

**Interreg** 

CENTRAL EUROPE European Union  
European Regional  
Development Fund

**EfficienCE**

**LOW-CARB**

TAKING  
**COOPERATION**  
FORWARD



Webinar

9 June 2020



**Data-based planning for low-carbon public transport services**

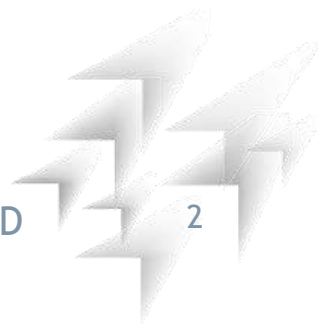


*W. Backhaus, Rupprecht Consult, Cologne, Germany*

Introduction  
Data-based  
public transport  
service planning

Introduction  
LOW-CARB  
project

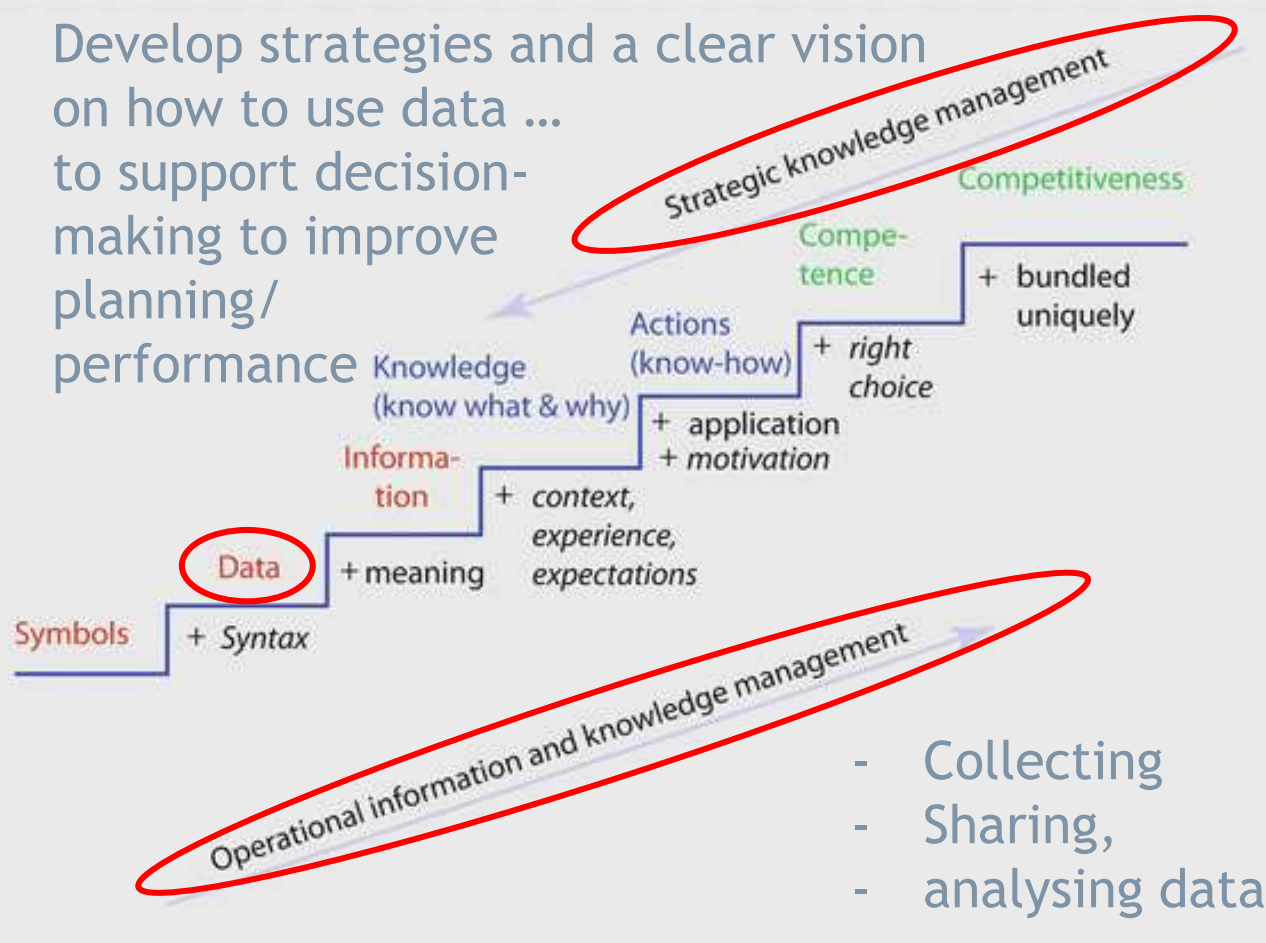
Examples for  
data usage in  
public transport  
service planning



# INTRODUCTION - DATA-BASED PLANNING

What is the value of data?

- Develop strategies and a clear vision on how to use data ...
- to support decision-making to improve planning/ performance



- Collecting
- Sharing,
- analysing data



Source: From data to knowledge -  
Knowledge Staircase from North

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# FIGURING DATA OUT

In its raw form, data needs to be shaped, processed and interpreted to provide added-value

The ecosystems has provided fertile grounds to thrive, due to:

- Increasing interconnectivity of people and objects
- Great levels of data created, stored and analysed
- Enabling complex analysis of data

Different types of data in PT

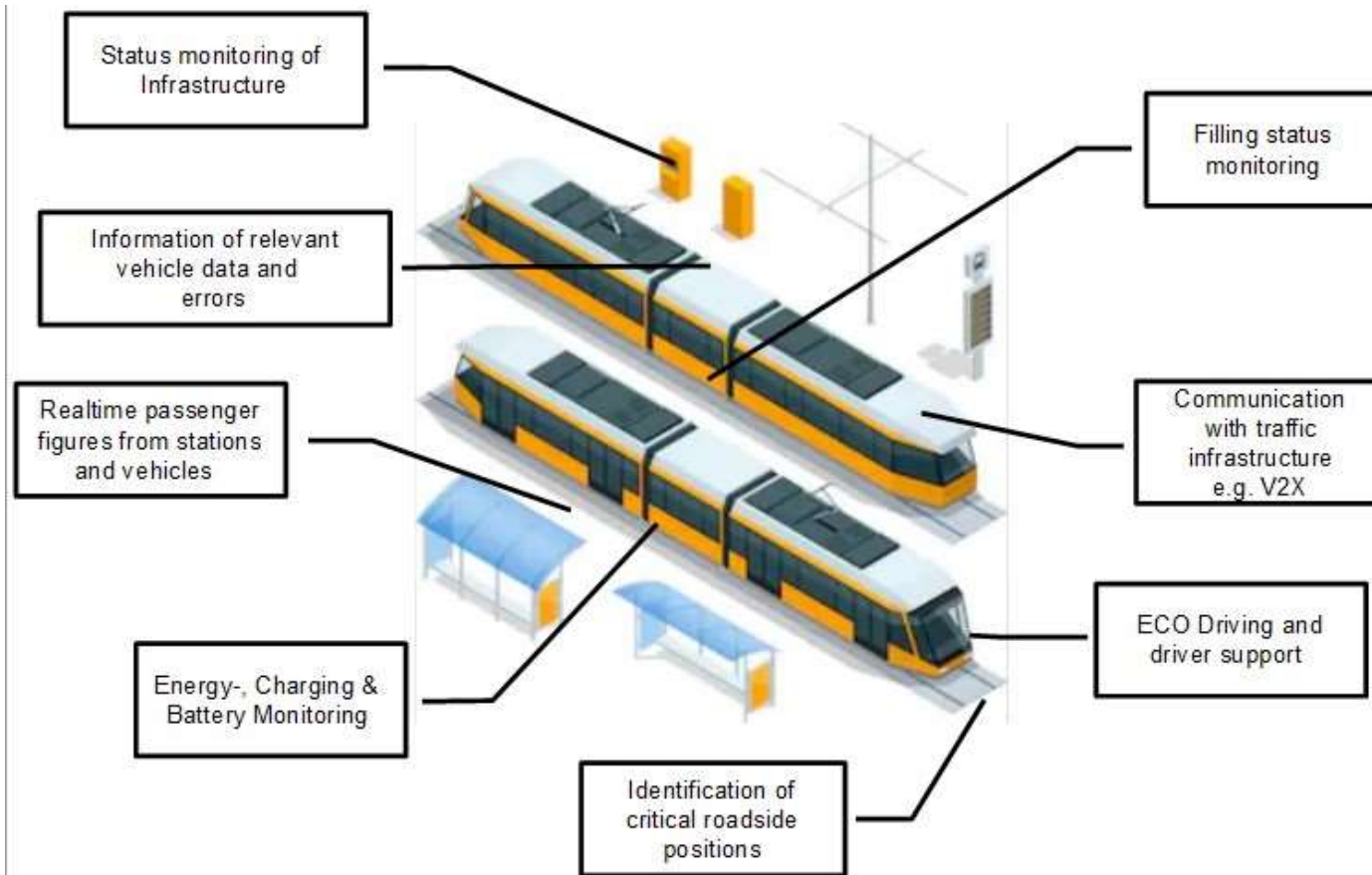
Customer data	All data on the customer itself, as well as passenger preferences and their use of the system
Operational data	Data produced by operators' assets for the delivery of public transport services
Mobility data	Data which provides information of urban mobility patterns
Exogenous data	Data from third parties which can have an impact on mobility

Data has and brings value. Customer data, operational data and the knowledge of the market are of strategic and commercial value

Data is as an asset and should be treated like such, one can generate revenue or save costs out of it and put it at risk

# INTRODUCTION - DATA-BASED PLANNING

## Example - operational data from PT services



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## LOW-CARB: Capacity building for integrated low-carbon mobility planning in functional urban areas

### Programme Specific Objective:

To improve capacities for mobility planning in functional urban areas to lower CO<sub>2</sub> emissions

### Project Main Objective:

LOW-CARB project aims to enhance capacities for **integrated low-carbon mobility planning for functional urban areas** in Central Europe.

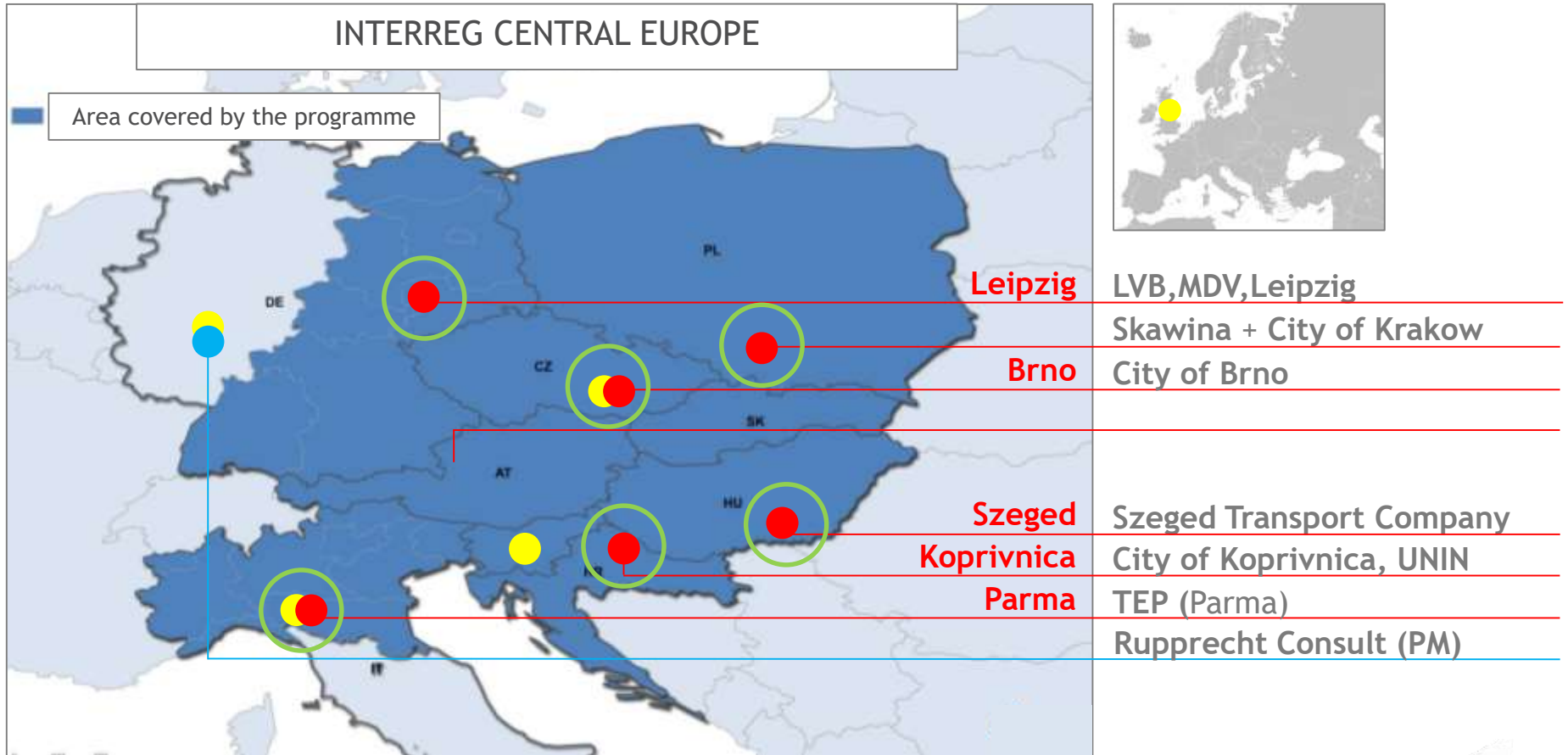
### Project Specific Objectives - with a focus on public transport:

- *Integrated low-carbon mobility planning* for functional urban areas
- *Capacity building* for integrated low-carbon mobility planning in FUAs
- *Pilot actions* for low carbon mobility in FUAs





# INTERREG CE PROJECT LOW-CARB: MAP OF PARTNERS



**10**

project partners

**7**

associated partners

**6**

FUAs

**6**

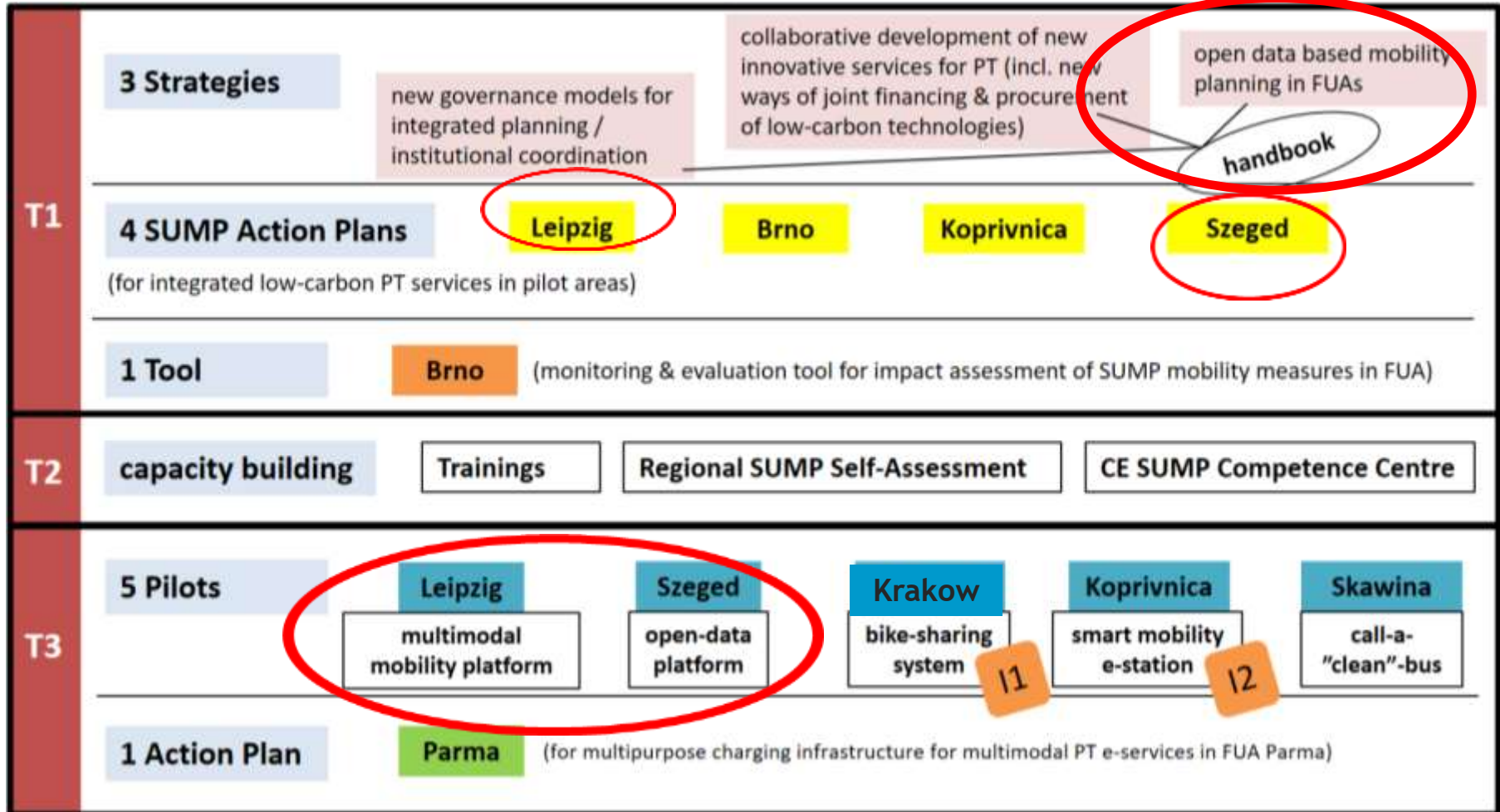
CE countries



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# INTERREG CE PROJECT LOW-CARB: WORK PACKAGE STRUCTURE



# AGENDA

Introduction  
Data-based  
public transport  
service and  
infrastructure  
planning

Introduction  
LOW-CARB  
project

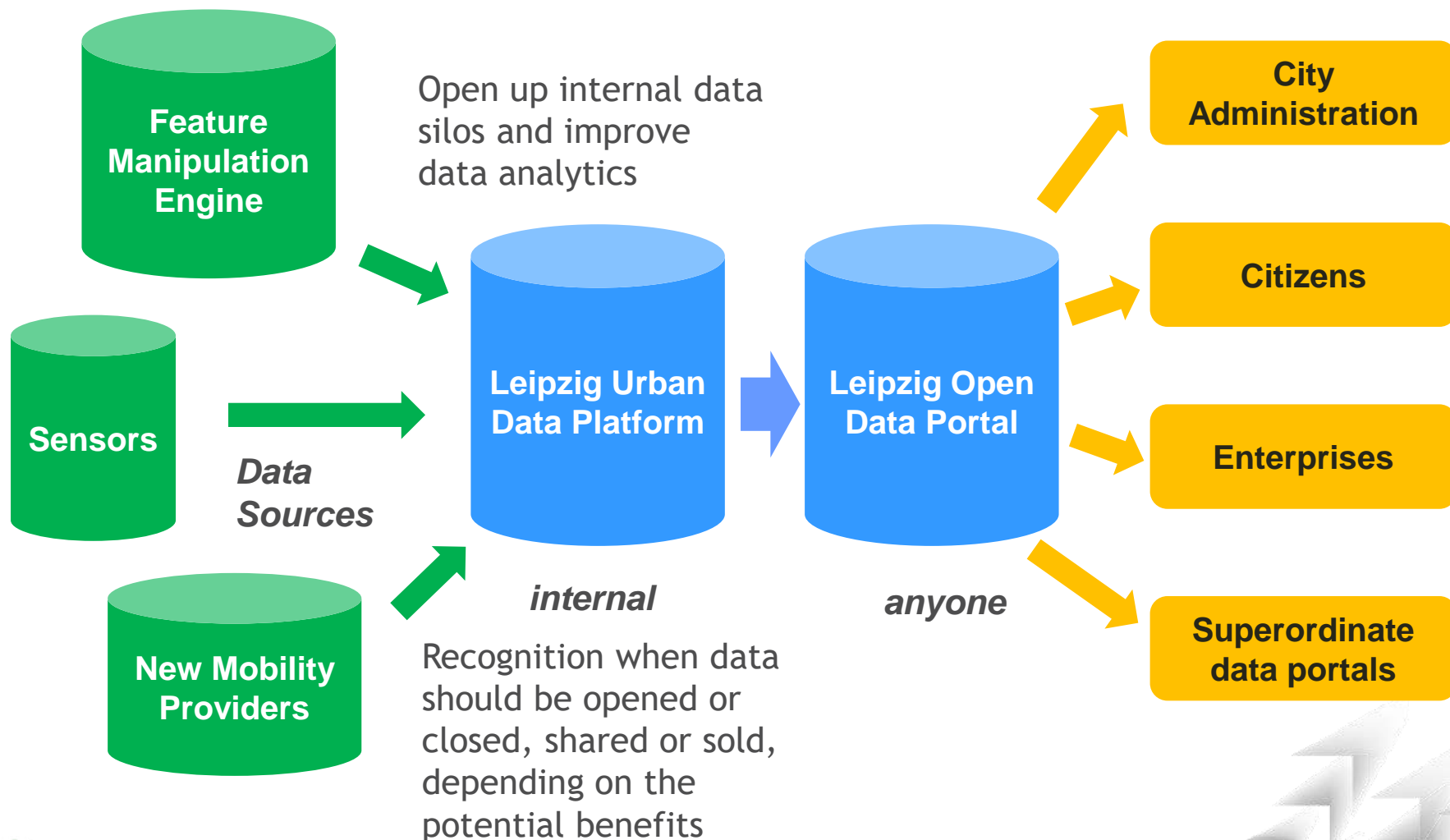
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# PROJECT RESULTS LEIPZIG PARTNERS



# OPEN-DATA STRATEGY FOR LEIPZIG



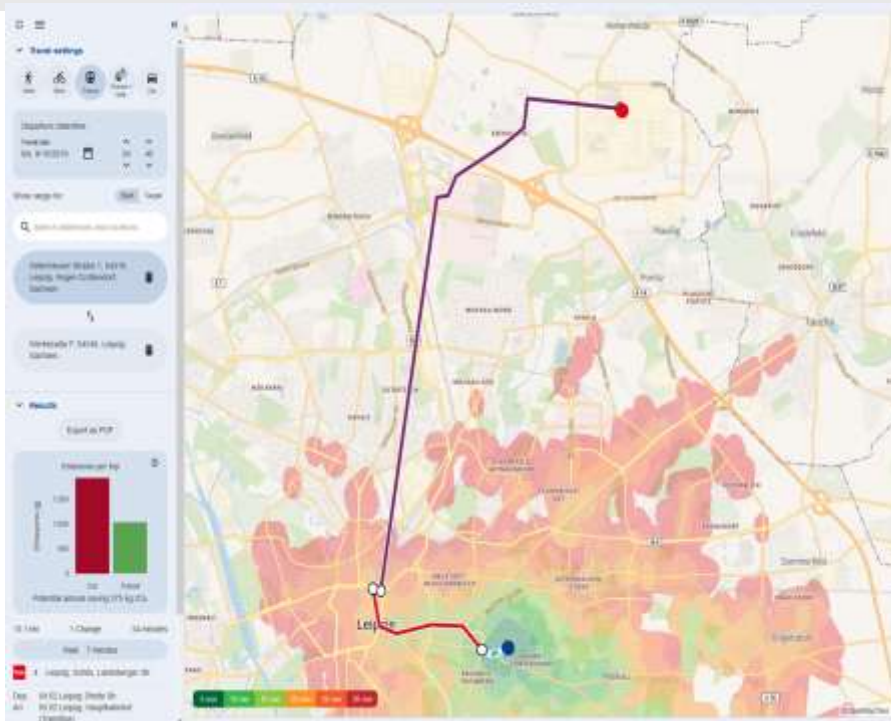
## Sustainable urban mobility planning with open data

- December 2019 @ Chaos Communication Congress, Leipzig
- Duration 2,5h
- Providing open data sets
- Results: e.g. PT Chatbot by OKLab Leipzig





# LOW-CARB: MOBILITY AND SERVICE PLANNING FOR LEIPZIG - WITH DATA

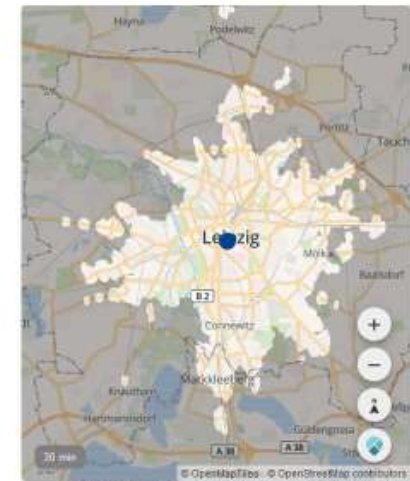


## ACCESSIBILITY MAP: „REACHIE“

Clever mobil im Leipziger Nordraum

- Travel range by time budget across different travel modes
- Cross-platform (mobile)
- Multi- & Intermodal
  - Pedestrian
  - Bike
  - PT + pedestrian
  - PT + bike
  - Car
- Itinerary
- CO2-calculator
- Coloured mode

[www.mdv.de/reachie](http://www.mdv.de/reachie)



Targomo



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## Sharing data for amending accessibility of remote business area

- Accessibility map
- Masterplan Mobility Leipzig Nordraum

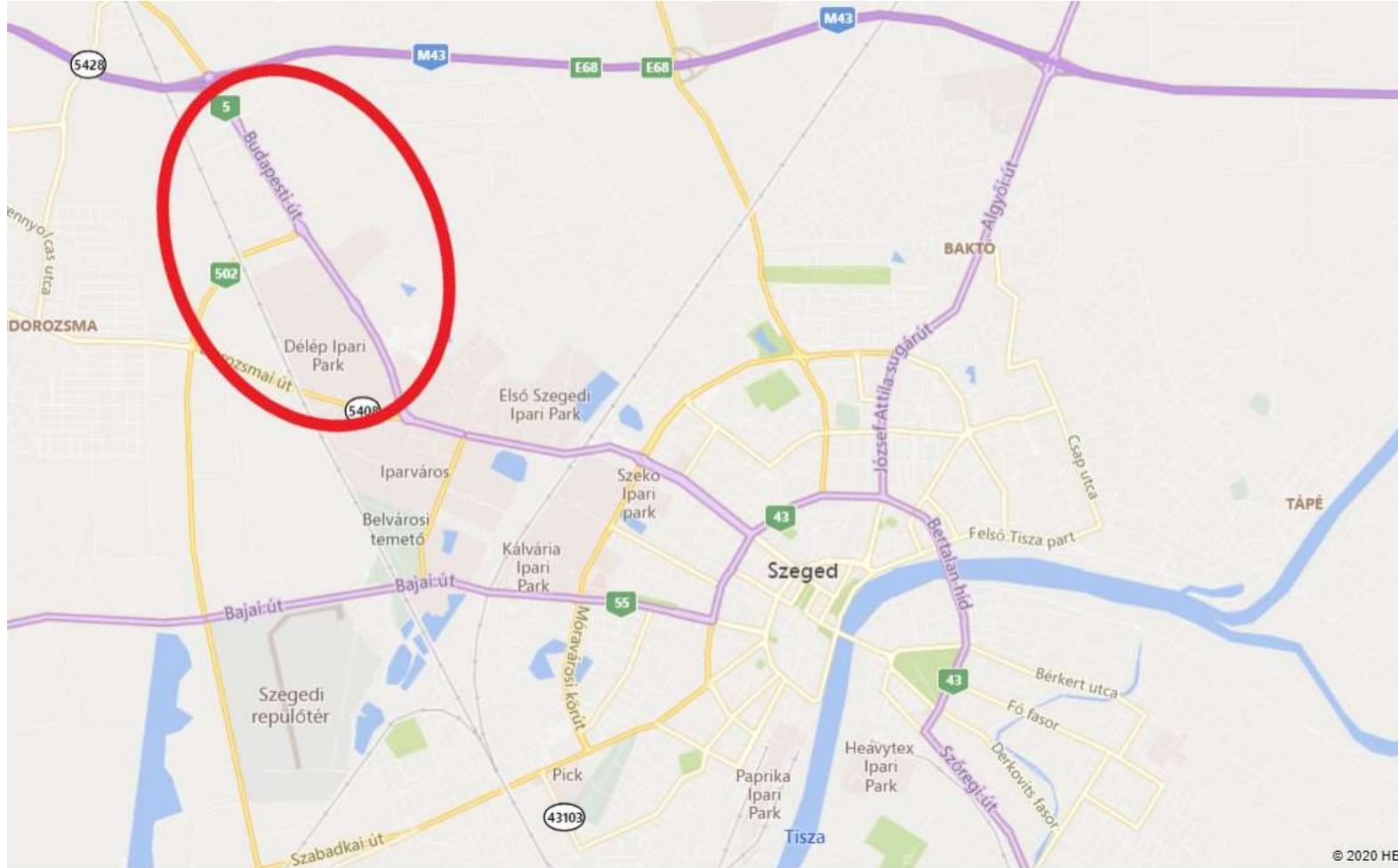


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# PREPARATION AND STAKEHOLDER INVOLVEMENT

## Szeged Functional Urban Area



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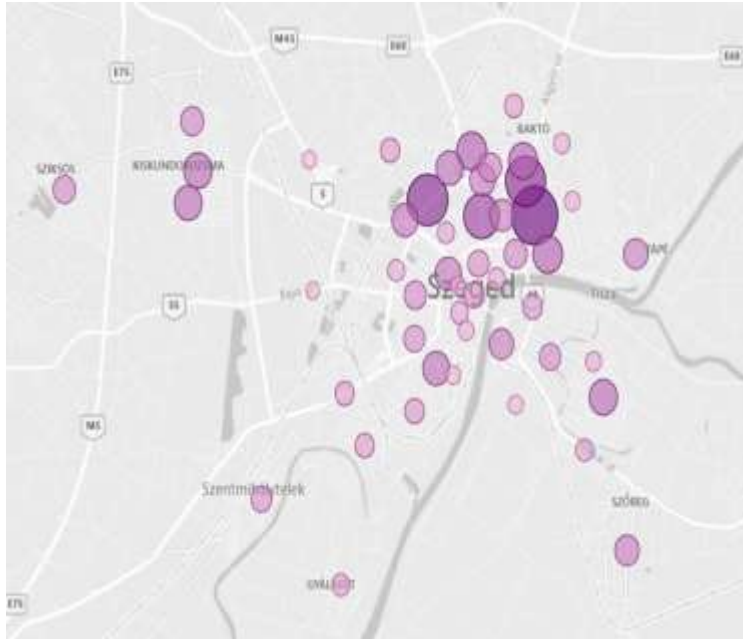
# PREPARATION AND STAKEHOLDER INVOLVEMENT

## Szeged Functional Urban Area

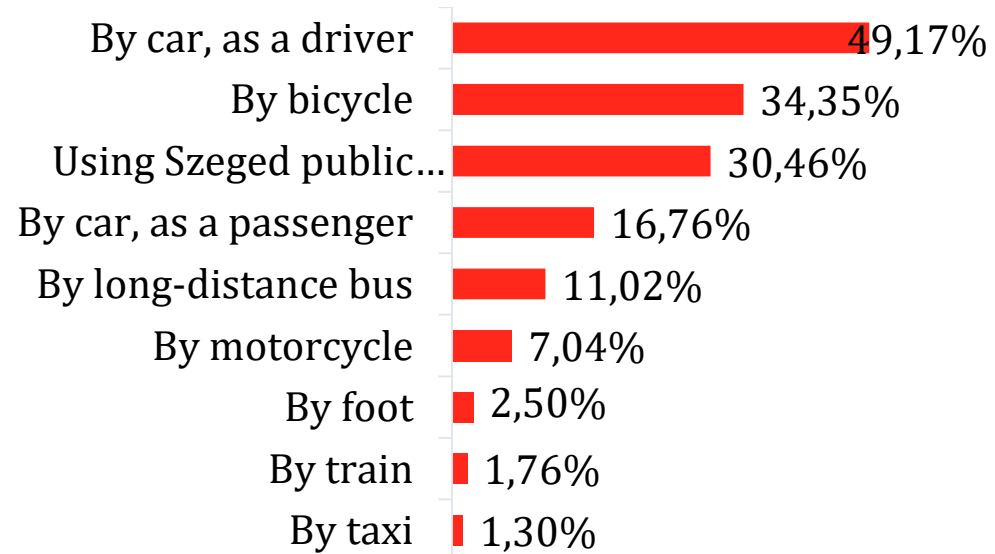


# LOW-CARB: MOBILITY AND SERVICE PLANNING FOR SZEGED

Place of departure of responders living in Szeged, by district



Distribution of means of transport by the number of respondents citing them as their preferred means of travelling to work



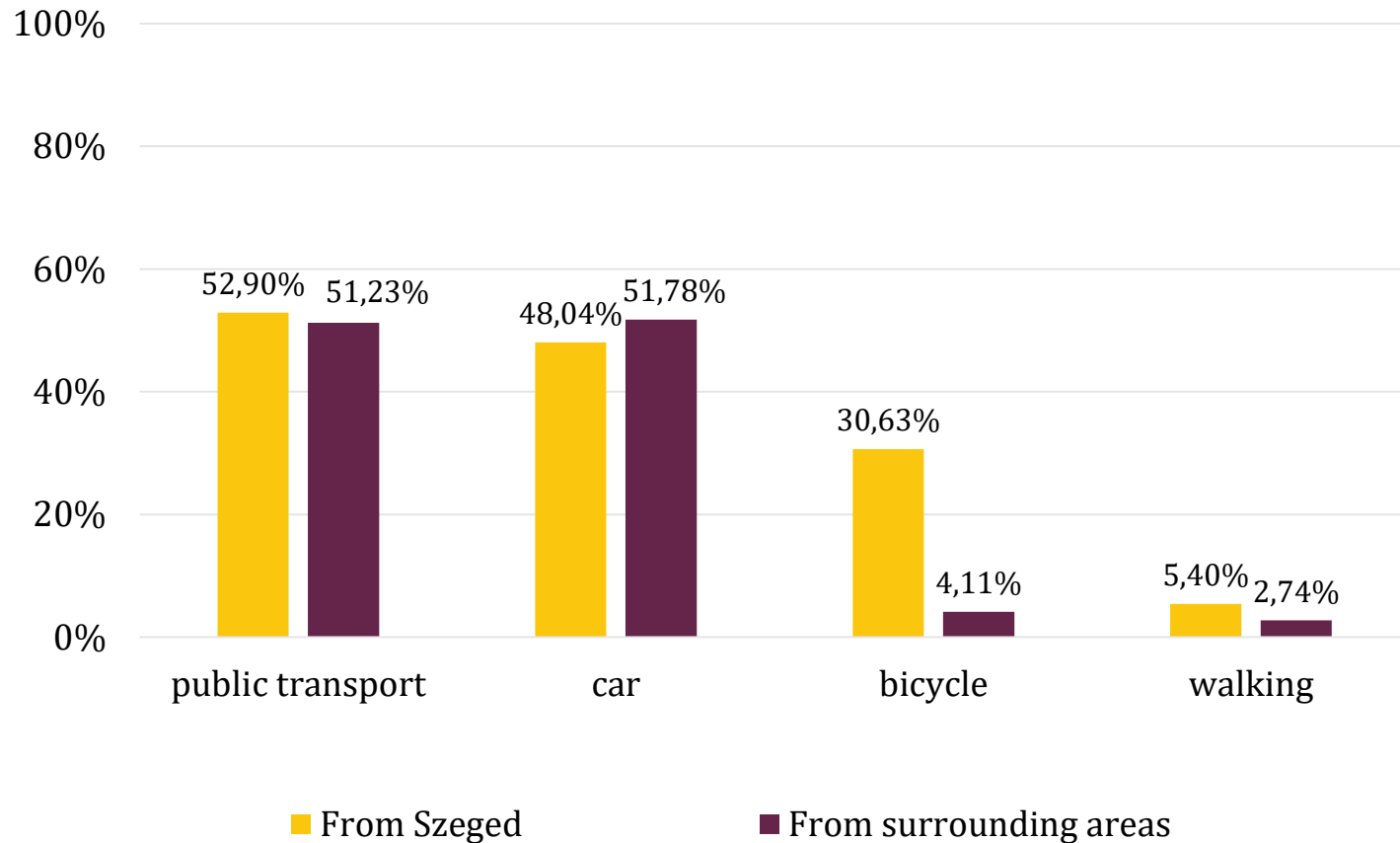
## Supporting a city-wide open data platform with PT data

- Survey for company-based mobility management
- WIFI passenger counting system
- Application for CO2-emissions calculation (awareness!)

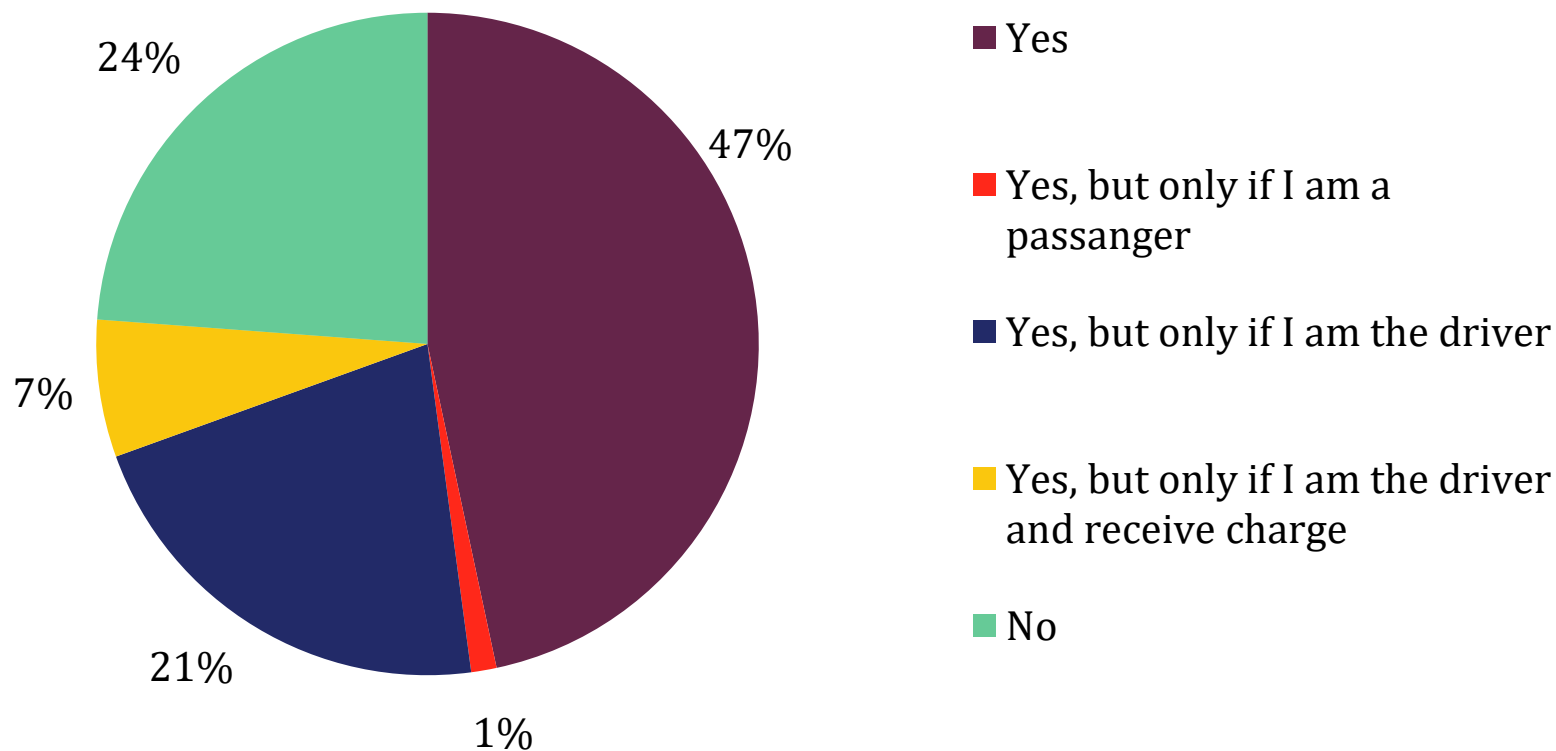


# ANALYSIS OF WORKPLACE MOBILITY SITUATION

## Means of transport to travel to work



## Willingness for car-sharing

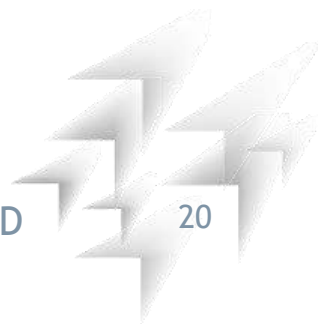


## Action plan for Szeged's North Area (Harmonised with Szeged SUMP goals)

- 60 measures in 10 groups: city level, public transport, cycling, road connections, car-sharing, green measures

### Priority actions:

- schedule harmonization/synchronization
- building bike paths
- new bicycle storages
- new PT stop &
- trolleybus network extension
- developing passenger information system



# DATA-ENABLED MOBILITY PLANNING IN LOW-CARB

... turning relevant data into valuable insights for SUMP



Data ...

- Governance
- Sources
- Tools
- ...

Transparency  
Decision-making  
...

Modelling/  
Simulation  
Assessment/  
KPIs  
...



# Thank you for your attention!

## Coordination team:

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