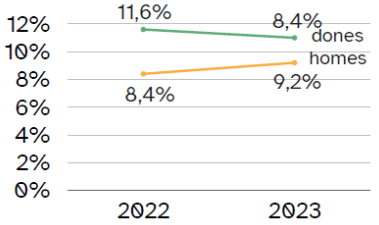
Distribució percentual dels desplaçaments per l'ús del mitjà de transport, respecte el total desplaçaments de cada sexe

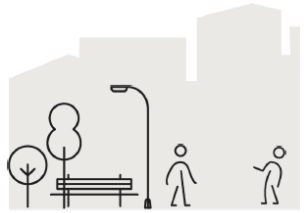
Font
Enquesta de mobilitat en dia feiner (ATM, Idescat i Institut Metròpoli), 2023

Usuàries del servei de bus metropolità diürn AMB



Percepció d'inseguretat/perill al transport públic





Proporció de dones i homes que relaten sentir inseguretat o perill quan es desplacen en transport públic

Font
Enquesta de Victimització de l'Àrea Metropolitana de Barcelona (EVAMB), 2022 i2023

DESIGN OF SERVICE

SUPPORT TO THE ACCESSIBILITY PLAN OF THE METROPOLITAN BUS NETWORK

METROPOLITAN STRATEGY FOR AN ACCESSIBLE AND INCLUSIVE BUS NETWORK

1. New accessibility management model
2. Consider accessibility as part of quality of service
3. Information and communication technologies
4. Improve bus stops accessibility
5. Identify and improve accessibility on buses
6. Information about metropolitan bus network to users and other experts
7. **Actions for a more inclusive metropolitan bus service**

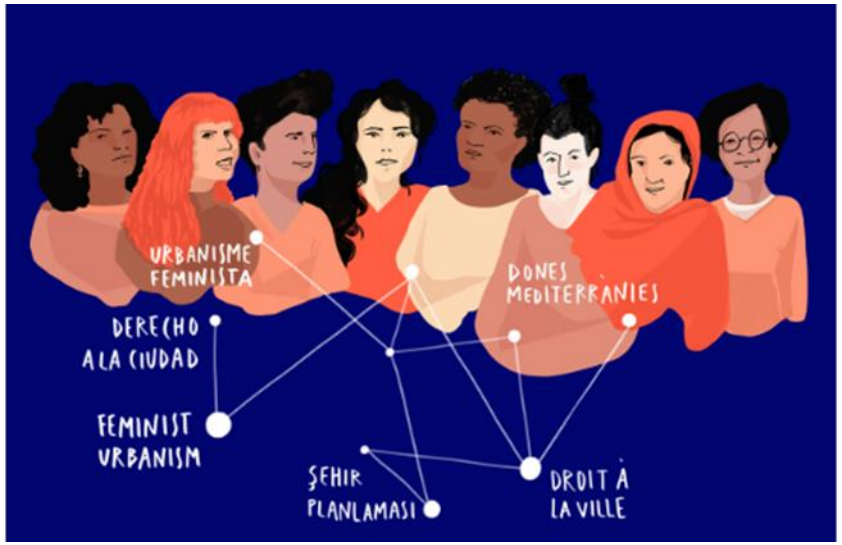
"STOP ON DEMAND" SERVICE FOR WOMEN AND YOUNGERS IN NIGHT BUS SERVICES

BETTER LIGHTING OF BUS STOPS

TOILETS FOR BUS DRIVERS AT THE END OF EACH LINE

TRANSVERSAL AND REFLECTION PROJECTS

MEDITERRANEAN WOMEN URBANISTS NETWORK



PARTICIPATION IN THE CATALAN HARASSMENT PROTOCOL IN PUBLIC TRANSPORT (ATM)

ATM Àrea de Barcelona
Autoritat del Transport Metropolità

3. Pla contra l'assetjament sexual al transport públic

www.amb.cat

lamirada.mobilitat@amb.cat

AMB Àrea Metropolitana de Barcelona

MyFairShare

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MyFairShare –

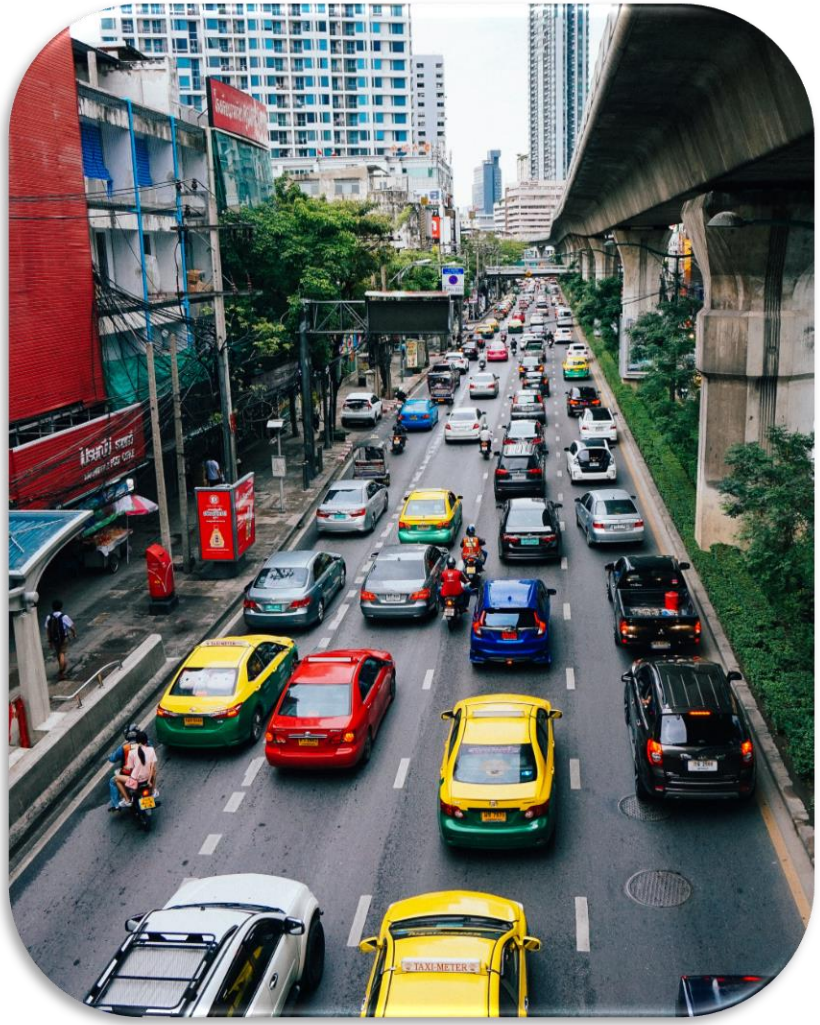
Individual mobility budgets as a foundation for social and ethical carbon reduction

Kristin Tovaas, AIT Austrian Institute of Technology

Florian Lorenz, Consultant for Postcarbon Urbanism

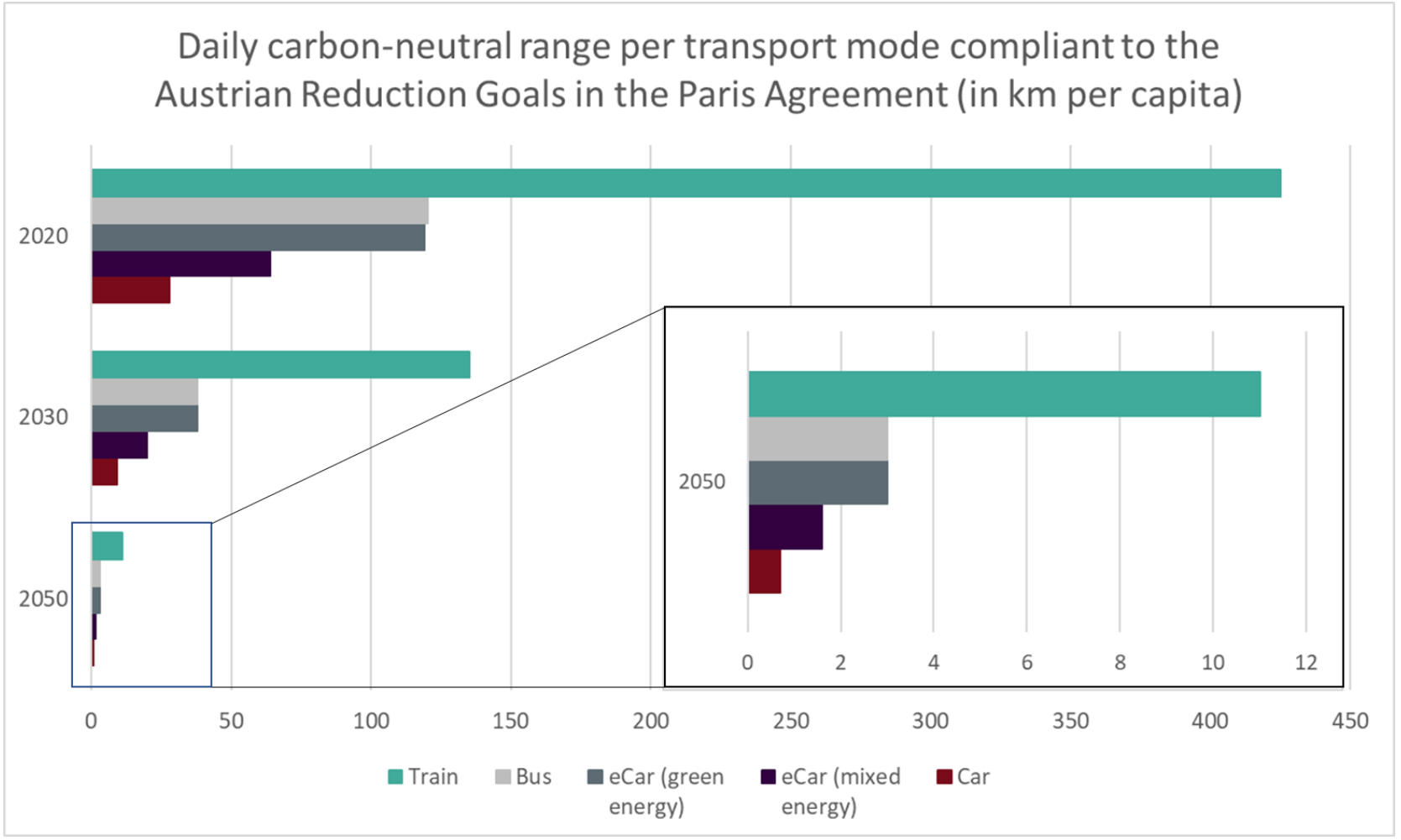
The challenge

- We've become an **increasingly mobile society**
- Resulted in **little to no success in reducing overall emissions or narrowing the gap** between the mobility privileged and the mobility disadvantaged



A thought experiment…

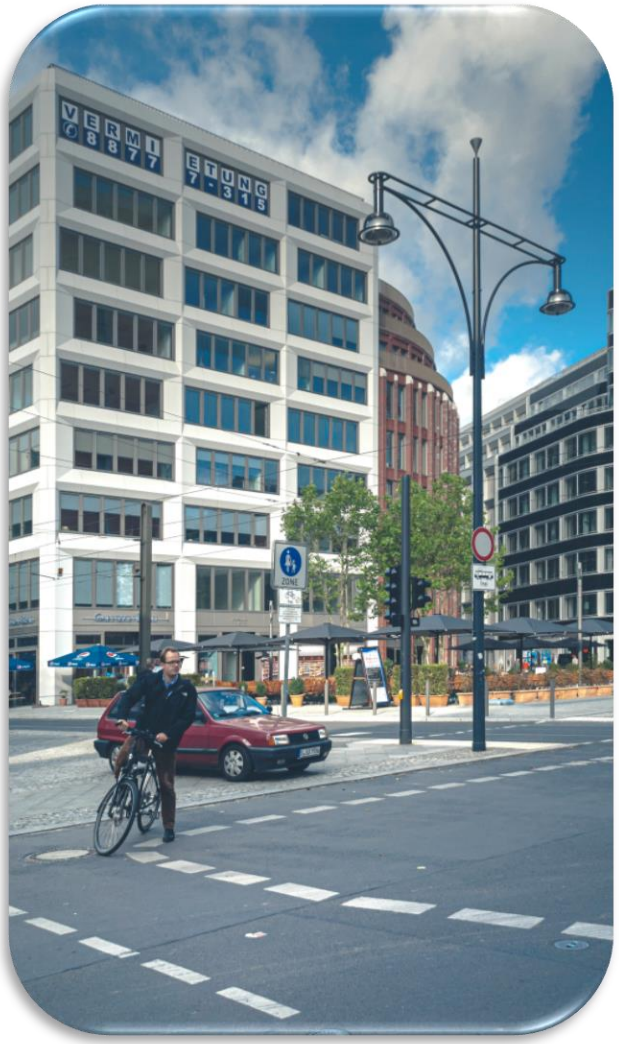
How far could we travel per day with specific transport modes if **the 2050 decarbonisation targets** were mandatory...



Source: MOBALANCE project

The call to action

What does it take to **design a climate-compatible mobility system** while at the same time **satisfying people's needs**?



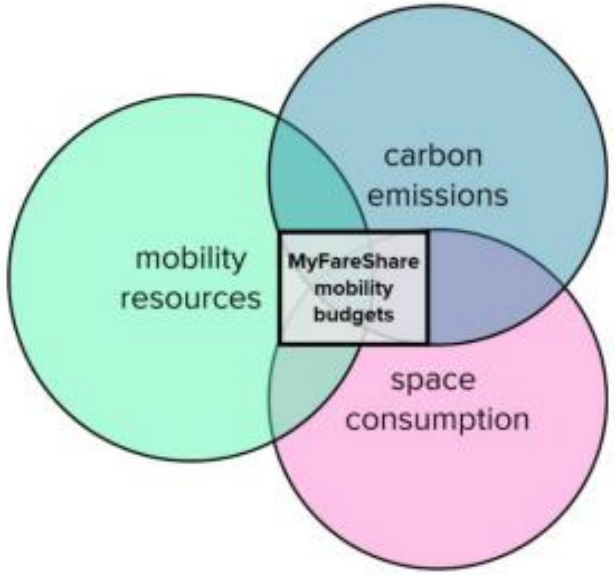
Answering the call

We need to **shift our perspective** on mobility: from accessibility to transport, to **accessibility to essential everyday activities** (e.g. living, working, learning, caring, supplying and enjoying).

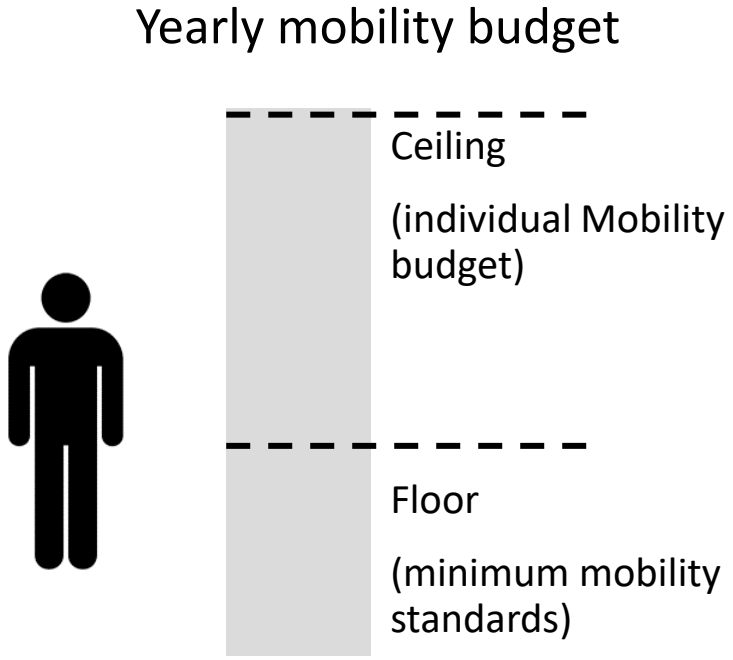
Fairness as the guiding principle

A focus on fairness accounts for **group-specific activity spaces**, their **typical sets of everyday life functionalities** and **acceptable travel time budgets** as the basis for developing transport policies for a sustainable and just transition.

What if each of us had a mobility budget?



Source: Philipp Rode



*The upper limit is defined by how much **transport emissions we can „afford“** per person per year*

*The lower limit is defined by **how much emissions have to be accepted** for a person to reach the nearest everyday funcitonalities.*

MyFairShare

Instruments for establishing fair accessibility

MyFairShare Minimal Budget Viewer

This Shiny App is part of the MyfairShare Project

Define Input Variables

Predefined Groups

Choose a predefined group: Average of all

Weekly number of trips per activity

Work	10
Education	0
Shopping	8
Errand	2
Leisure	6

Number of reached places

Work 100 (3,000)

Education 1 8 30

Shopping 1 2 30

Errand 2 10 60

Leisure 5 30 150

Modes available

Foot Bike Public Transport Bike&Ride Park&Ride Car

Travel time adjustment for selected group - values in %

foot	bike	pt	car
100	100	100	100

Predefined maximal travel times

Choosepredefined Traveltimes: 15 min foot, 20 min bike, 45 min PT

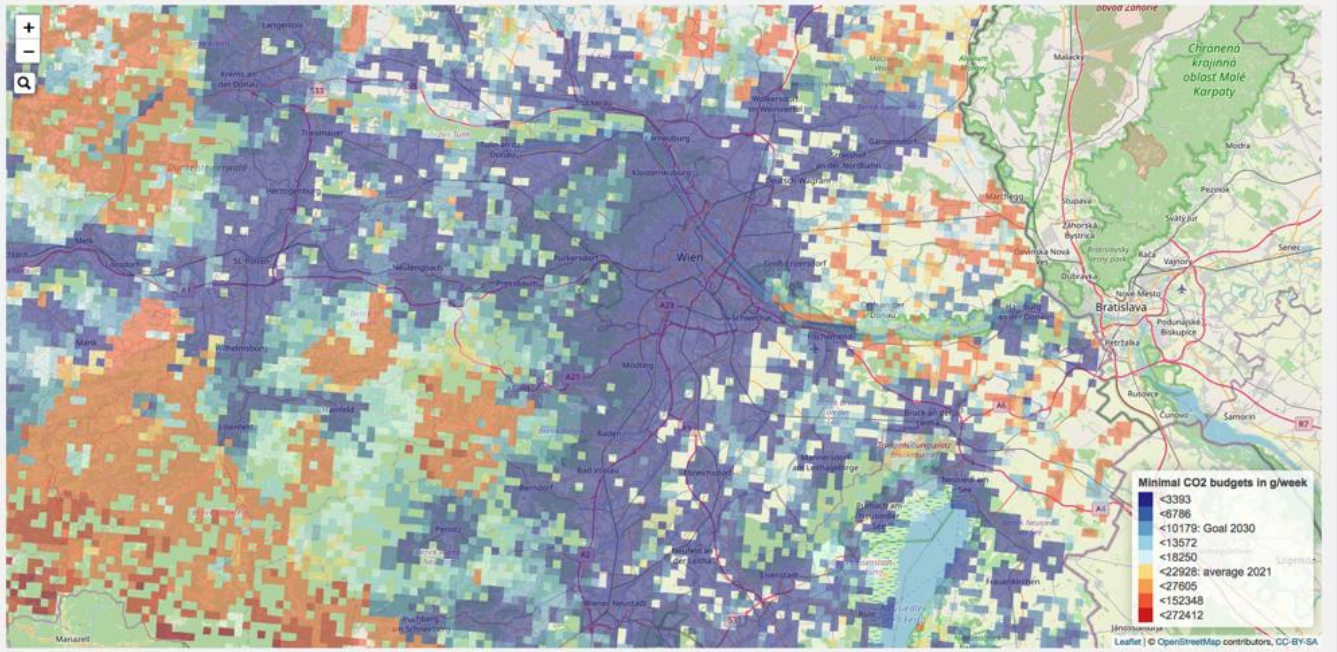
Maximal Time allowed per activity in each mode in minutes

	foot	bike	pt	car	bnr	pnr
work	15	20	45	26.76	45	45
education	15	20	45	28.88	45	45
shopping	15	20	45	15.29	45	45
errand	15	20	45	21.08	45	45
leisure	15	20	45	37.02	45	45

Minimal Budget Map

Information shown in map: Mininmal GHG budget | Travel Time | Population in cluster | Work places in cluster | Schools in cluster | Facilities for errands in cluster | Shopping facilities in cluster | Leisure facilities in cluster

Choose a living lab to view: Living Lab 01: Vienna — Update map



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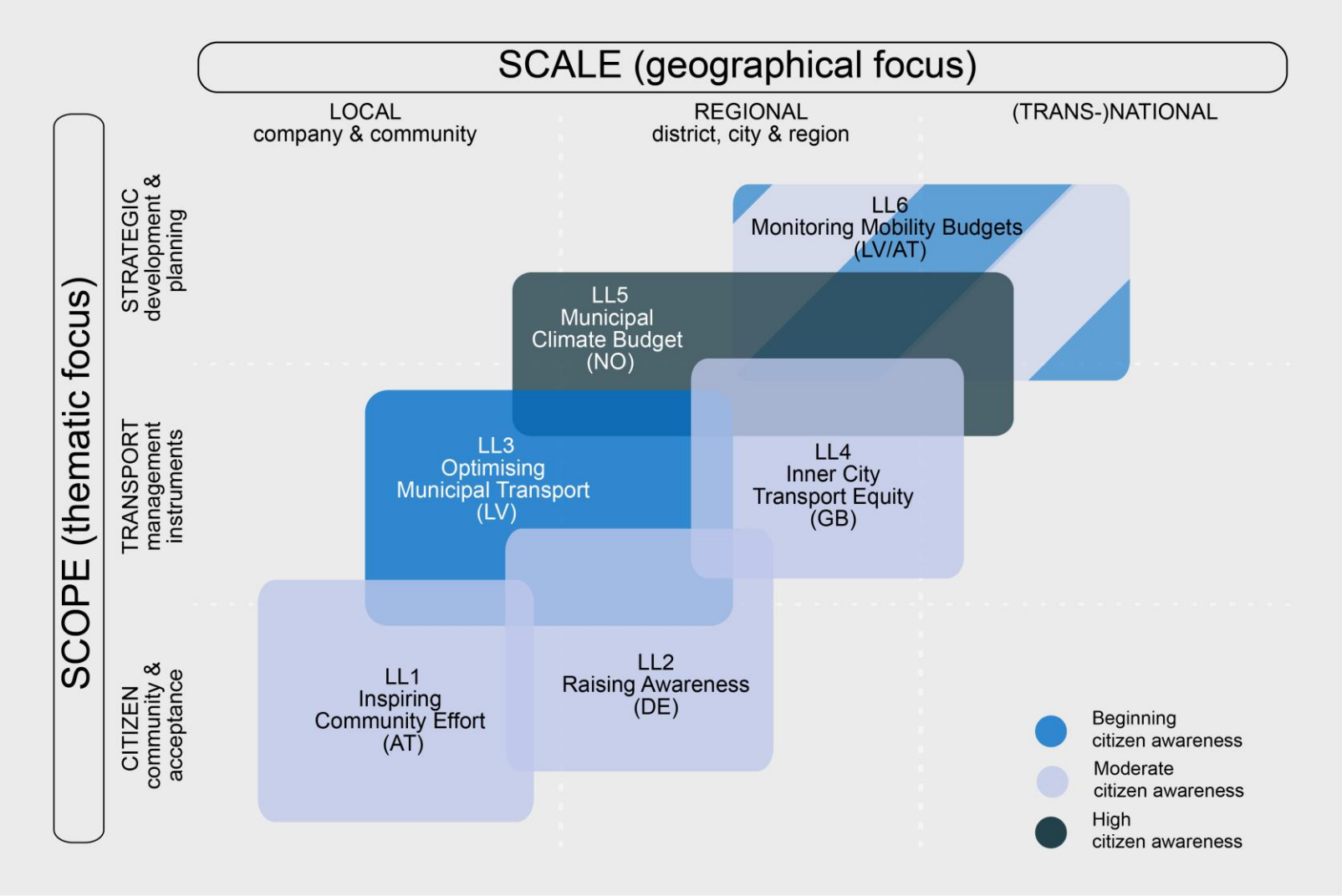
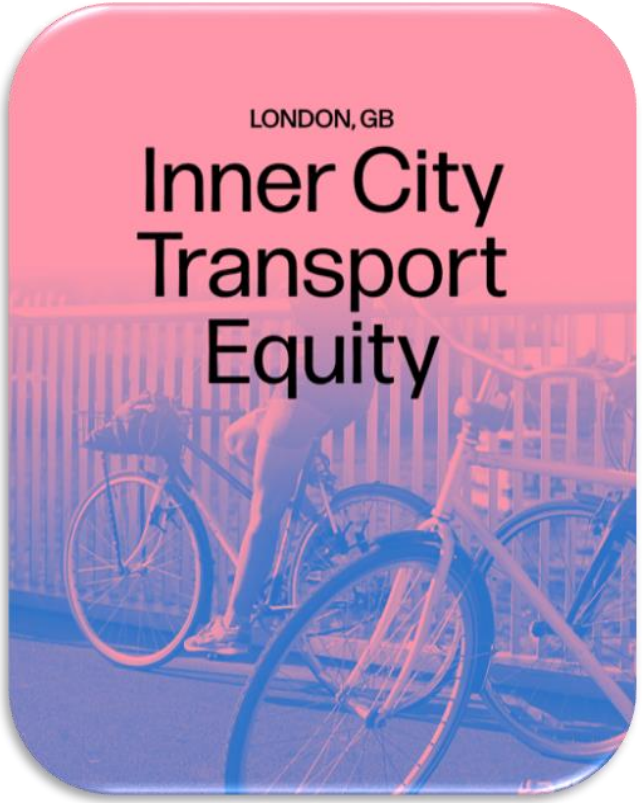
Living Lab Approach



Findings from Living Labs – London/GB

- Empirical, mixed-method study based on theories of social justice, transport equity, and planned behaviour.
  - Empirical element of the study conducted a representative survey and analysed existing datasets
  - The Living Lab experiment was structured around a citizens' jury, mobile application (app) tracking and engagement, and in-depth interviews
- Main results
  - Lack of sense of fairness can lead to resistance from the community
  - To activate stakeholders, it is important to establish a shared understanding of the concept of fairness.
  - One method that could ensure this, would be using citizen juries. These juries should be diverse to accurately represent the community's reality and lifestyle and ensure a fair and inclusive process.



Findings from Living Labs – Vienna/AT

- Study design: behavioural, observational and participatory
  - Four-weeks experiment with three test groups
  - Scenarios: baseline, economic-budget and carbon-budget
  - Scenario modelling (2023, 2030 and 2040), self-assessment surveys, mobility-data collection via mobile phone app, concluding Consensus Conference
- Main results
  - Information alone is not sufficient to change behaviour (in the short study period) > structural conditions need to change
  - Fairness aspects are centre for participants when discussing implementation of individual mobility budgets
  - Measure should be accompanied by lasting communication that appeals to existing interests of the targeted stakeholders.
  - The Consensus Conference is a promising format for engaging civic stakeholders in proactive, mutually enforcing, co-productive ways.

Key Policy Takeaways

Carbon budgets help shifting from „access to mobility“ to “access to everyday functions”

Improving local accessibility to reduce public investment and maintenance costs, climate impacts and social costs

Supporting participation and public debate increases acceptance, consensus and active contribution

MyFairShare

www.myfairshare.eu/guidance

An **evidence-based decision support** for **selecting the most effective instruments** to implement Individual Mobility Budgets.

Fact Sheets:

- Individual Mobility Budgets
- Communicating Mobility Budgets
- Mobility Budget Planning Scenarios
- Dealing with Ripple Effects

MyFairShare – A Collaborative Effort

AIT Austrian Institute of Technology GmbH

University of Natural Resources and Life Sciences

Florian Lorenz, PR-Consultant

Urban Europe

European Comission

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ERA-Net

German Aerospace Center / Deutsches Zentrum für Luft- und Raumfahrt e.V.

Latvia University of Life Sciences and Technologies

University of Latvia

Austrian Research Promotion Agency (FFG)

Federal Ministry Republic of Austria Climate Action, Environment Energy, Mobility, Innovation and Technology

Federal Ministry of Education and Research

London School of Economics and Political Science

Institute of Transport Economics / Transportøkonomisk institutt

Latvian Council of Science

The Research Council of Norway

Economic and Social Research Council (ESRC)

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Baden-Württemberg
Ministry of Transport

Karlsruhe

Interreg North Sea

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SMALL

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Shared Mobility for All

POLIS Conference 2024 - 28/11

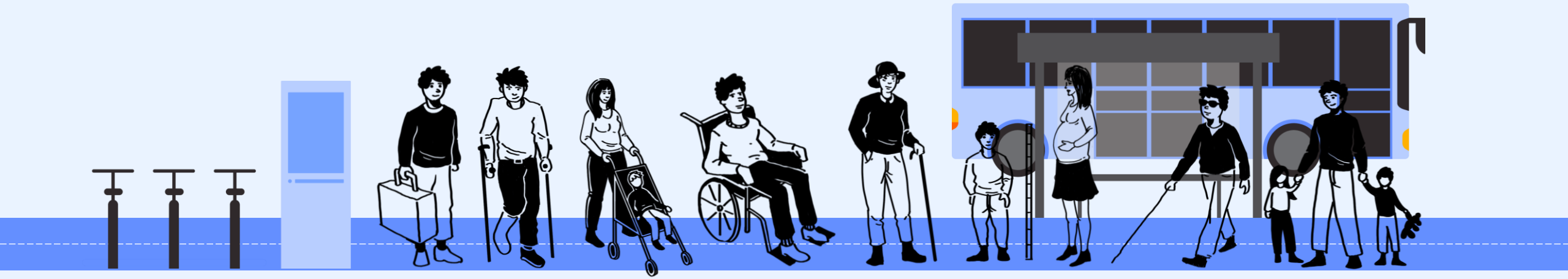
Esen Köse & Sami Angsthelm

Know your users

When you think of people with reduced mobility, you mainly think about them

but there are many more people who have reduced mobility

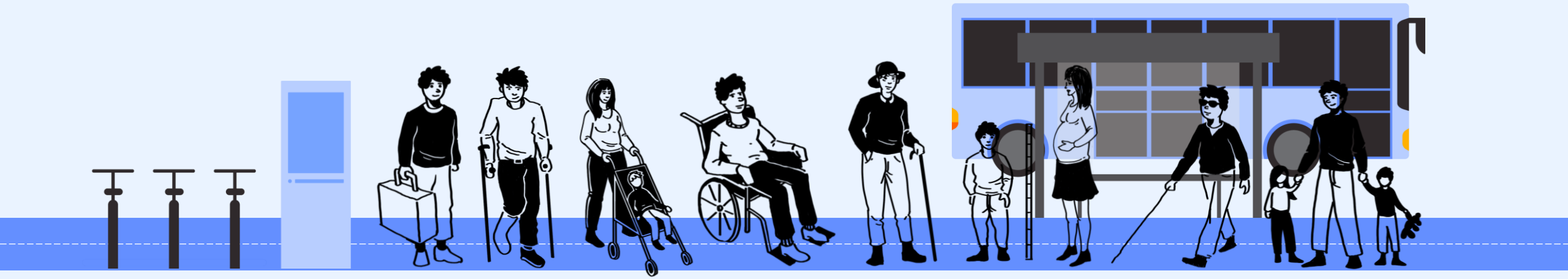
and they all want to participate in sustainable mobility



And there are many PRMs

In Europe

- 95 million people are over 65yo
- 45M households with children
- 100+ million live with some form of disability



Co-creation as foundation

Co-creation has many phases...

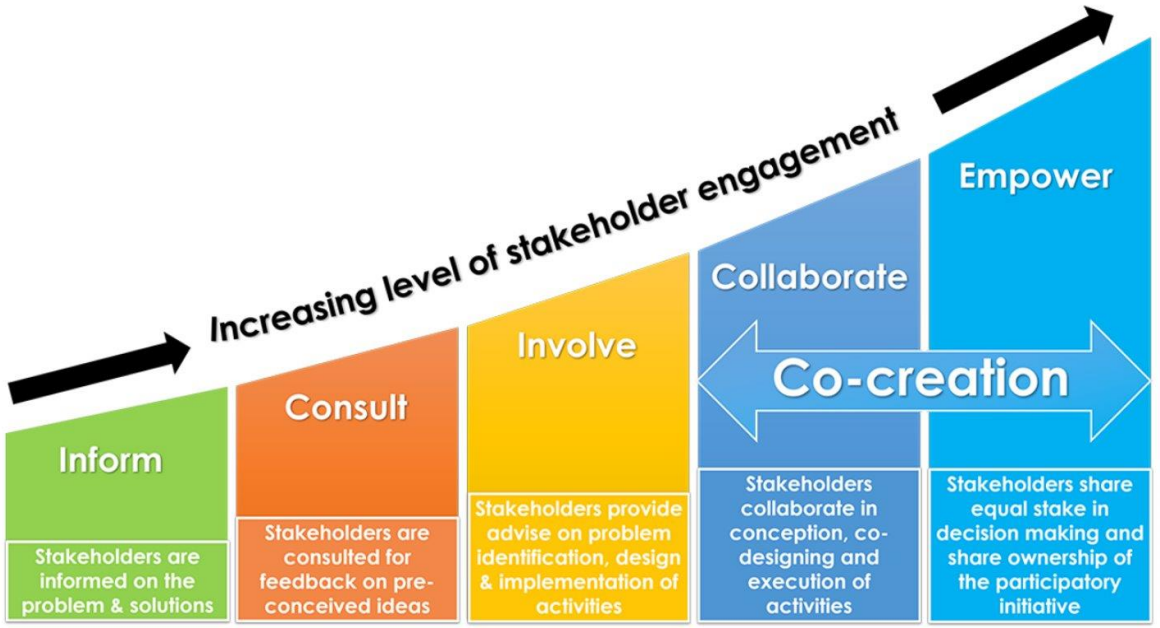
Co-identify

Co-develop

Co-implement

Co-evaluate

Co-disseminate



…and many faces

SMALL project partnership

Key facts

- Budget: €4.4M
- 11 pilots, 8 cities
- Duration: 2022-2026
- Goal: co-create more accessible shared mobility solutions

Interreg North Sea

Co-funded by the European Union

SMALL

mpact

Vervoerregio Amsterdam

VARBERGS KOMMUN

City of Amsterdam

DE FIETS AMBASSADE GENT

SAINT QUENTIN

REGION Region Hovedstaden

VU VRIJE UNIVERSITEIT AMSTERDAM

Brest MÉTROPOLE & VILLE

RUPPRECHT CONSULT Forschung & Beratung GmbH

GHENT UNIVERSITY

POLIS CITIES AND REGIONS FOR TRANSPORT INNOVATION

Our approach

Understand needs

co-design shared mobility solutions with end-users

Test new solutions (adapted vehicles, digital solutions, volunteering schemes)

11 pilot projects across 8 cities and regions in real settings

Draft new policies

New policy guidelines to help decision-makers and operators to integrate new inclusive solutions.

On partner level

Co-creation methodologies per end-user

Focus group

Short description	During this targeted group discussion, participants are invited to discuss specific topics or issues, led by a moderator.
Co-creation phase	co-identify, co-develop
Duration	2-3 hours
Mode	offline
No. of participants	small group (10-15)
Effort	medium

User diaries

Short description	Day-to-day experiences of using (shared) mobility services can be captured in a structured way to detect patterns and irregularities.
Co-creation phase	co-identify, co-evaluate
Duration	1 day to a week
Mode	offline or online
No. of participants	large group
Effort	high

Storyboard

Short description	Can help to understand specific user tasks across a process of implementation, focus is on user experience (by using pictures and drawings).
Co-creation phase	co-implement
Duration	1-2 hours
Mode	offline
No. of participants	small group (5-10)
Effort	medium

Field trip

Short description	Organise a guided tour through the neighbourhood with different actors present. Field trips can, e.g., be used in a planning context.
Co-creation phase	co-identify, co-develop, co-implement
Duration	2-3 hours
Mode	offline
No. of participants	mid-sized group (up to 30)
Effort	low

On project level

SMALL Insights paper

Insights to maintain this focus

beyond the project lifecycle

Main actors for co-creation, but there is more!

Cities/municipalities

Limited knowledge about the target groups

Not enough time and budget planned for co-creation

Hierarchical and organisational rigidity in cities

Operators/designers

Limited knowledge about the target groups

Tenders are unrealistic

"Inclusive shared mobility is not profitable"

End-user (representatives)

Prejudice against shared mobility

Lack of knowledge or awareness on shared mobility solutions

fear for safety

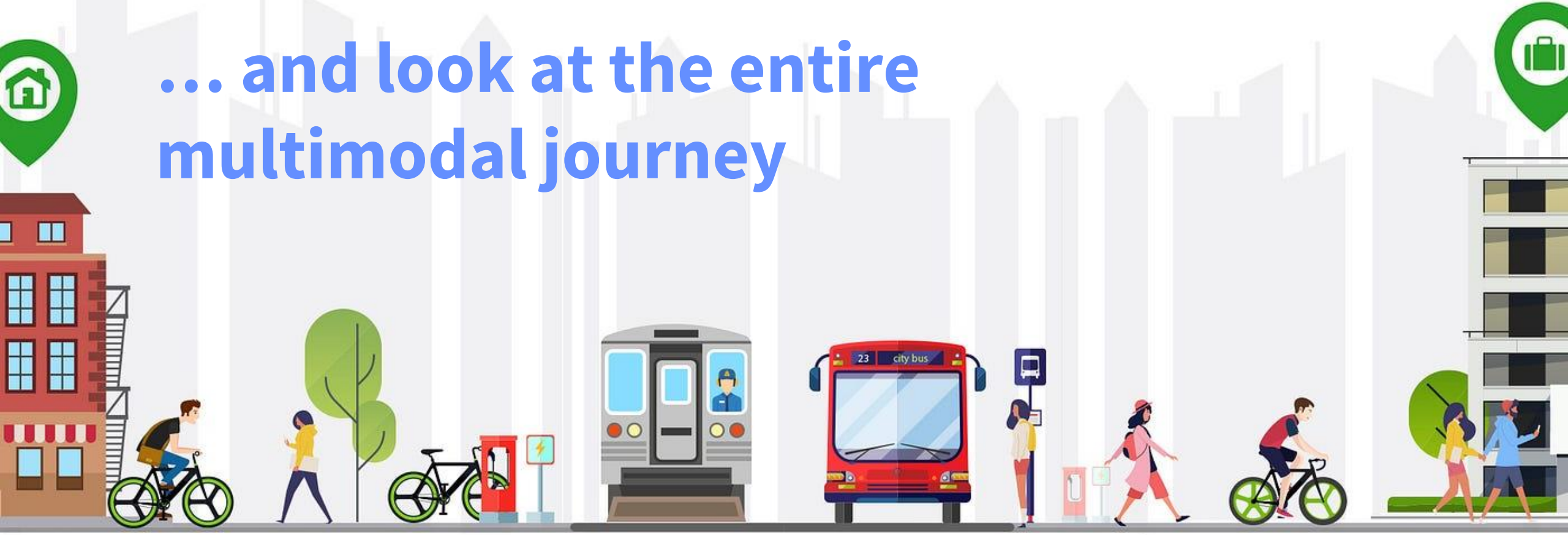
How do we collaborate with them?

Move from personas to mobility needs...

GOOD

MUCH BETTER

… and look at the entire multimodal journey

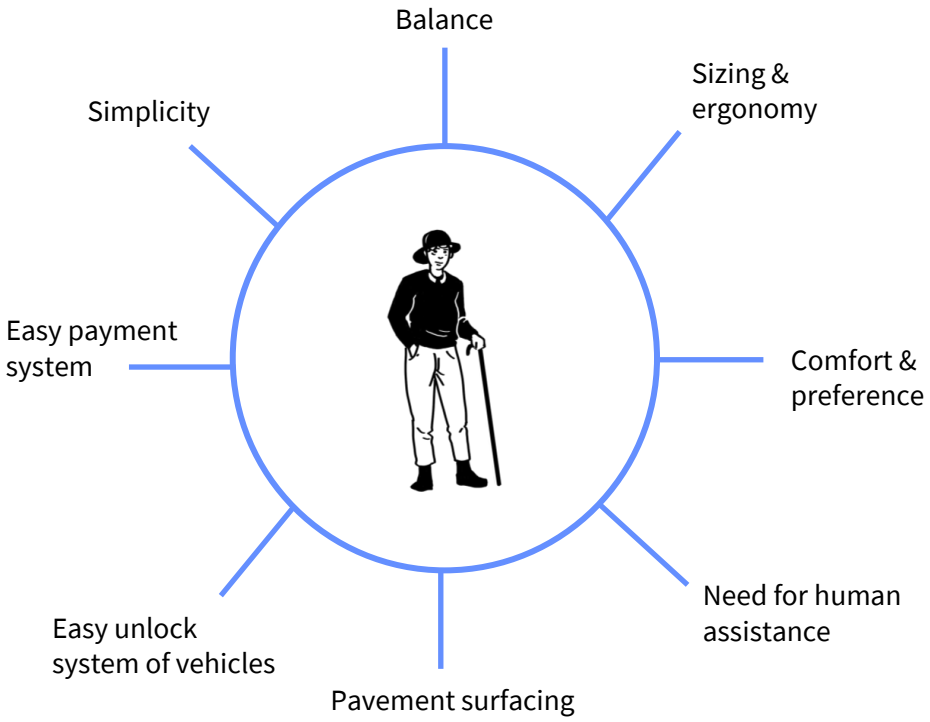


Physical environment

Mobility environment

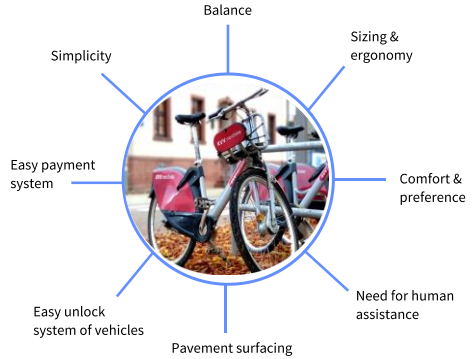
Information environment

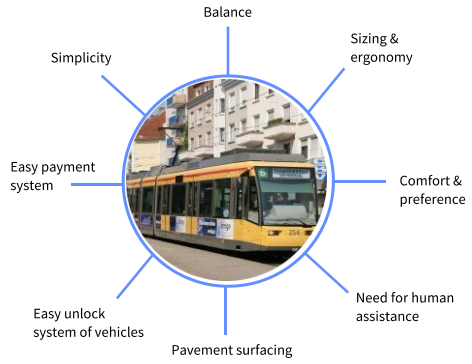
Assessing mobility needs and its match with mobility solutions



What is available to who?

What should we do to accommodate more users?





The inclusive mobility manager

What should you do?

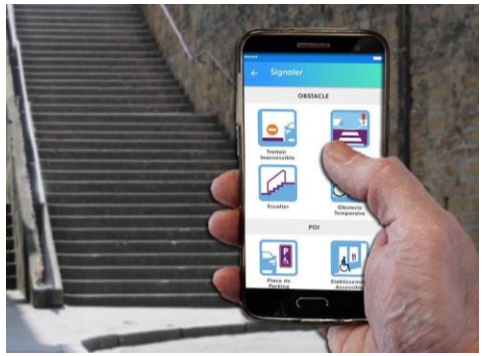
Be aware

Co-create

Convince and feel

Stay up to date with innovation

Coordinate modalities



Test and learn

Register for our co-creation webinars

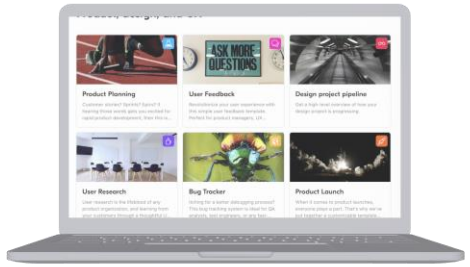
SMALL 1st Co-creation webinar: Mastering co-creation in mobility research

5/12

SMALL 2nd Co-creation webinar: How to organize user engagement

11/12

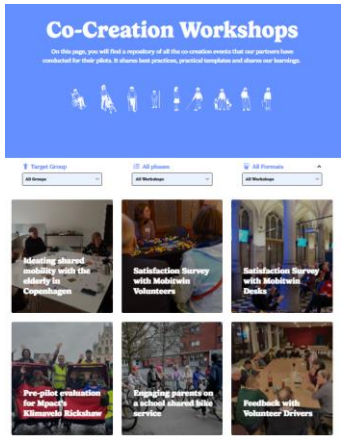
Read our project outputs



Observatory & Policy database

SMALL Insights

SMALL publication



co-creation toolbox

Thank you!

POLIS ANNUAL CONFERENCE 2024
CITIES AND REGIONS FOR TRANSPORT INNOVATION

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Follow the SMALL project

sharedmobilityforall.eu

interregnorthsea.eu/small

Shared Mobility for All

Interreg North Sea
Co-funded by the European Union

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SINFONICA

POLIS Conference

28 November 2024

Lars Meijer
Provincie Noord-Brabant

Funded by the European Union

SINFONICA at a Glance

- **SINFONICA**: **S**ocial **IN**novation to **FO**ster i**N**clus**I**ve cooperative, **C**onnected and **A**utomated Mobility
- **Call identifier:** HORIZON-CL5-2021-D6-01
- **Time frame**: 2022 – 2025
- **Partners**: 13 + 1 (7 countries)
- **Budget**: 3 759 723,75 €
- **SINFONICA Goal:** to develop functional, efficient, and innovative strategies, methods and tools to engage CCAM users, providers and other stakeholders to collect, understand and structure in a manageable and exploitable way their needs, desires, and concerns related to CCAM.
- **Bottom up approach!**

SINFONICA

Method

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- ✓ **ESTABLISHMENT OF GROUPS OF INTEREST**
- ✓ **CREATION OF METHODOLOGIES**
  - Co-Creation Methodology
  - Engagement strategies
  - Qualitative Data collection methodologies
  - Quantitative Data collection methodologies
- ✓ **PARTICIPATORY APPROACH IMPLEMENTATION**
  - 3 rounds!
- **INFORMATION ANALYSIS**
- **TOOL DEVELOPMENT**
- **GUIDELINES AND RECOMMENDATIONS**

Funded by the European Union

Interviews & Focus Groups

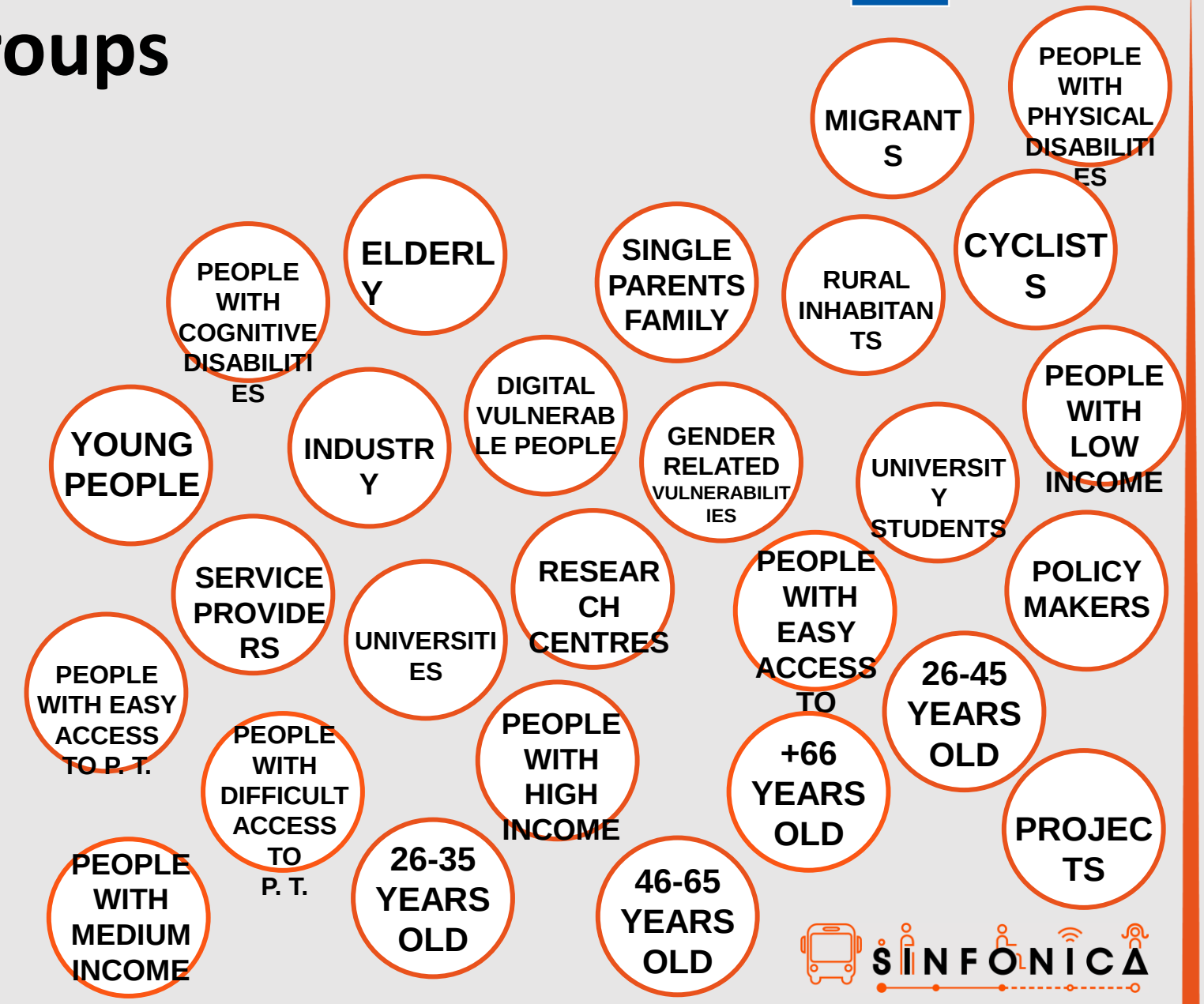
70 Interviews
9 focus group, 3 workshop

70 Interviews
9 focus group, 3 workshop

70 Interviews
9 focus group, 3 workshop

80 Interviews
9 focus group, 3 workshop

290 Interviews, 36 Focus Groups,
12 workshops +
4900 answers (European survey)



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Preliminary and Partial Results: Methodologies & Strategies

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- The **Co-creation methodologies** are complex but are worth: the physical meetings and the role-playing game are the most useful options!
- The **engagement strategies** need to be constantly changed, improved, discussed: we can't have a single strategy that work for everyone for the whole project period.
- The **focus groups** help to reveal more interesting insights, but **interviews** make people more comfortable and have proven to be more effective to certain targets.

Funded by
the European Union

Preliminary and partial Results: What people think and feel

- We have asked to rank the **4 As** (availability, accessibility, affordability, acceptability). For the moment, it is difficult to find a common view in ranking the 4 As despite the homogenous group categories. However, it seems that **availability** is considered the "pass" to be able to consider CCAM.
- In the actual public transports, the limitation that is mostly being perceived seems to be the **lack of freedom of movement**.
- It is mostly believed that **CCAM will improve transport** characteristics compared to current public transport.

Funded by the European Union

Preliminary and partial Results: What people think and feel.

- **Security & safety** features in CCAM seem to be very important for most of the participants.
- Many people declared that they completely **trust technology** and that are very interested in new technology options (very few early birders among them).
- There is still some difficulties within the **digital-related issues**.

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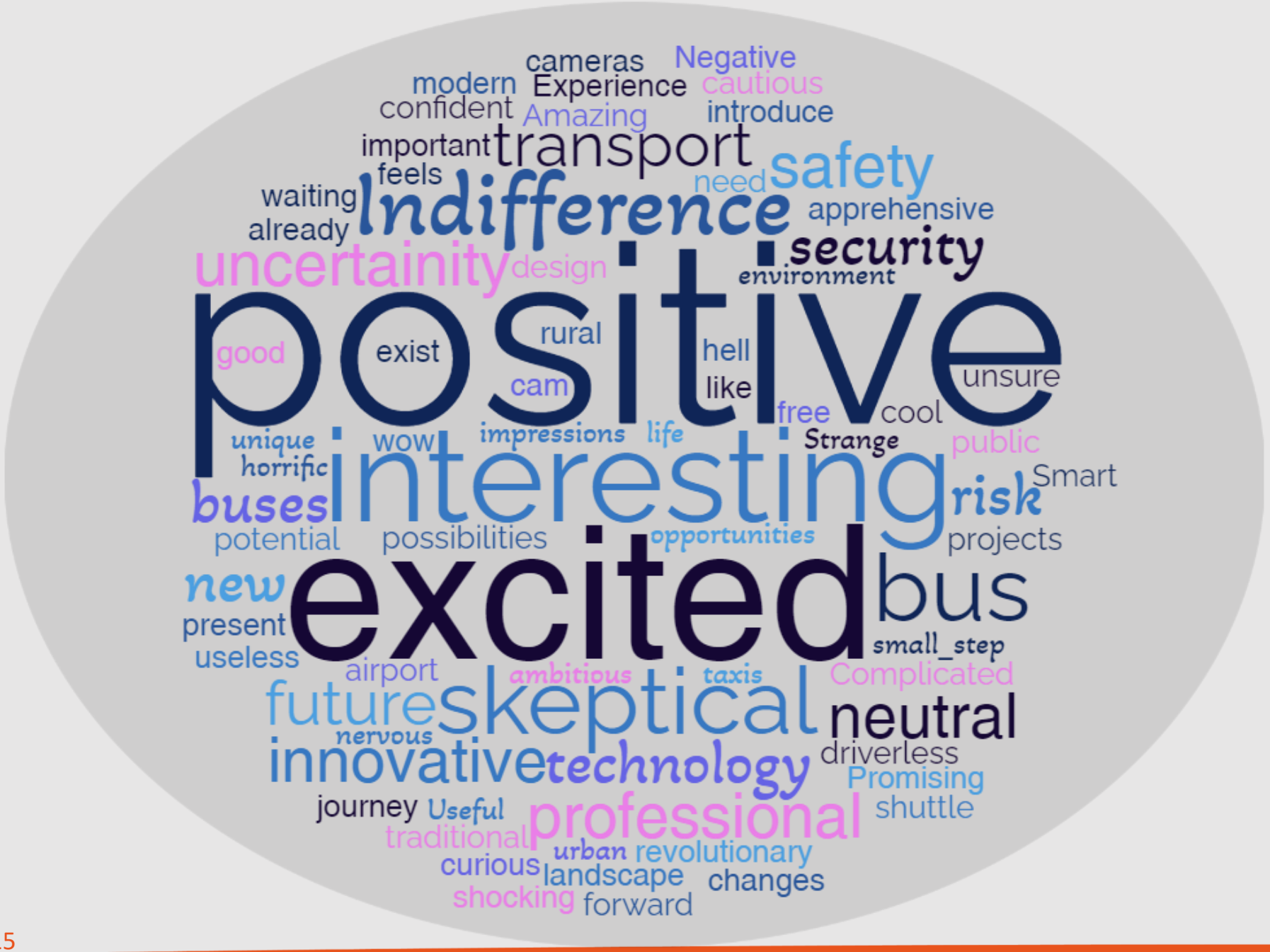

How would you express in one word your **first immediate attitude** towards highly digital and autonomous forms of mobility?

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Preliminary Requirements from the municipalities to quickly adopt CCAM

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ASSISTANCE AND SAFETY

ACCESSIBILITY AND INCLUSIVENESS

INTEGRATION AND TRANSPARENCY

ENVIRONMENTAL AND ECONOMIC SUSTAINABILITY

MONITORING AND CONTINUOUS EVALUATION

INFRASTRUCTURE AND INVESTMENTS

What to expect from SINFONICA

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Methodologies

→ Engage users and stakeholders.
→ Collect certain data with specific target
→ Build a community.
→ To co-create with the community and with the stakeholders.
→ To train new colleagues.

Knowledge

→ Create a strong knowledge base with users' and stakeholders' needs and requirements (not leaving anyone behind!).
→ Create the **knowledge map explorer** an interactive and user-friendly tool to deliver tailored information.

Guidelines & Recommendations

→ Create guidelines and recommend. for the implementation of inclusive, equitable and accessible CCAM solutions.

A & A

→ Increase the acceptance and the awareness of CCAM solutions around

Disseminate

➢ To reach not-technical people.
→ Would you like to tell people something about your project / product related to CCAM?! Write us!
→ C !

CCAM vocabulary

for non-technology experts

Simulations

from where the CCAM services' scaled up impacts on the mobility of the defined demand population.

SINFONICA

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Thanks for your attention!

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CCAM PARTNERSHIP PROJECT

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