JUSTICE (ENUAC 2021-2024)
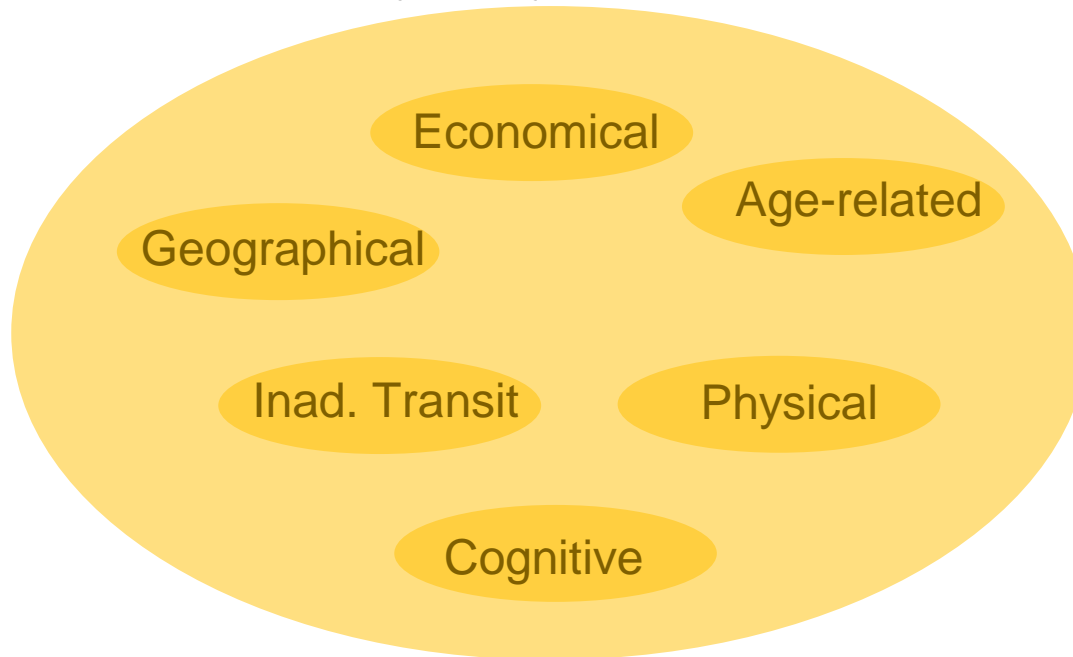

WalkUrban Final Conference
Dortmund
March 7th, 2024

What is an inclusive city?

→ Public Transit Accessibility

Impaired by a system of barriers:

- Economical
- Age-related
- Geographical
- Inad. Transit
- Physical
- Cognitive

GOALS

To measure and characterize accessibility for specific target groups
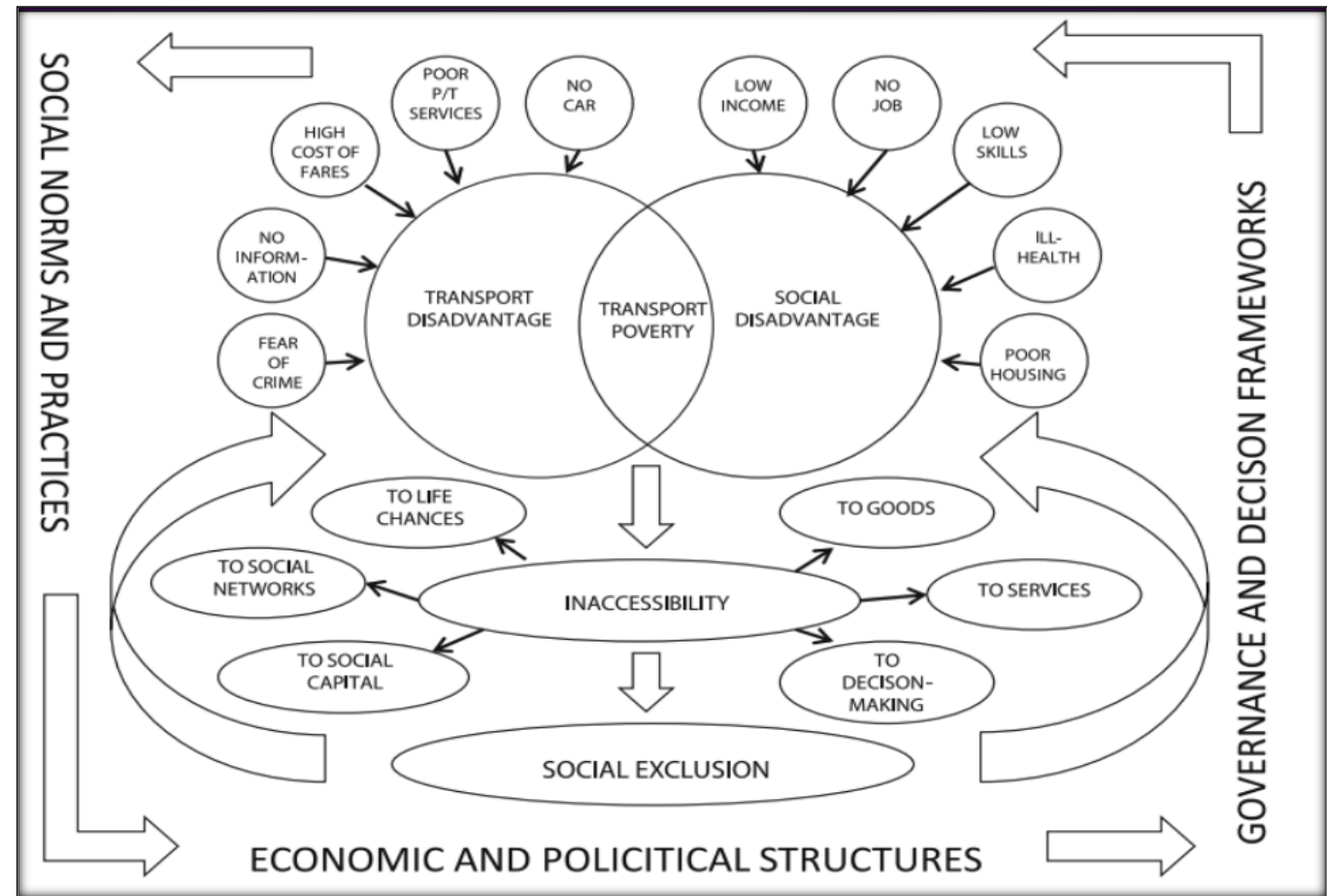Draw a recommendation list for inclusive city environments

Spatial Justice through Inclusiveness & PT Accessibility

Justice concepts (Rawls 1972, Sen 2005) have been

mobilized in the transport and accessibility field (Geurs & van Wee 2011, Lucas 2012, Martens 2012, Martens & Bastiaanssen 2014, Lucas et al. 2016)

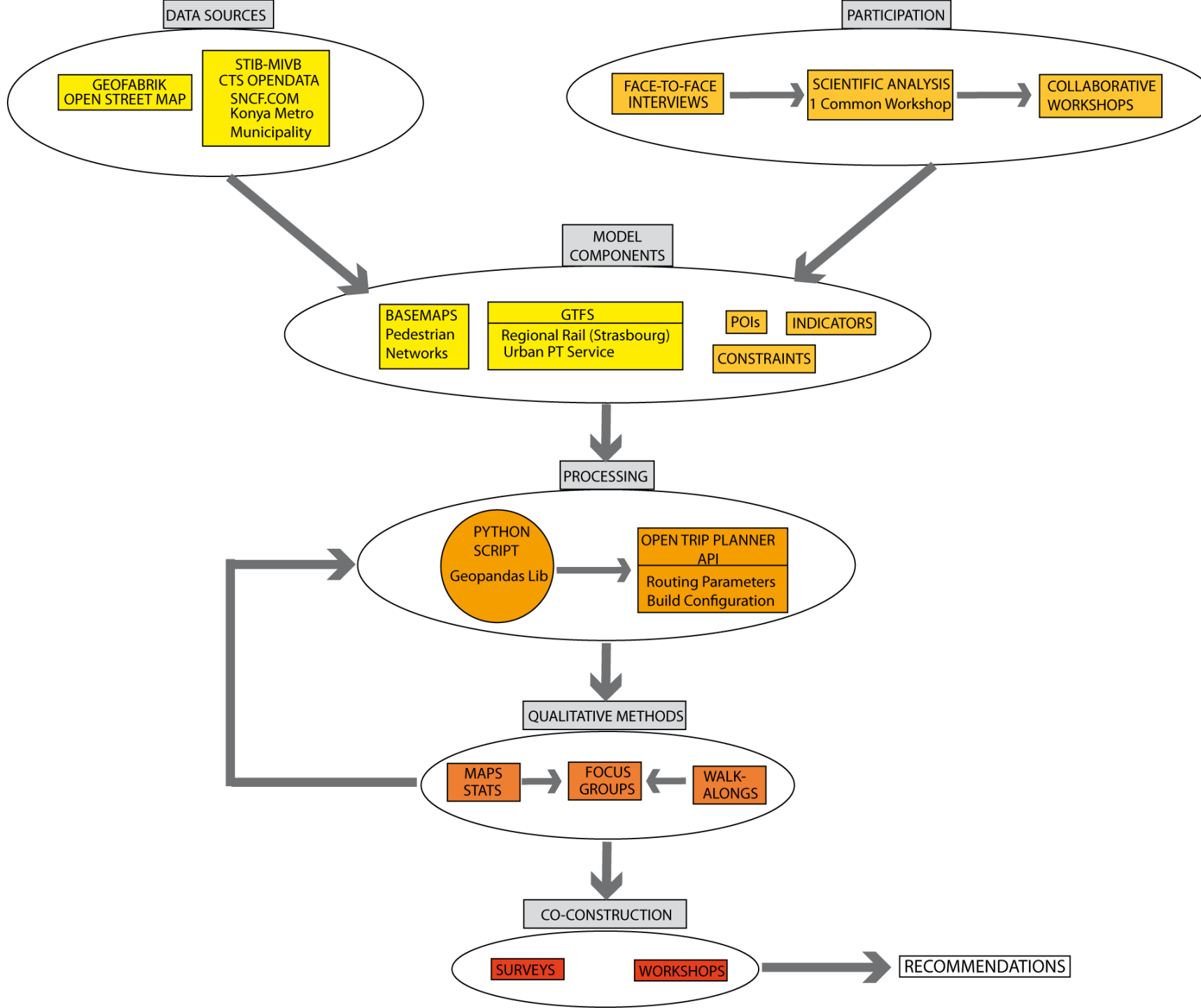applied regarding equity issues (Foth & al. 2013, El Geneidy & al. 2016, Pereira et al. 2017)

but **generally PT is implicitly supposed to be inclusive**, with some exceptions (Grisé et al. 2019)
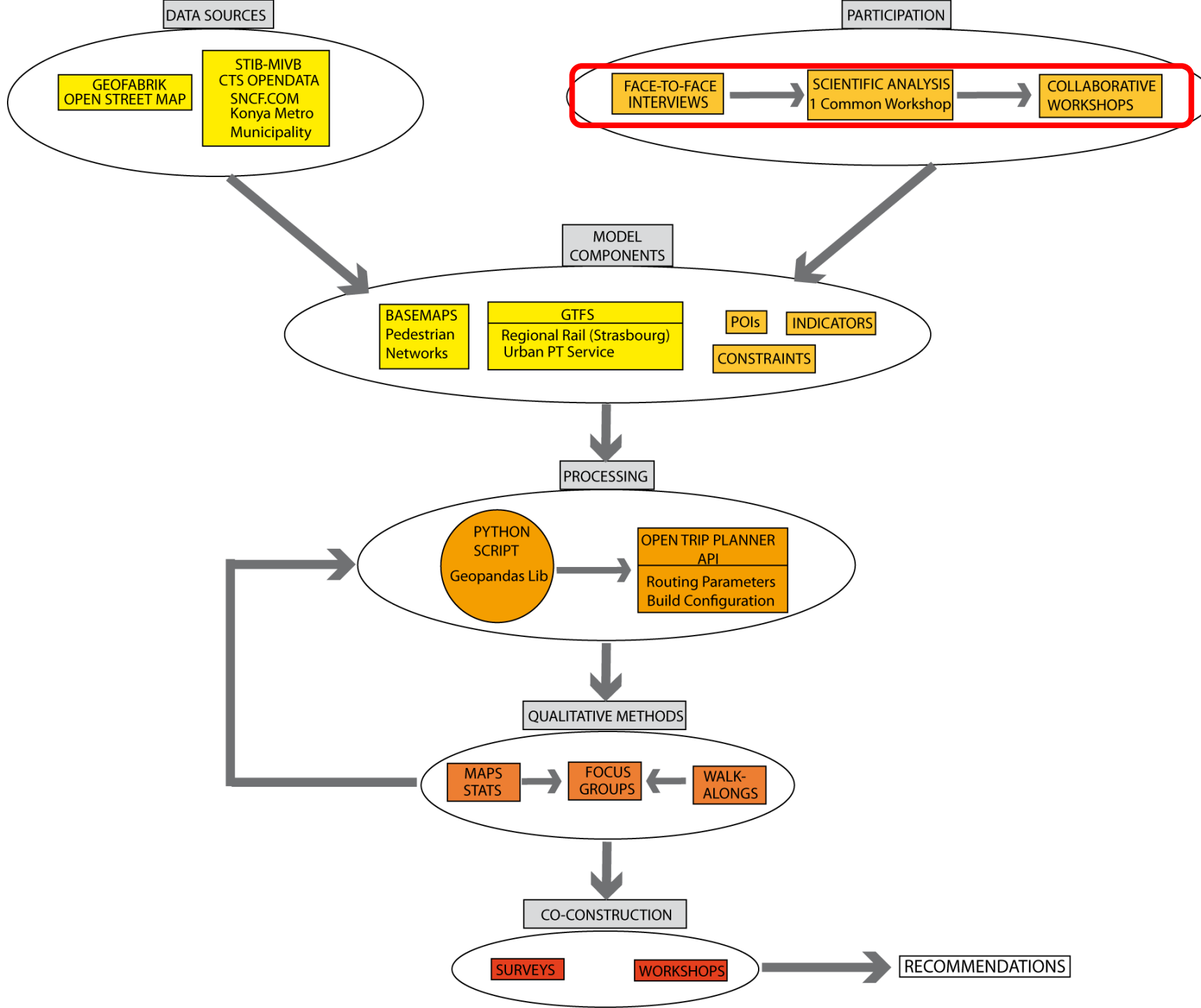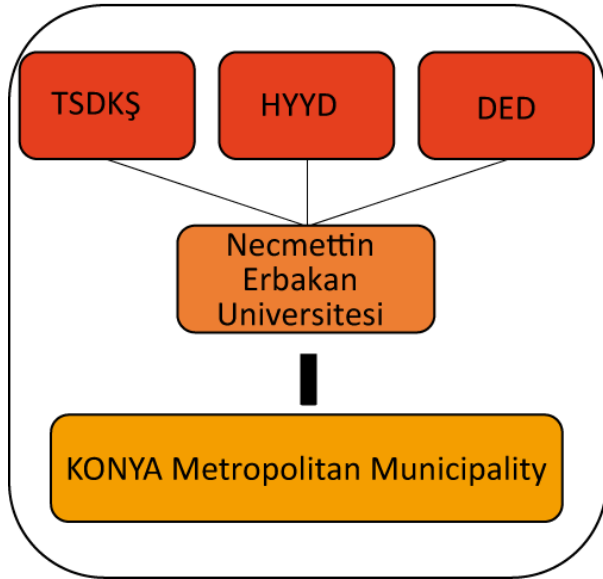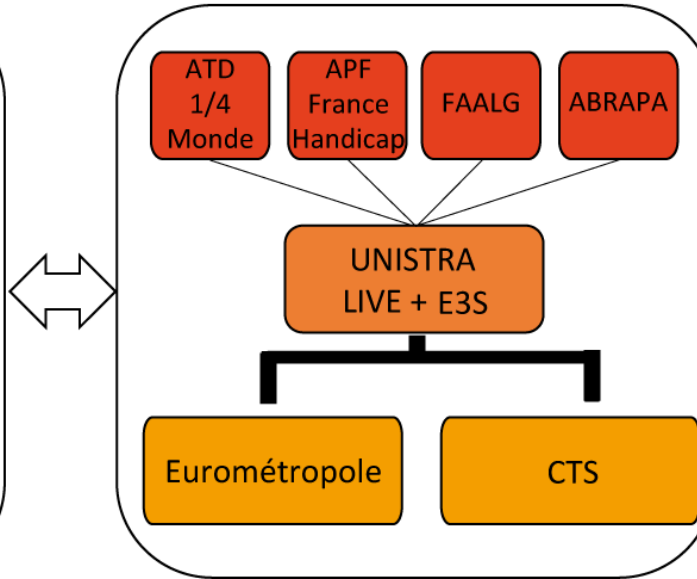

Lucas 2012

METHODS

JUSTICE
3 cities · 4 audiences

DATA SOURCES

GEOFABRIK
OPEN STREET MAP

STIB-MIVB
CTS OPENDATA
SNCF.COM
Konya Metro
Municipality

PARTICIPATION

FACE-TO-FACE
INTERVIEWS → SCIENTIFIC ANALYSIS
1 Common Workshop → COLLABORATIVE
WORKSHOPS

MODEL COMPONENTS

BASEMAPS
Pedestrian
Networks

GTFS
Regional Rail (Strasbourg)
Urban PT Service

POIs   INDICATORS
CONSTRAINTS

PROCESSING

PYTHON SCRIPT
Geopandas Lib → OPEN TRIP PLANNER
API
Routing Parameters
Build Configuration

QUALITATIVE METHODS

MAPS
STATS → FOCUS
GROUPS ← WALK-
ALONGS

CO-CONSTRUCTION

SURVEYS   WORKSHOPS → RECOMMENDATIONS

5

KONYA

TSDKŞ	HYYD	DED

Necmettin Erbakan Universitesi

KONYA Metropolitan Municipality

STRASBOURG

ATD 1/4 Monde	APF France Handicap	FAALG	ABRAPA

UNISTRA LIVE + E3S

Eurométropole	CTS

BRUSSELS

Observatoire Santé et Social	CAWAB

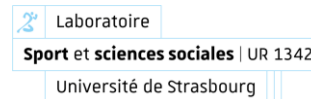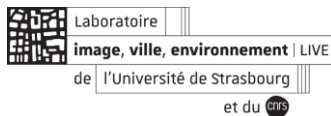| ULB IGEAT	UCLouvain CREAT

Bruxelles Mobilité	STIB

NGOs

Blind & Visually Imp.

Disabled

Elderly

Socially Underprivileged

Academics

Research Labs

Stakeholders

Transport Authorities

PT Operators

DATA SOURCES

GEOFABRIK
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RECOMMENDATIONS

Participation Ouputs: Accessibility Barriers, Indicators & POIs

- Accessibility Barriers

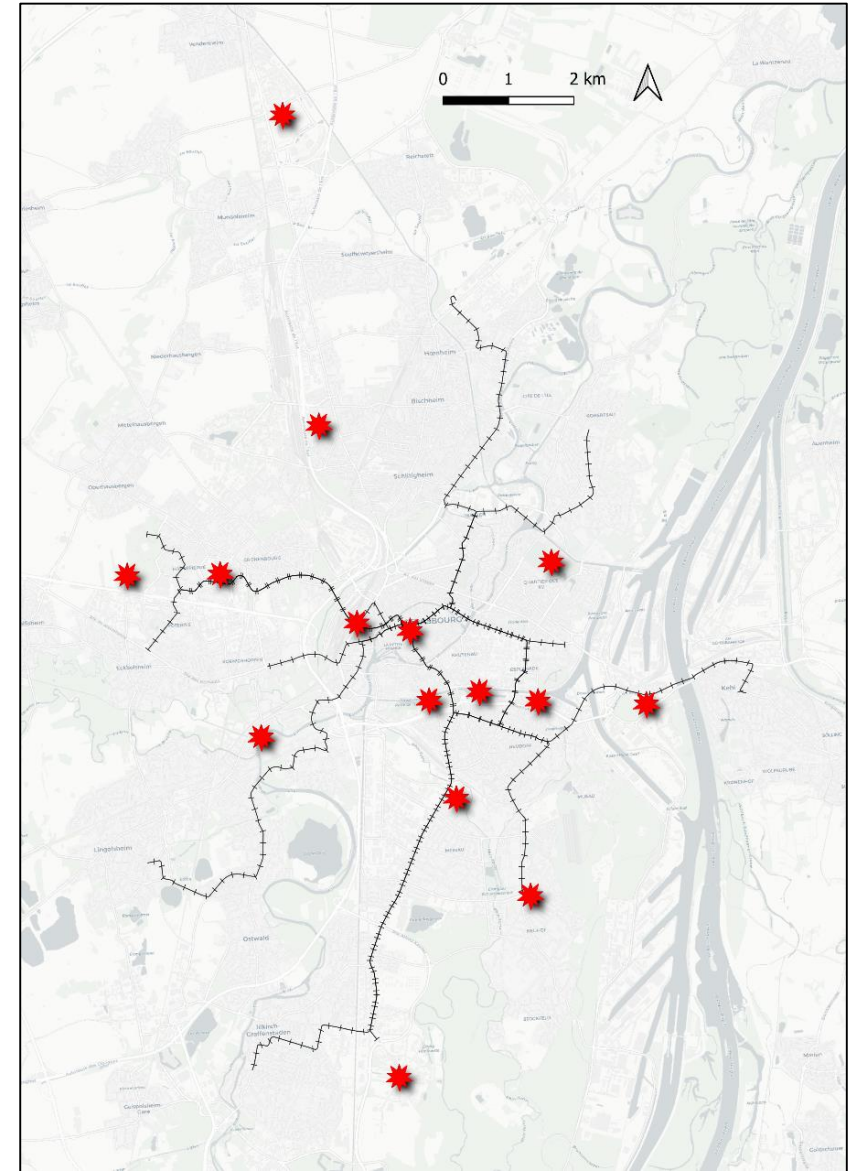| High Priority - Brussels |
| --- |
| Stations with Elevators only |
| Disabled Compliant Stations only |
| Desk or Automat only |
| Shelter with seats only |
| No Underground station |

High Priority - Strasbourg
Max Walk distance
No Transfer
No Bus
No Tramway
Slow Walk Speed

Participation Ouputs: Shared Views on Justice

Distributive Justice (Equity)
Who benefits from access and opportunities ? Who faces risks, costs, and impacts?

Recognition Justice (Inclusion)
Are the various needs, values, abilities, knowledge and practices of different groups acknowledge and respected?
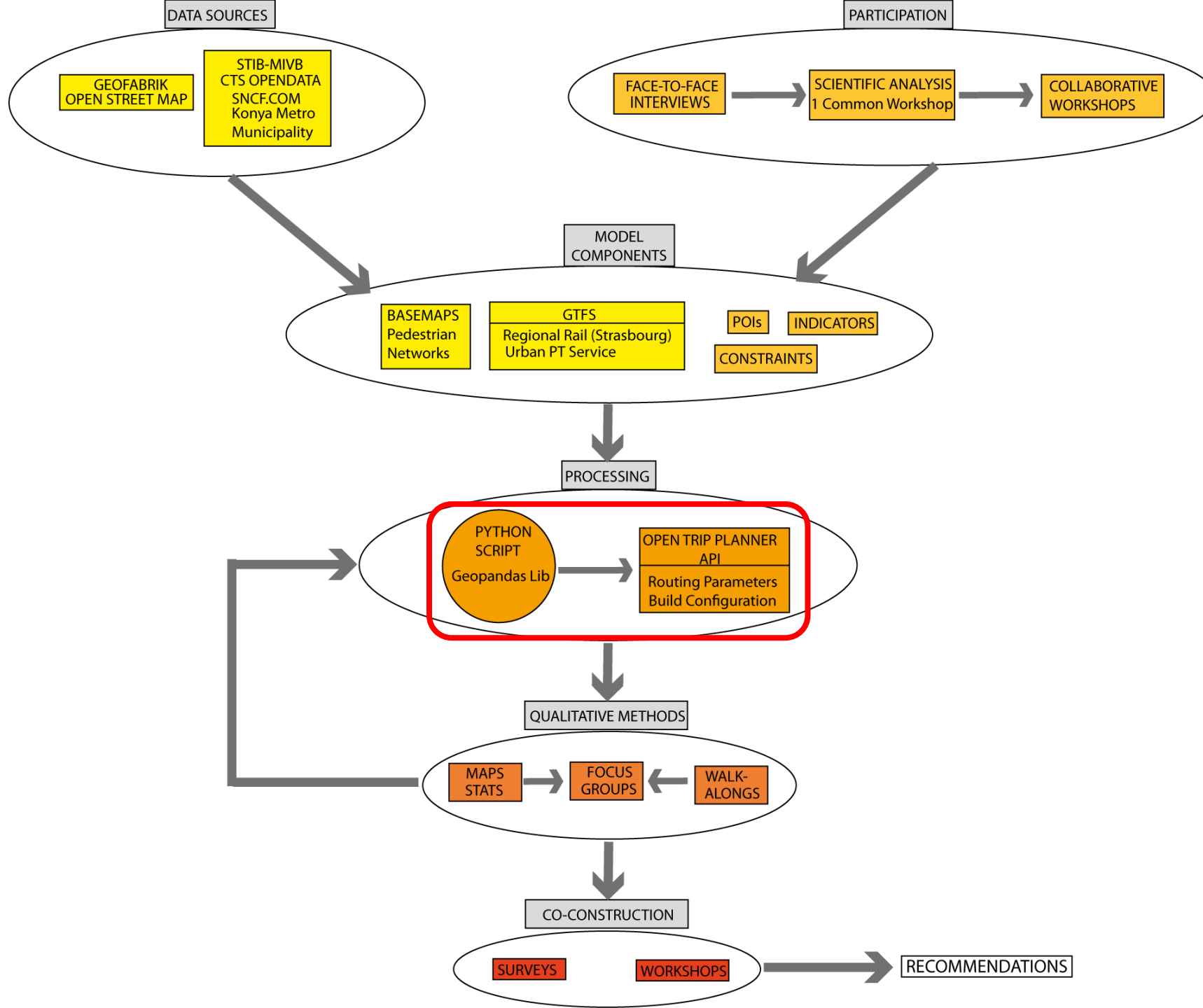
AUTONOMY?

Procedural Justice (Participation)
How inclusive and participatory is decision-making and governance of PT in terms of identifying problems and implement solutions?
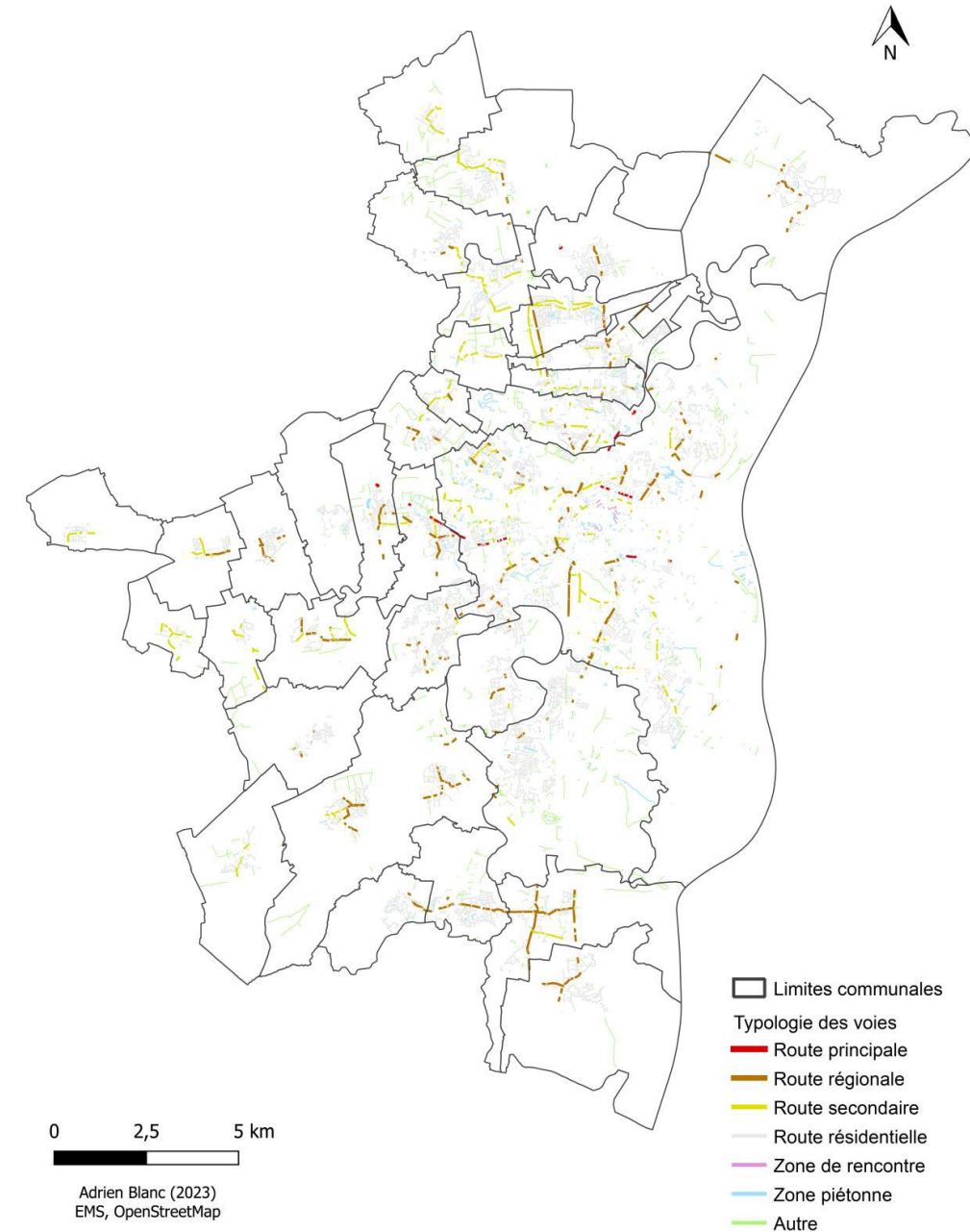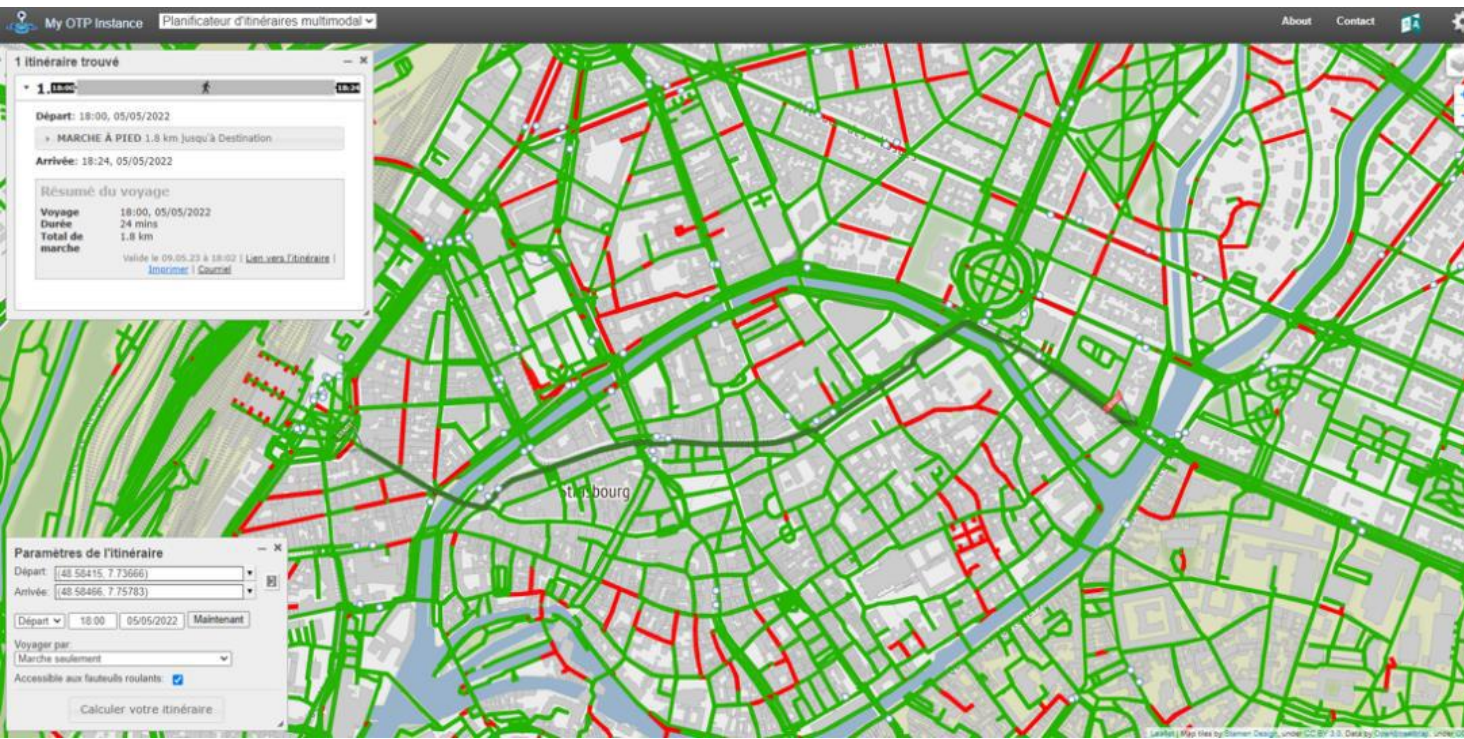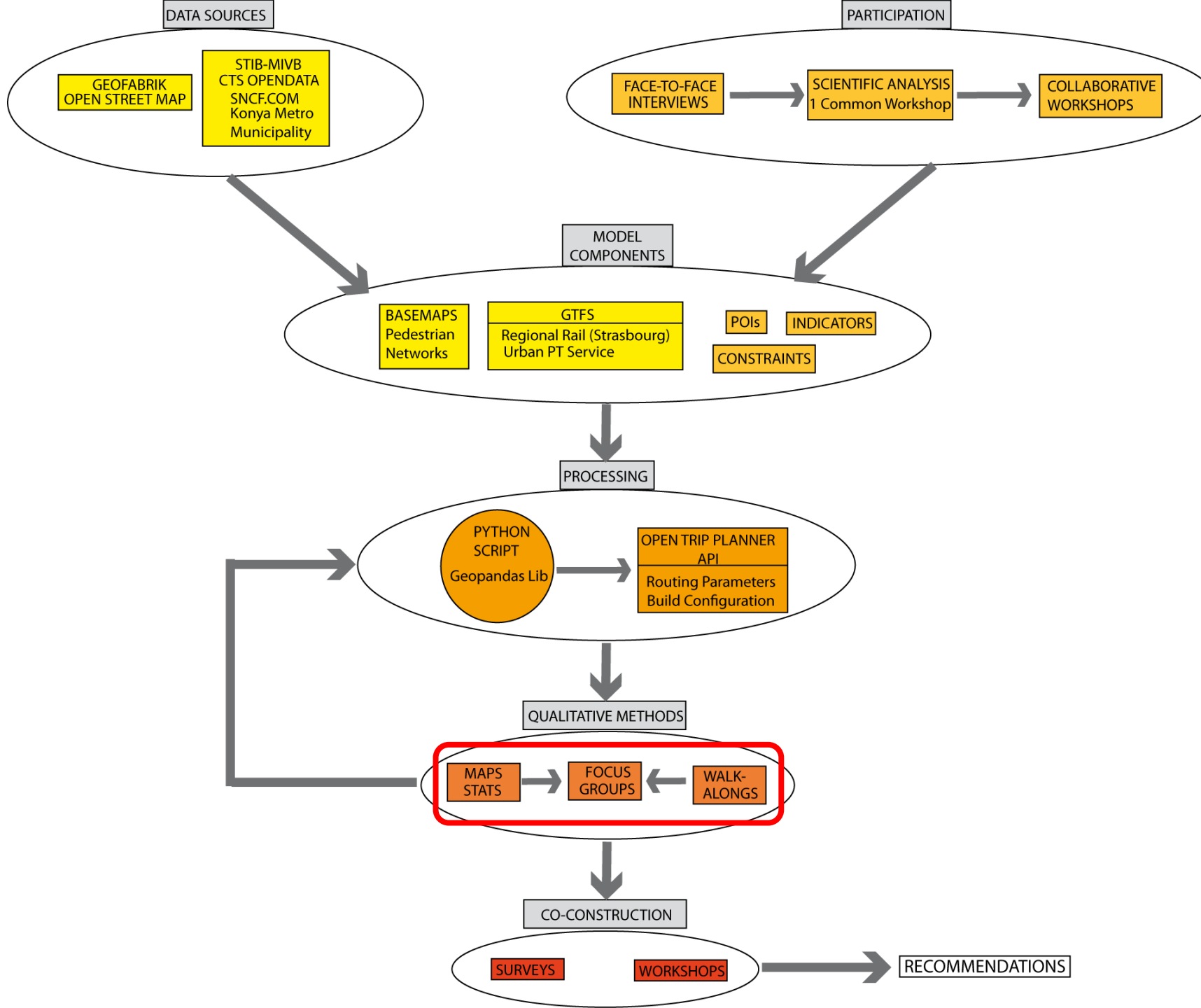
UNIVERSALISM?

Methods & Data

- OSM Basemaps
- GTFS: urban PT + Rail (Strasbourg)
- Accessible stations, vehicles (Brussels), and sidewalks (Strasbourg)

Adrien Blanc (2023)
EMS, OpenStreetMap

Limites communales

Typologie des voies
- Route principale
- Route régionale
- Route secondaire
- Route résidentielle
- Zone de rencontre
- Zone piétonne
- Autre

0   2,5   5 km

Qualitative Methods:
Measuring and Expressing

- 72 go-alongs in the 3 cities
- 3 Focus Groups

→ Refinement of the measures
→ Building profiles
→ Express not possible to model barriers
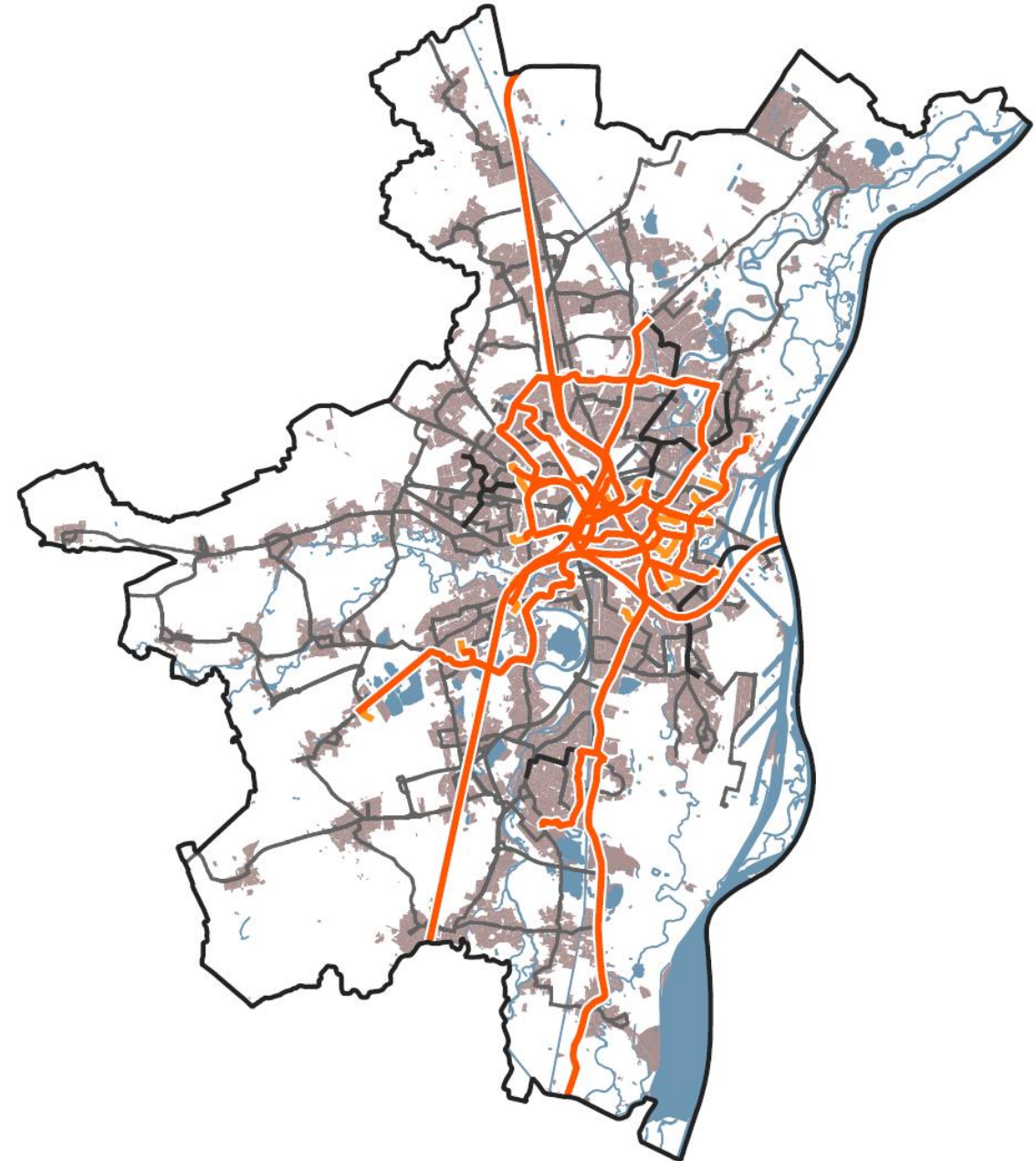
Urban Fabric

■ Built areas
■ Water bodies

PT Network

— tramway
— bus

Go-along routes

— PT
— Walk to/from PT

Justice Project
Sources : DataGrandEst, CTS
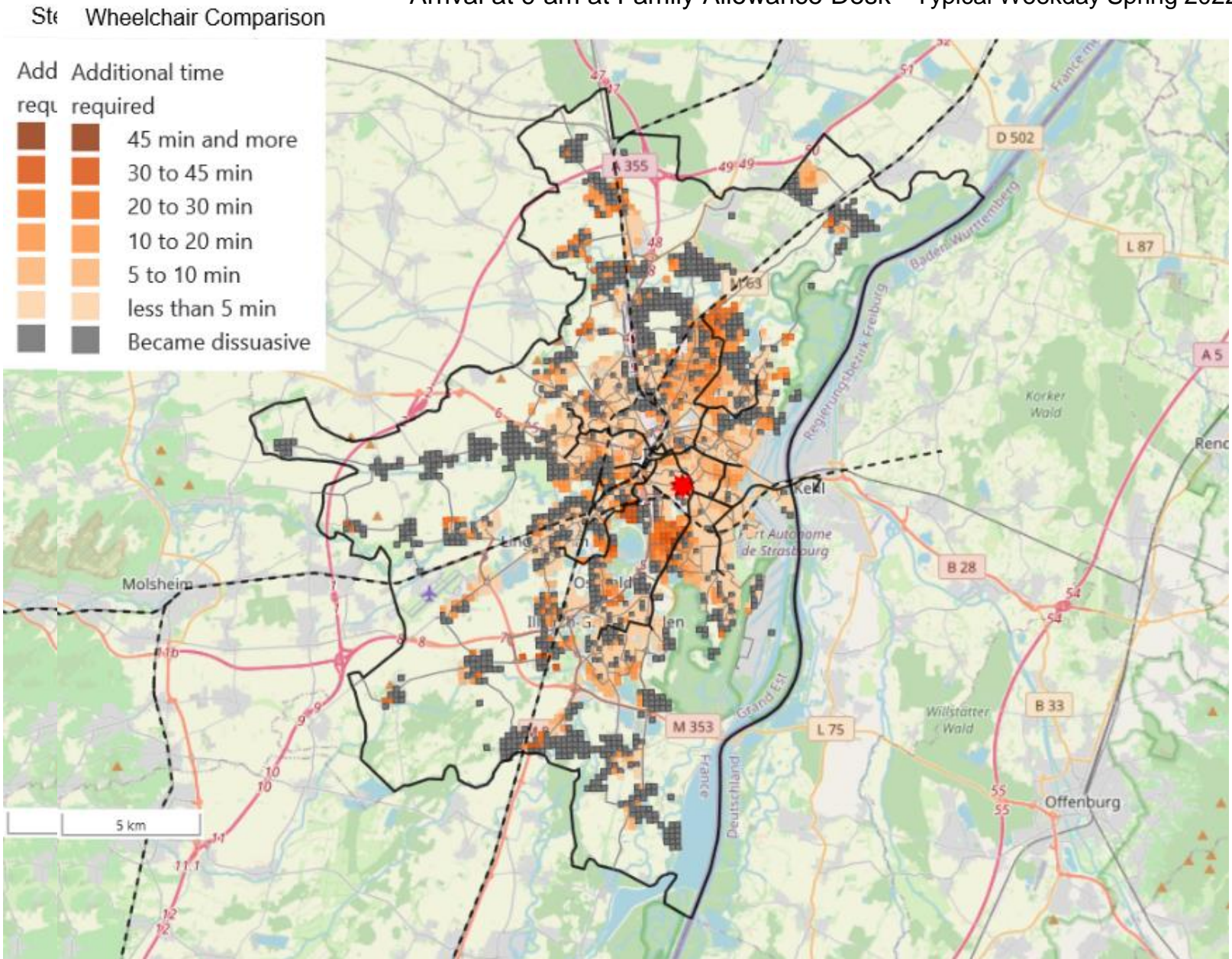Realization : Olivier Finance

EARLY RESULTS

JUSTICE
3 cities · 4 audiences

Measured Accessibility (Strasbourg)

Arrival at 9 am at Family Allowance Desk - Typical Weekday Spring 2022

Expressed barriers
(Strasbourg)

Roadways

High Sidewalks
Signs for obstacles
Dangerous Crossings

Transit Service

Frequency
Range of operating hours

Rolling Stock

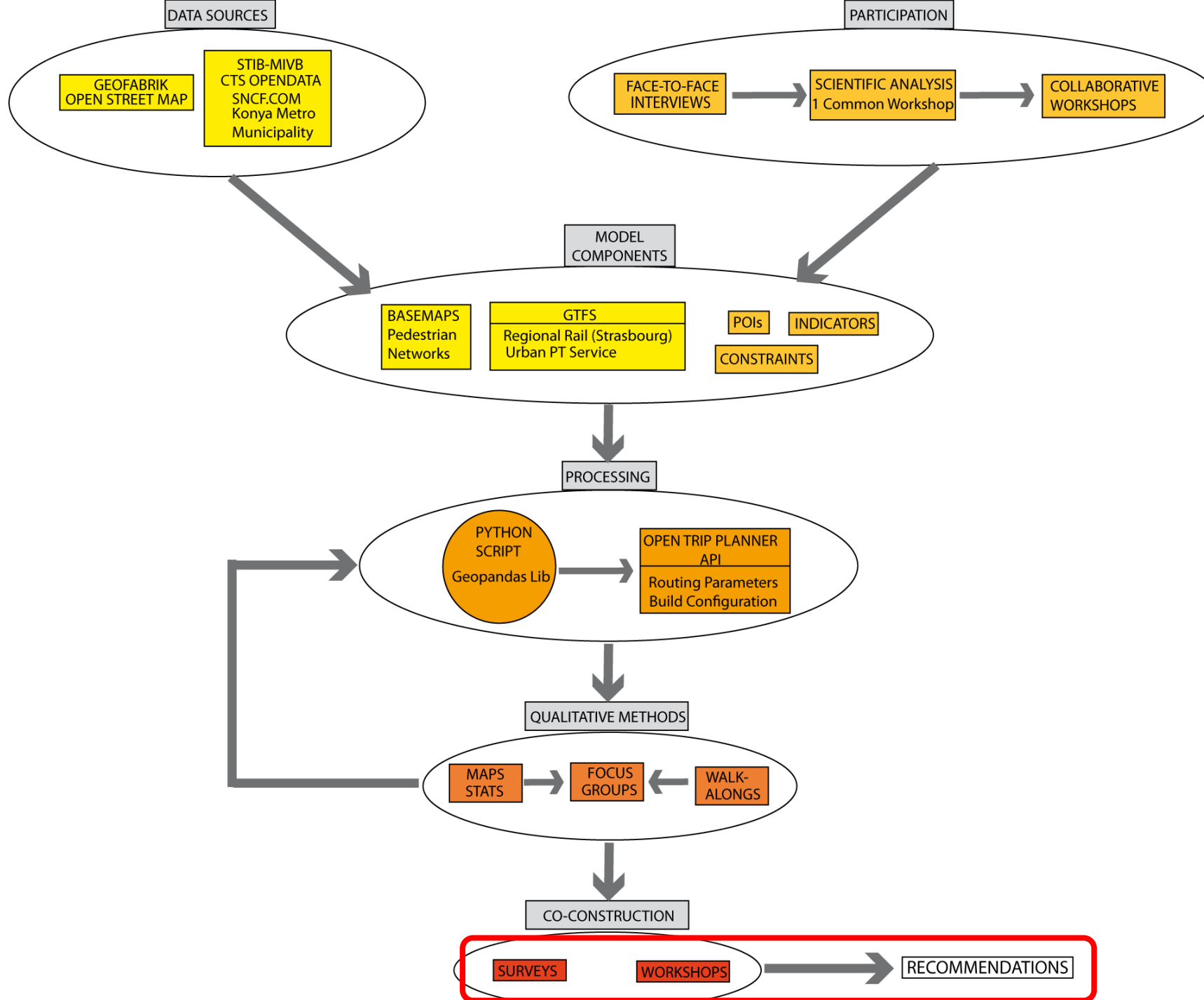Number of handholds
Door opening

Information

Voice announcements number on platform
Voice announcements sound level on vehicle
Apps
Screens in vehicles or in stations

Citizenship

Bus drivers way of driving
Consideration for fragile groups

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SURVEYS   WORKSHOPS   RECOMMENDATIONS

18

Co-Creating Workshops

January – March 2024, Brussels - Konya - Strasbourg

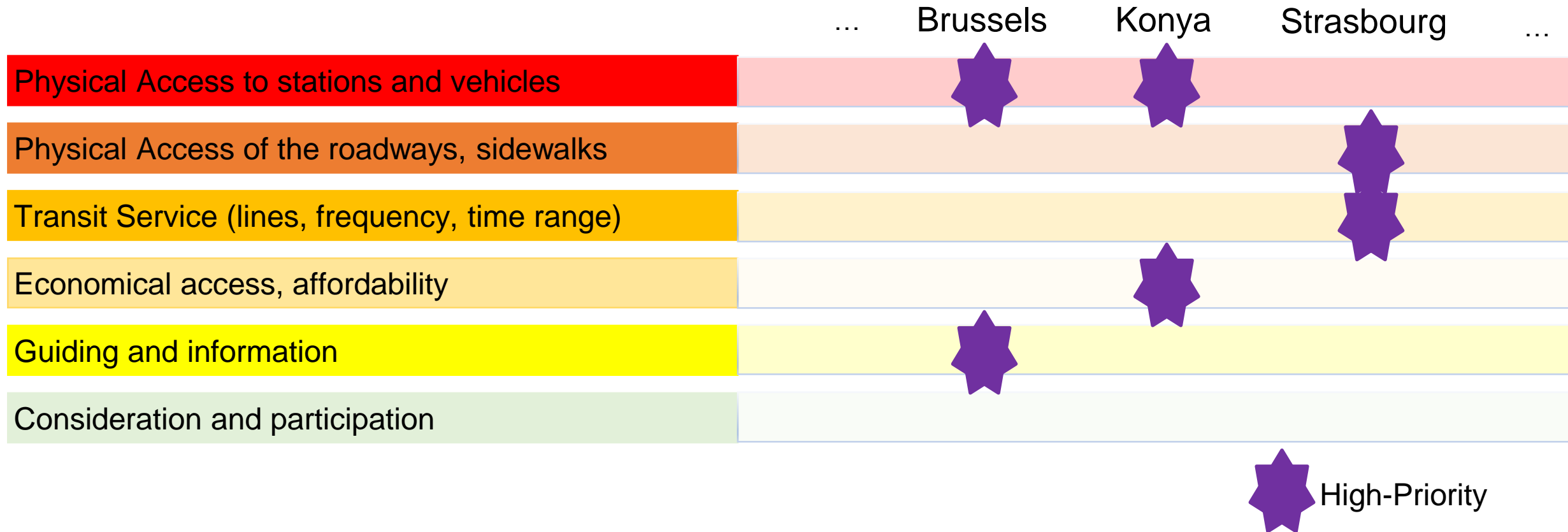

Crédits: UlrichW

JUSTICE
3 cities · 4 audiences

Credits (photographies): Mehmet Samil ÖZRENK (KBB), "Atomium" by Nan Palmero from Flickr.com (CC-BY), "Les quais, Strasbourg" by Pierre_Bn from Flickr.com (CC-BY)

Inclusive City Strategy

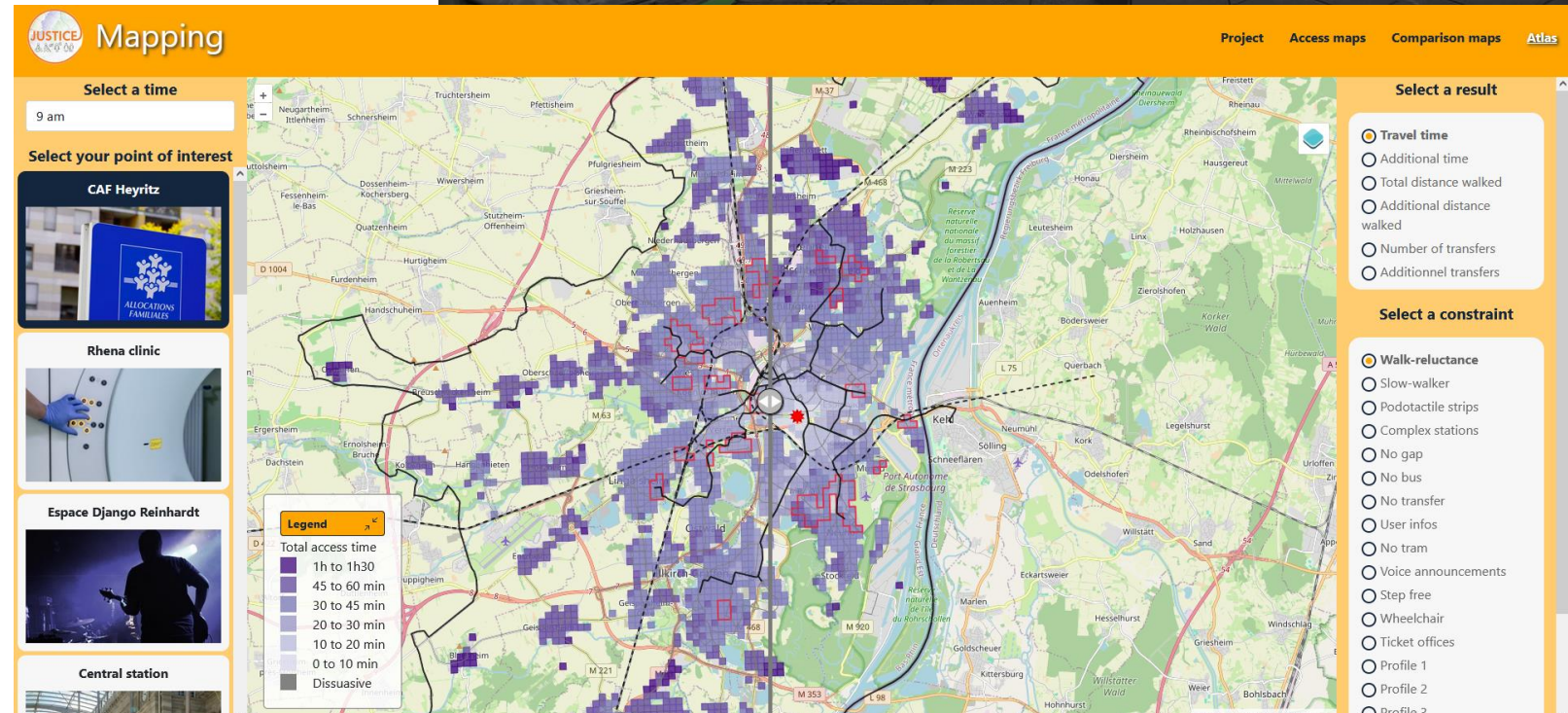Good Practices Notebook

JUSTICE

Actions (Konya)

Kiosks to allow disabled people to report their presence at the bus drivers

40 buses & 3 bus stations equipped thanks to the JUSTICE project

Conclusion

JUSTICE
3 cities · 4 audiences

What is an inclusive city policy?

	...	Brussels	Konya	Strasbourg	...
Physical Access to stations and vehicles		★	★		
Physical Access of the roadways, sidewalks				★	
Transit Service (lines, frequency, time range)				★	
Economical access, affordability			★		
Guiding and information		★			
Consideration and participation					

★ High-Priority

Dissemination

- Film

- [Atlas](#)

- Final Event April 24th

THANK YOU FOR LISTENING!

Alexis Conesa, LIVE,
Université de Strasbourg

https://justice-project.eu

@Enuac_Justice

conesa@unistra.fr

JUSTICE
3 cities · 4 audiences