

# Re-humanization of cities: mobility and public space innovations



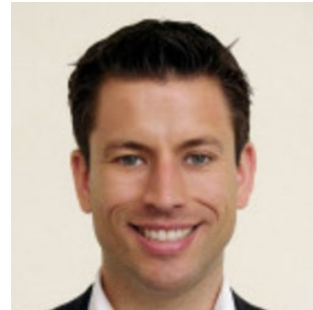
**Iván Tosics,**

*URBACT Thematic Programme  
Expert*

**Béla Kézy,**  
*Lead Expert, Thriving Streets*



**Claus Köllinger,**  
*Lead Expert, Space4People*

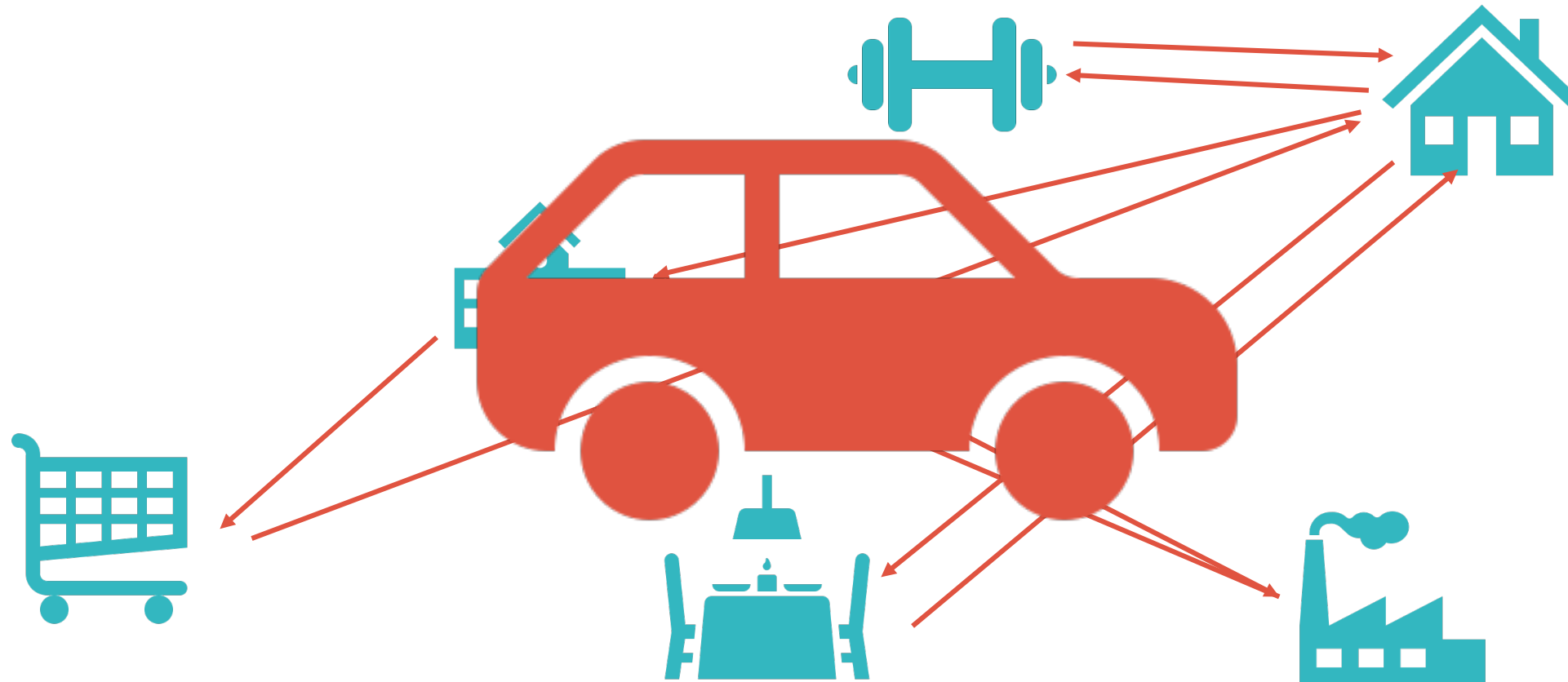


**Roland Krebs,**  
*Lead Expert, RiConnect*



**#WalkAndRollCities**  
Where streets belong to people!

# The challenge to living well in a city



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**WHAT** is Walk&Roll cities?

2

**HOW** did we get here?

3

Rehumanizing our cities - **visions**

4

Innovative **tools** to bring visions to life

5

**HOW** can we make this happen?

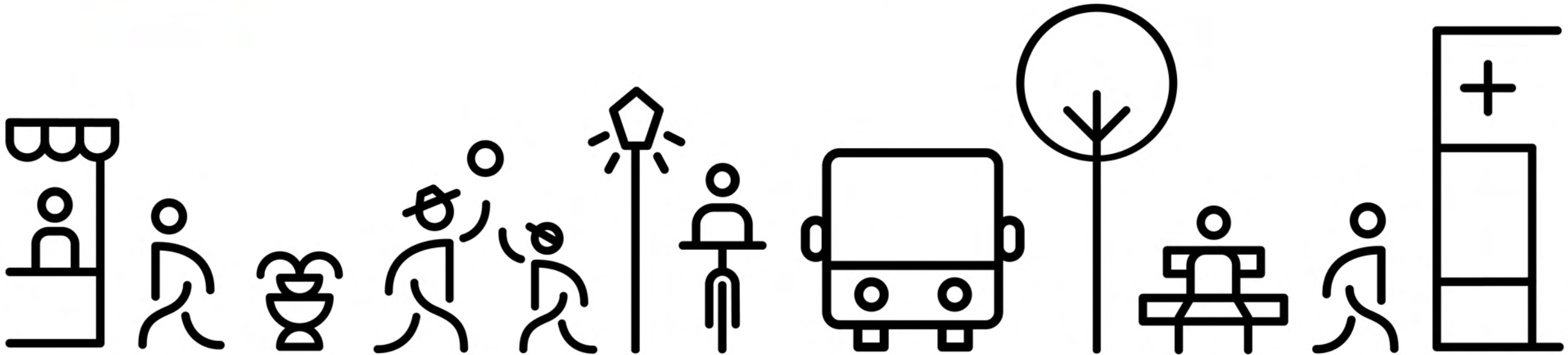


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# WHAT is ...

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# Walk'n' Roll Cities: an URBACT cooperation in mobility and public space



- Urban Policy Learning Platform
- **Focus:** mobility and public space
- **Spatial cover:** from metropolitan level to neighbourhood and street level
- **Examples of topics:**
  - Metropolitan transport and local active mobility
  - Integration of infrastructures
  - Intelligent parking solutions
  - Changing the mobility mindset of people
  - Placemaking

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# Timeframe and tools of the cooperation

The cooperation is planned until the end of URBACT III, i.e. summer 2022.

Two main tools:

- Thematic meetings: webinar 1 (Nov 2021), webinar 2 (5 April 2022) and a closing seminar (6-7 July 2022 in Barcelona).
- LinkedIn group: <https://www.linkedin.com/groups/8964194/> serving as a sharing platform for the products of the three APNs.

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# URBACT City Festival: session on mobility and public space solutions

Paris/Pantin, 14-16 June (appr. 450 participants)

What (specific activity)	When (length in minutes)	Who (which speaker)
introduction	3 min	Iván Tosics moderator
LE of RiConnect to interview 1-2 city representatives of the network	14 min	Roland Krebs LE with city representatives
LE of Thriving Streets to interview 1-2 city representatives of the network	14 min	Béla Kézy LE with city representatives Patrizia Marani (Parma) & Daan Jansens (Antwerp)
LE of Space4People to interview 1-2 city representatives of the network	14 min	Claus Köllinger LE with city representatives: ...
moderated discussion with the city representatives about the difficulties to discuss and implement the mobility innovations and changes in the use of public space	10 min	Iván Tosics moderator
summary and closing	5 min	Iván Tosics moderator

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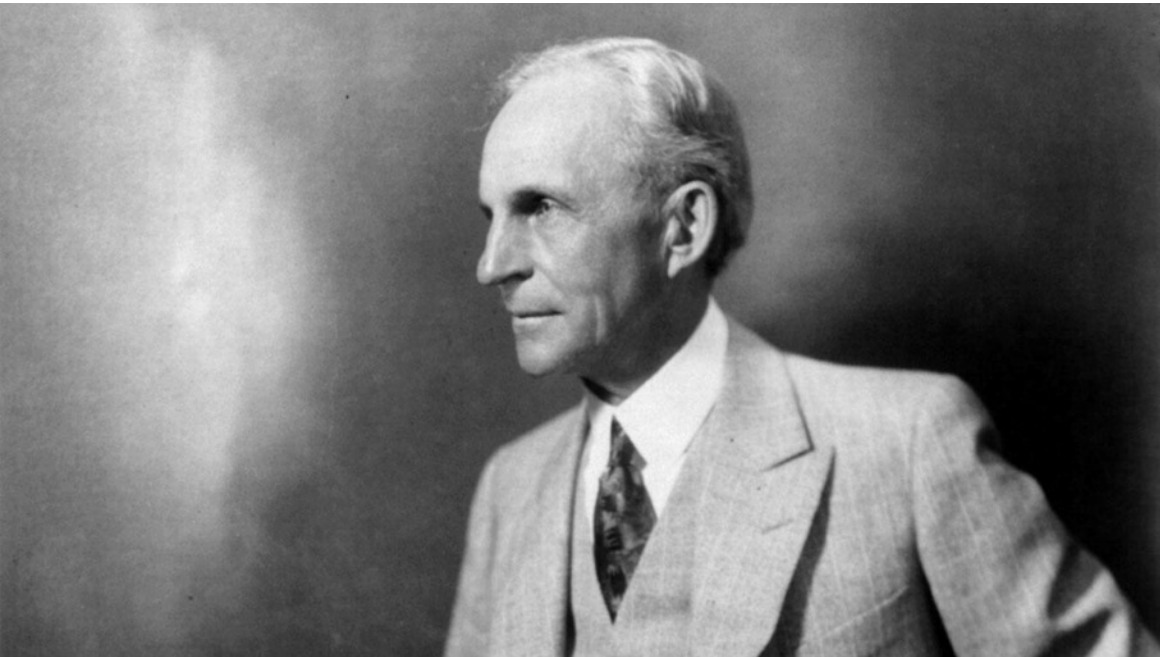
# How did we get here?

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# The main reasons for rapid American suburbanization

- the **mortgage loan scheme** that encourages the construction of single-family homes
- the **U.S. Federal Highway Act of 1956**, which made it possible to multiply the length of the highway network with huge subsidies (construction of a new highway 40,000 miles)
- federal policy to **keep gasoline prices low**
- the reform of the tax system, after which the primary source of revenue for local governments is **the real estate tax**
- rebalancing the state aid system **to the extra infrastructure costs of extra-urban development.**

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1950



Courtesy of Walter P. Reuther Library, Wayne State University, Detroit.

**Der Bau der ersten innerstädtischen Autobahn zieht seit 1942 eine Schneise durch Detroit.**

Starting in 1942, the building of first urban freeway creates a corridor through downtown Detroit.

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1954



Photograph © 1979, Jim Sheppard, Detroit Free Press, Detroit.

**Mit dem Einkaufszentrum Northland Mall beginnt ein massiver Suburbanisierungsprozess.**

The regional shopping center Northland Mall triggers a massive suburbanization process.

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1960

# Suburbanization processes in the US

- In most metropolitan regions of the USA, **the size of the built-up area of the city and its surroundings increased much faster than the population growth rate**, ie the housing density of the urban region decreased sharply (from 1500-2500 people / sqkm to 800-1300 people / sqkm)
- In the expanding urban regions, **single-family homes and private car transport** were becoming dominant
- **City of Phoenix**: including agglomeration, housing density decreased from 2431 persons/sqkm in 1950 to 904 in 1990. The increase in the population of the next 40 years means the disappearance of 6,800 sqkm of agricultural land (the built-up area increased from 44 nkm in 1950 to 10,000 sqkm in 1990).

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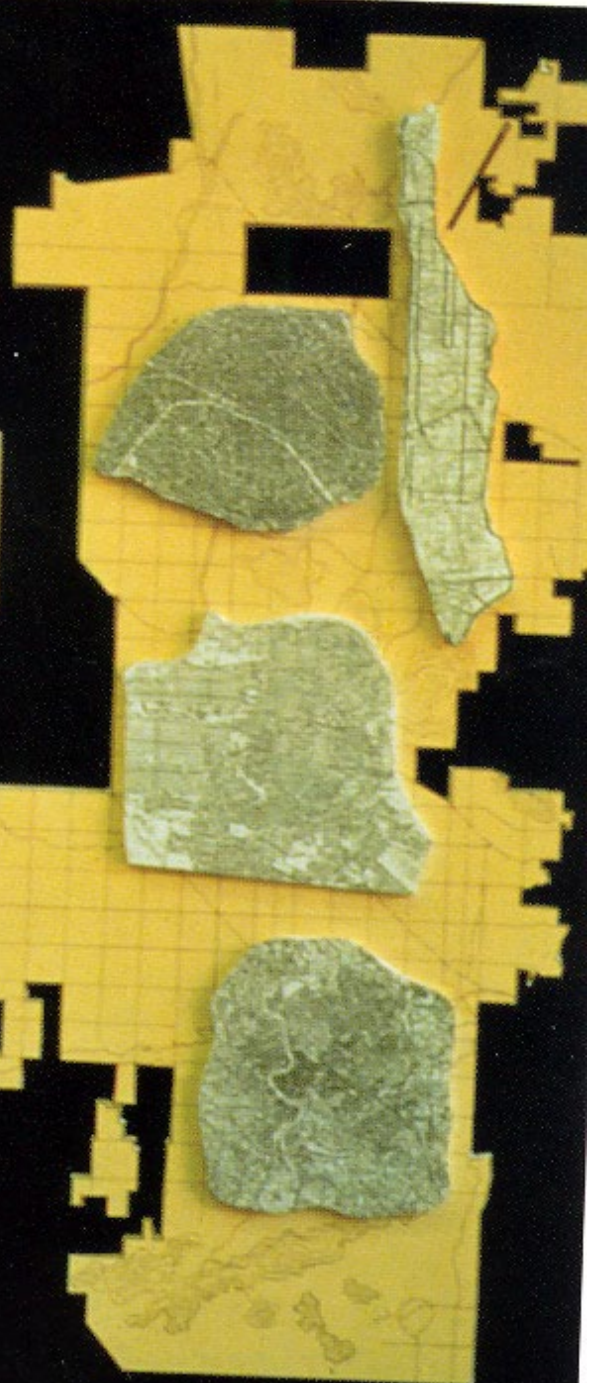
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# COMPARISON OF CITIES

CITY	AREA, SQ. MI.	POPULATION	DENSITY, IN.
MIAMI	41	1,200,000	29,268
ROME	40	1,000,000	25,000
NEW YORK	46	18,000,000	391,304
INDIANAPOLIS	100	400,000	4,000



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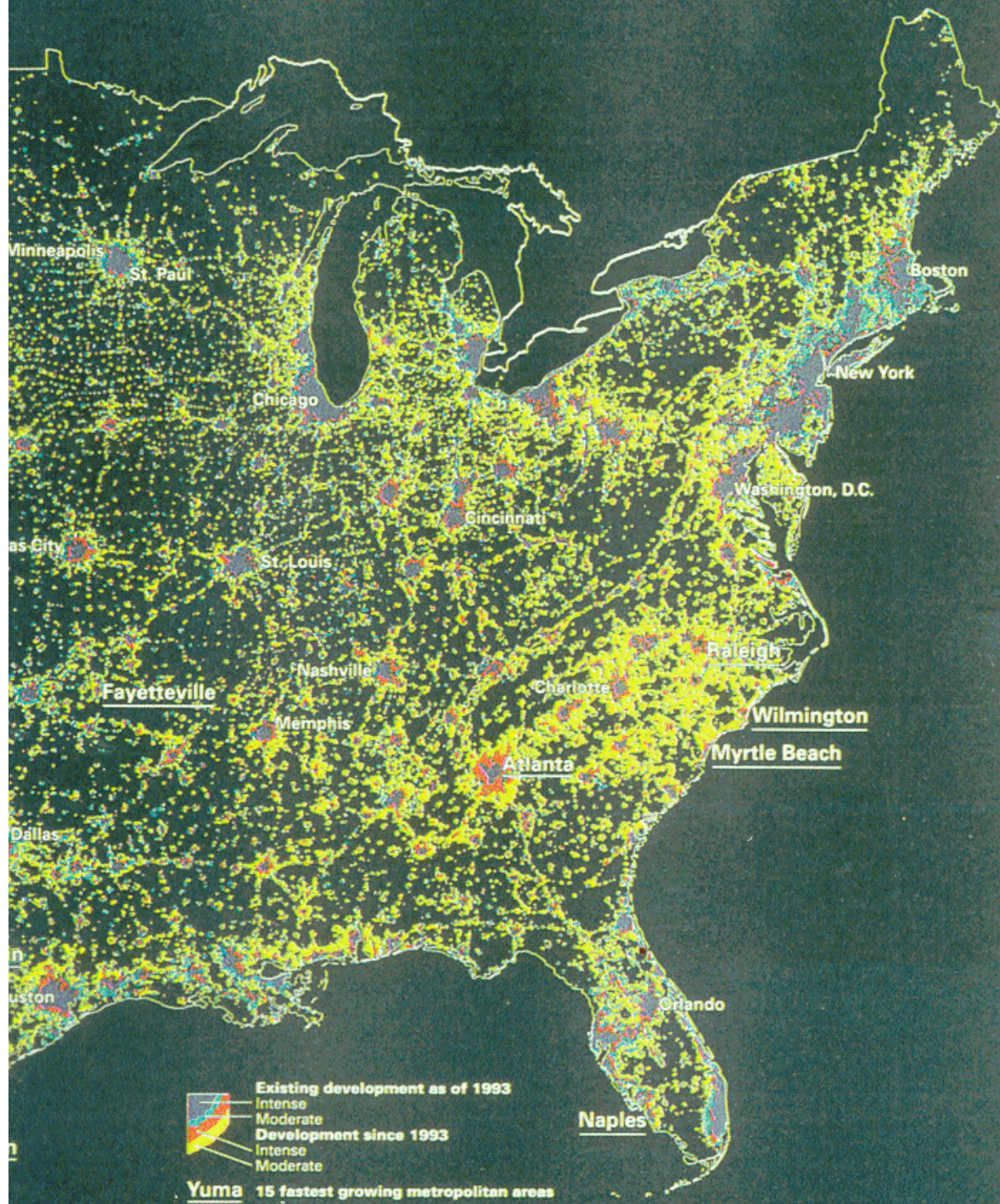


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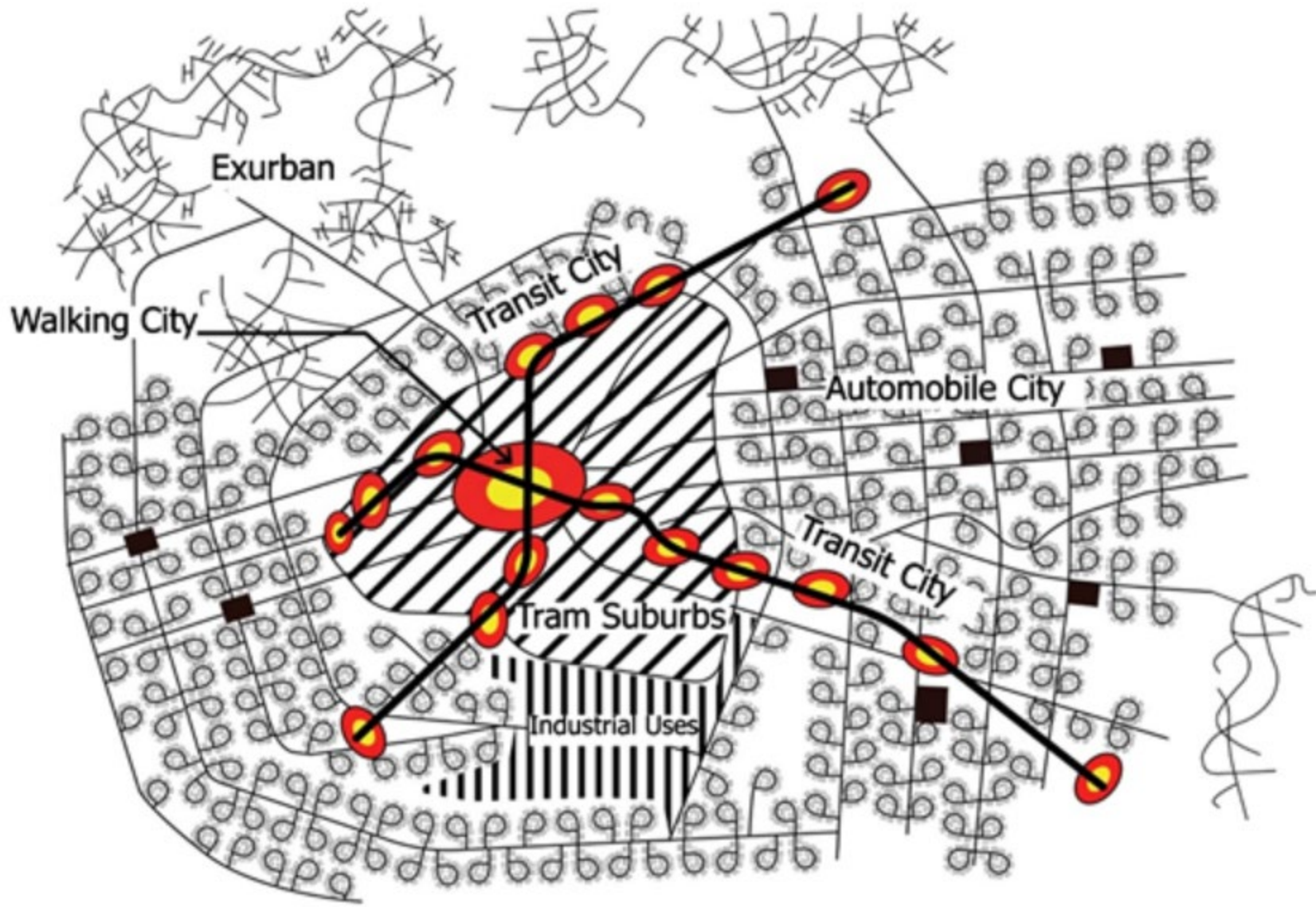




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Source: Newman et al. (2016).

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12/1943

# DIE AUTOGERECHTE STADT – THE AUTOMOTIVE CITY



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Image © 2022 The GeoInformation Group

## DRESDEN, GERMANY - 1942

Google Earth

1943

2/2003  
1943

# DIE AUTOGERECHTE STADT – THE AUTOMOTIVE CITY



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Image © 2022 AeroWest

## DRESDEN, GERMANY - 2000

Google Earth

3/2022

# DIE AUTOGERECHTE STADT – THE AUTOMOTIVE CITY

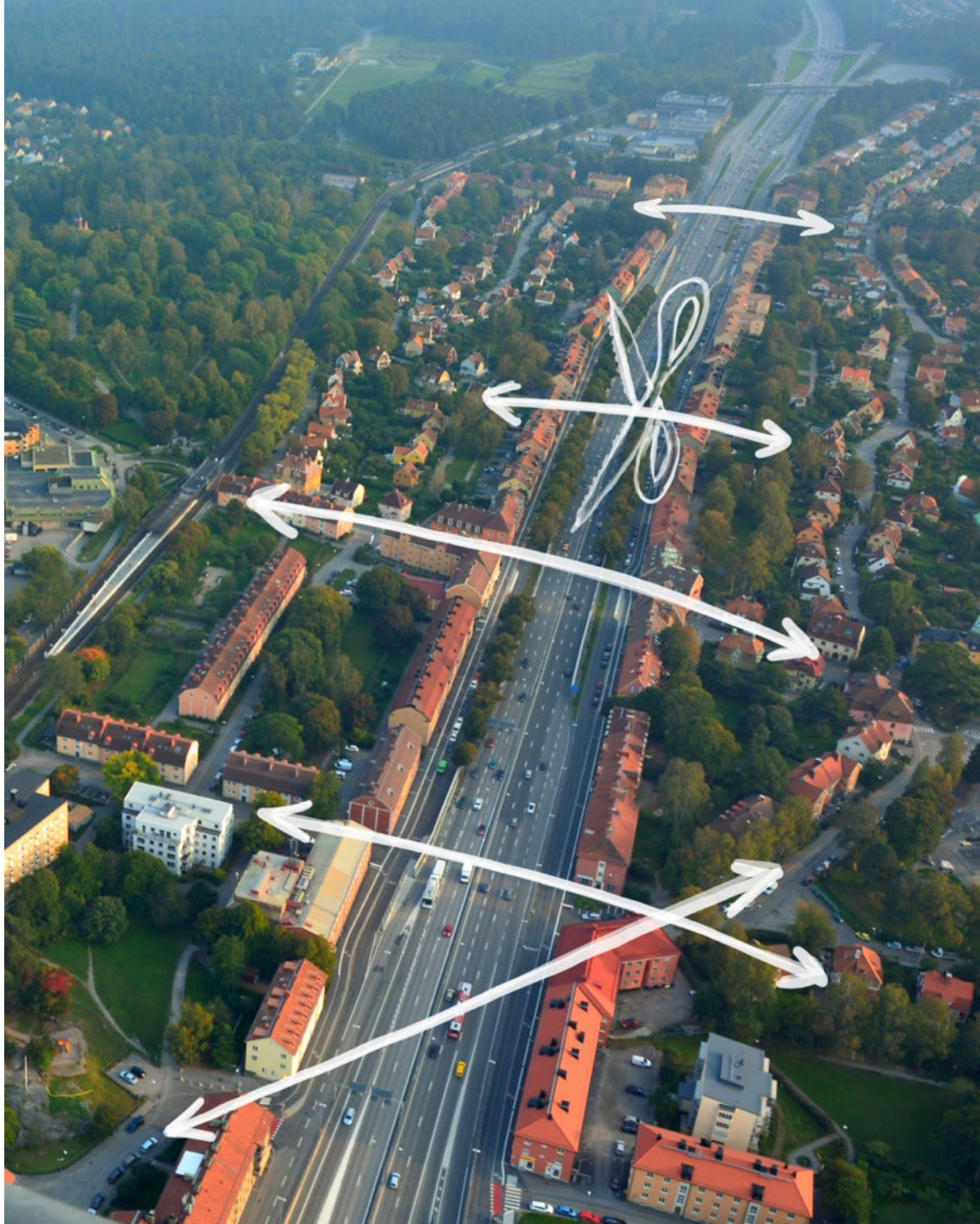
Dresden

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Image © 2022 Maxar Technologies

## DRESDEN, GERMANY - 2022

Google Earth



**Gamla Enskede, suburb of Stockholm, one of the first garden cities**

**1958: city planners decided to build a six-lane freeway running through the middle of the suburb, replacing the existing tram connection to the city and slicing the subtle designs of the neighbourhood in two, severing the organic flow of streets and squares**

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Source: <https://medium.com/butwhatwasthequestion/cities-captured-by-cars-part-1-of-and-you-may-find-yourself-behind-the-wheel-of-a-large-949cc00dd2bd>

# COVID crisis: further outmigration from cities

## Oslo analysis

- Increased outmigration in 2020 in the age groups 25-30 and 60-70. Managers (with at least 4 years of university education) were mostly increasing outmoving, showing a **clear teleworking effect**. Among outmigrants people not born in Oslo are over-represented. 2021: outmigration increased even further.
- Moving from the city in the year of Covid - will they return after the pandemic? Marianne Tønnessen. Paper for the ENHR2021 conference (Nicosia/online)

## US analysis

- Substantial reallocation of housing and office demand away from dense city centres toward city outskirts and suburbs. **‘Doughnut effect’** – the rise of the suburbs and the slump of the city centre, driven by a fear of crowds and the growth of working from home
- Arjun Ramani, Nicholas Bloom: The doughnut effect of COVID-19 on cities. January 2021  
<https://voxeu.org/article/doughnut-effect-covid-19-cities>

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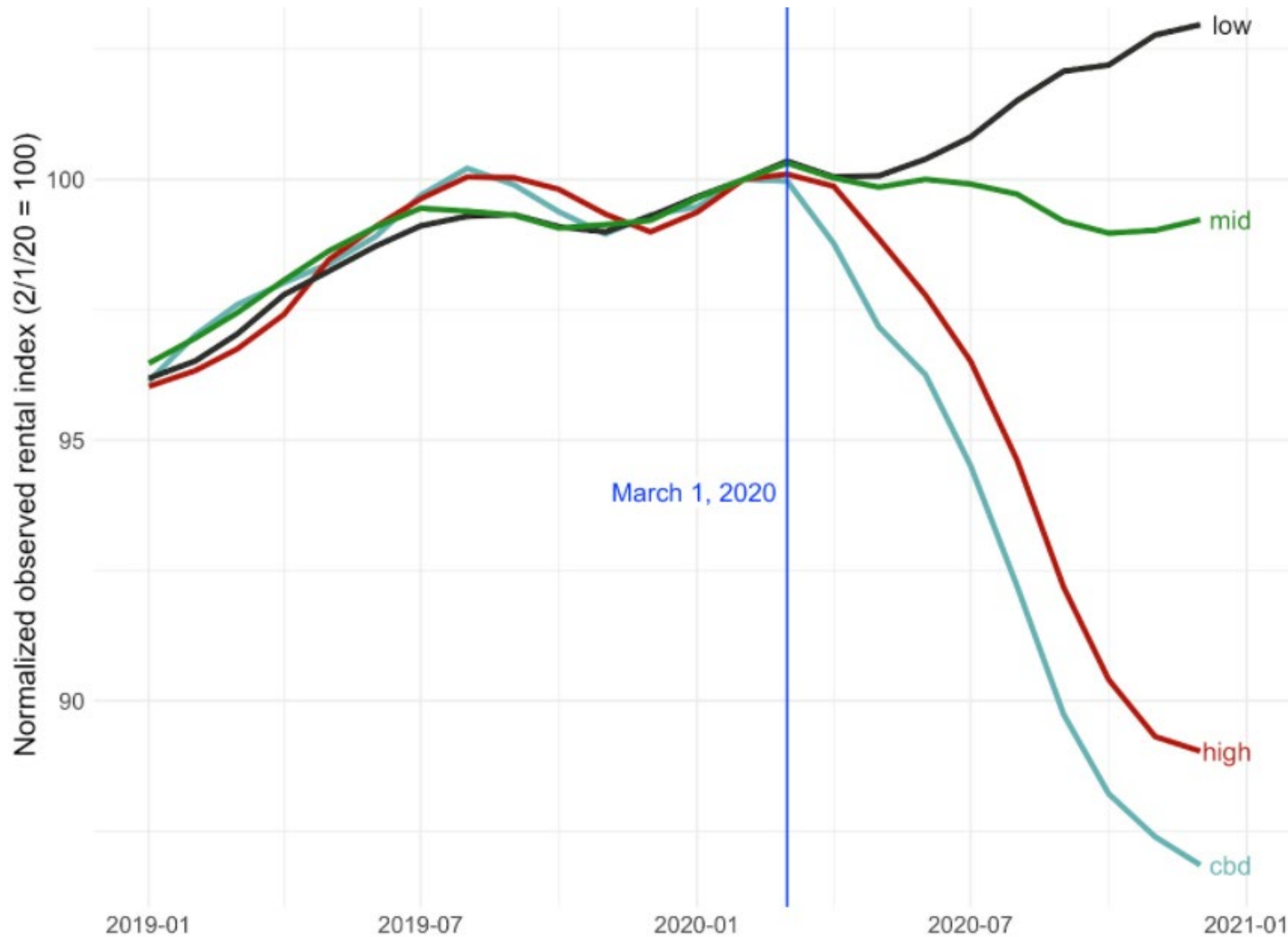
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# Rental index for 12 largest US metros broken by density groups

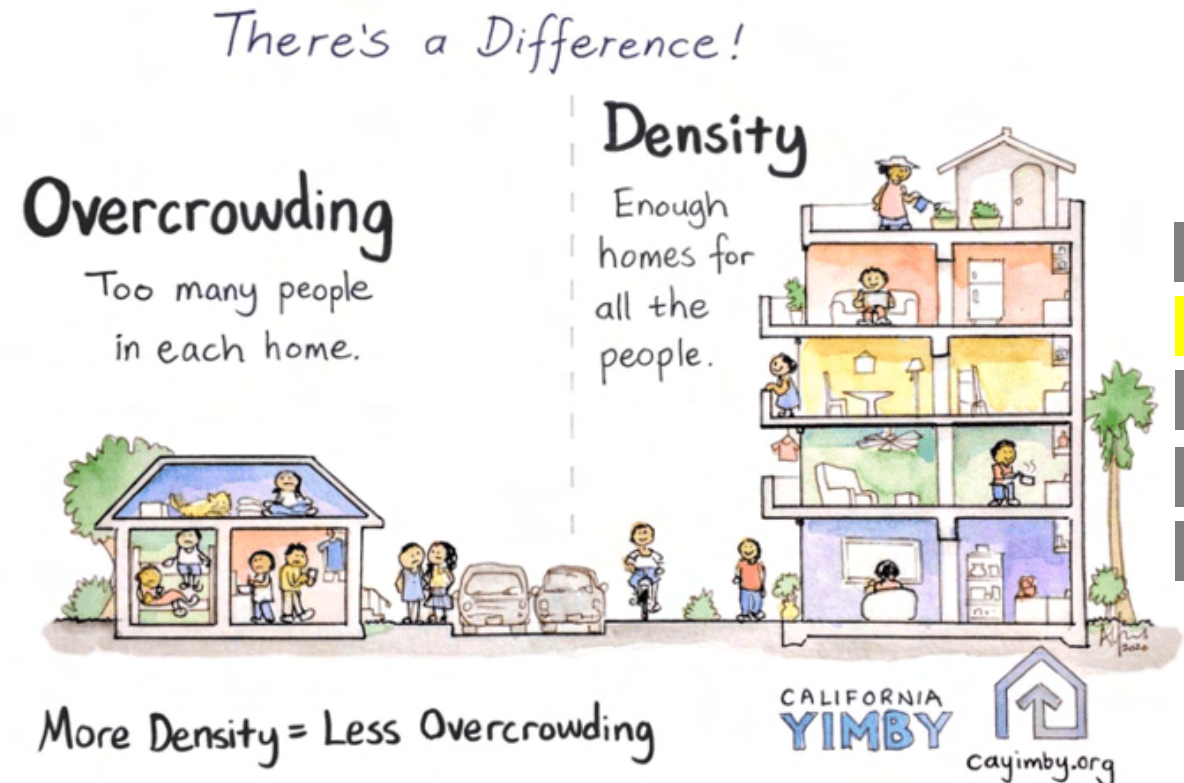


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Source: Arjun Ramani, Nicholas Bloom The doughnut effect of COVID-19 on cities January 2021

# The dilemma of urban density

*„It is not density alone that makes cities vulnerable to COVID-19, but the structural economic and social conditions that make it possible or difficult for cities to take suitable measures against the spread of the virus. Cities that are characterized by inequality, poor living conditions and the spatial concentration of poor sections of the population are far more vulnerable than the wealthy.” OECD*



# Ideas about the post-COVID city

How can our existing cities be changed into more equitable and sustainable places, in order to avoid uncoordinated urban sprawl?

- **regional view:** blended city
- **city view:** better density in city core, managed suburbanization
- **urban mobility:** towards active mobility forms and multimodality with public transport
- **public space:** retrieve public space from cars
- **services:** allow and strengthen communities, turn places into common use

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# New metropolitan model

## The Blended City?

 The Physical City



 The Virtual City



The Blended City



# Rehumanizing our cities - *visions*

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# Visions

- Accessibility shift
- Chronotopia – 15 minute city
- Superblocks
- "Liberating" city roads from cars
- Redesigning the road network
- Regional integration?

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# The re-humanization of cities

- **Again, systematic policy and planning interventions are needed, this time in the opposite direction to the 1950s. Parallel and interrelated changes in mobility and public space development should aim to limit car use and support active travel, while transforming public spaces for the benefit of residents.**
- **Overall Concept:** Levine-Grengs-Merlin (2019) 'From Mobility to Accessibility: Transforming Urban Transportation and Land-Use Planning'

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# An overarching concept: ‚Accessibility shift’

Transportation and land-use planning should be strongly connected, and based on people's ability to reach destinations, rather than on their ability to travel fast.

The new approach should be based on

- **connectivity:** forms of connection that avoid physical displacement should also be considered;
- **proximity:** the city must be transformed so that more and more needs can be met within a short distance without the use of cars;
- **mobility:** addressing the remaining mobility needs should be based on integrating different modes of transport, with a focus on public transport and active forms of mobility, in addition to restricting car use.

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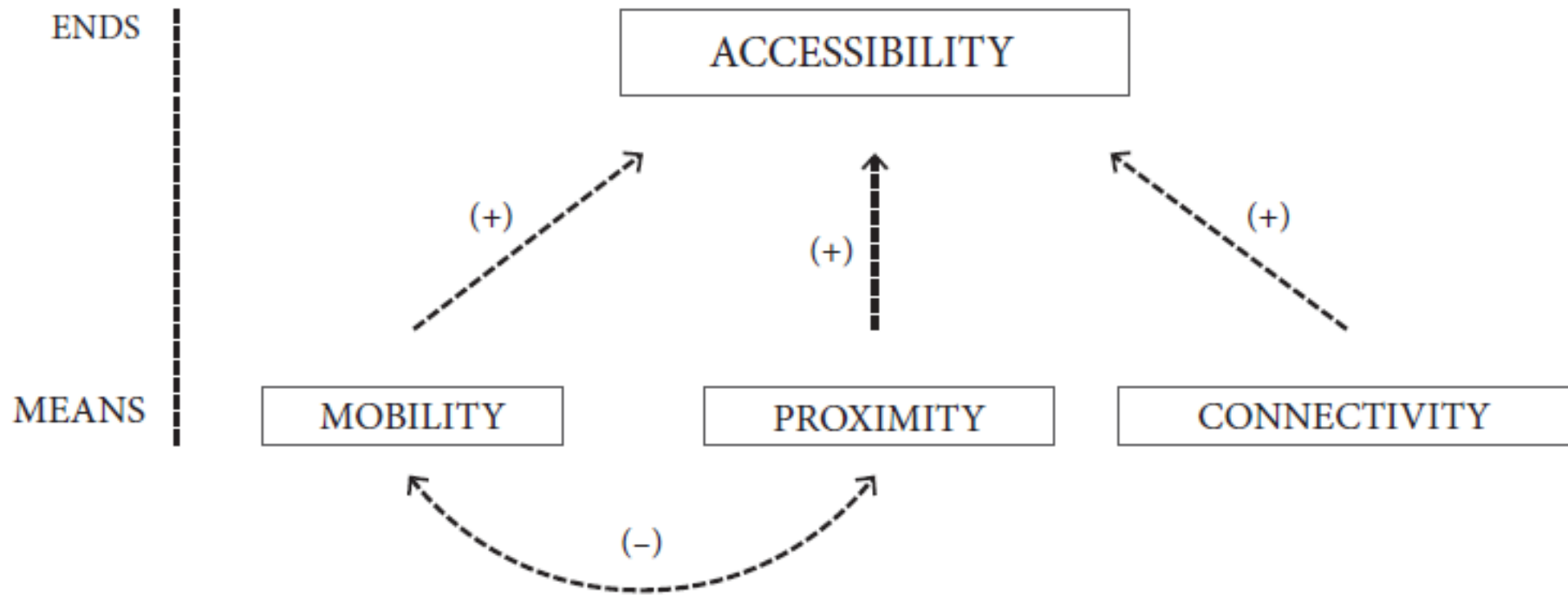
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**FIGURE I.1** Relationships among mobility, proximity, connectivity, and accessibility in a revised hierarchy of transportation goals

Levine-Grengs-Merlin (2019) 'From Mobility to Accessibility: Transforming Urban Transportation and Land-Use Planning'

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Compagnie de Navigation Nationale de Grèce

# 4<sup>ème</sup> CONGRÈS INTERNATIONAL D'ARCHITECTURE MODERNE

à bord du S/S «PATRIS II» Marseille—Athènes—Marseille

du 29 Juillet au 13 Août 1933

Organisé avec le concours de la Société «NEPTOS», 254, rue St-Honoré—PARIS

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### Tchécoslovaquie

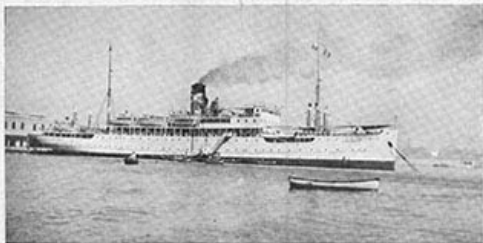
M. KALIVODA, V.

## CHRONOTOPIA - MULTIPURPOSE CITY VS THE FUNCTIONAL CITY



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## A BOAT TRIP TO ATHENS – CHANGING THE CITIES FOREVER 1933



# CHRONOTOPIA - MULTIPURPOSE CITY VS THE FUNCTIONAL CITY



SHOUWBURGPLEIN, ROTTERDAM, WEST8

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# CHRONOTOPIA - MULTIPURPOSE CITY VS THE FUNCTIONAL CITY



METAL 57 – BNP PARIBAS HEAD QUARTER PARIS, DOMINIQUE PERRAULT, 2020

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# CREATIVE WORKING PLACE REFORM



ROCHUSPARK CO-WORKING VIENNA, AUSTRIA

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# Four models

Using infrastructures to minimize mobility can follow four models:

- the same structure can be used **simultaneously for multiple functionalities**;
- second, the **different use of the same structure at different times**;
- third, **seasonal variation** in use;
- fourth, **real-time adaptive change** in use through resilient responsive structures.

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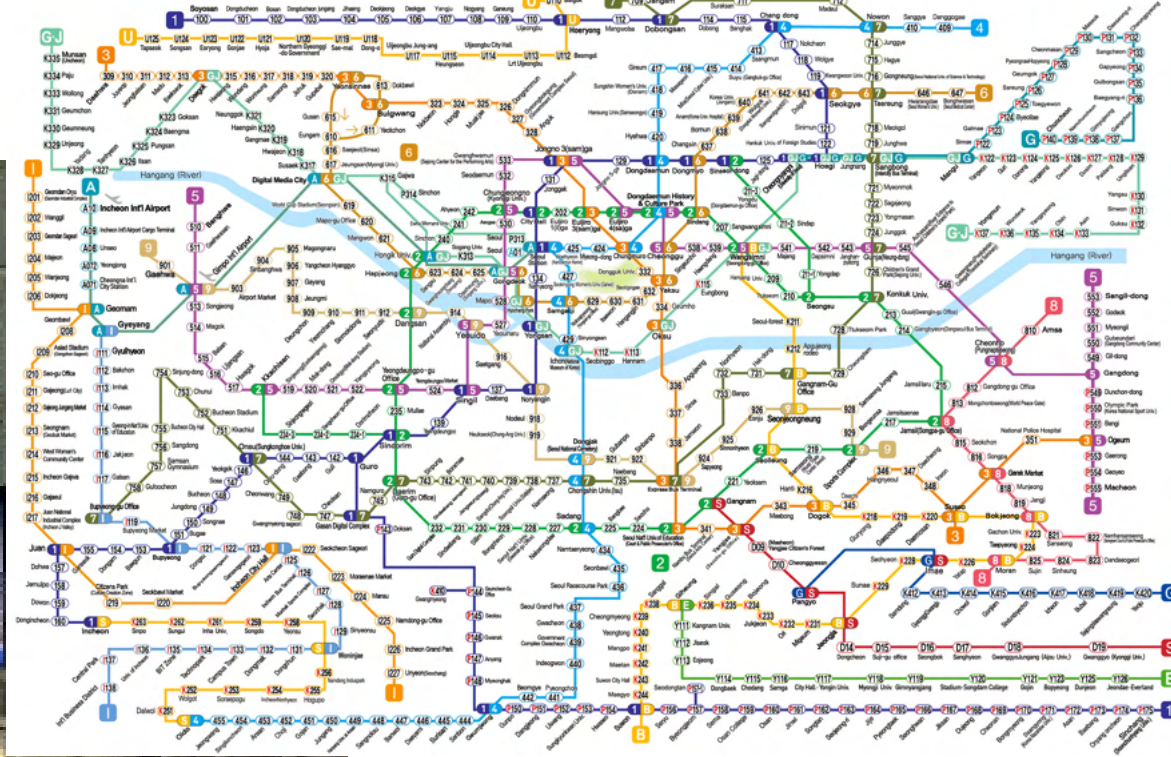
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# DIFFERENT USES AT THE SAME TIME



# SUBWAY TRAIN STATIONS + MULTIPURPOSE SPACES

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DIFFERENT USE AT DIFFERENT TIMES



CICLOVIAS EN BOGOTÁ – EVERY SATURDAY SINCE 1974

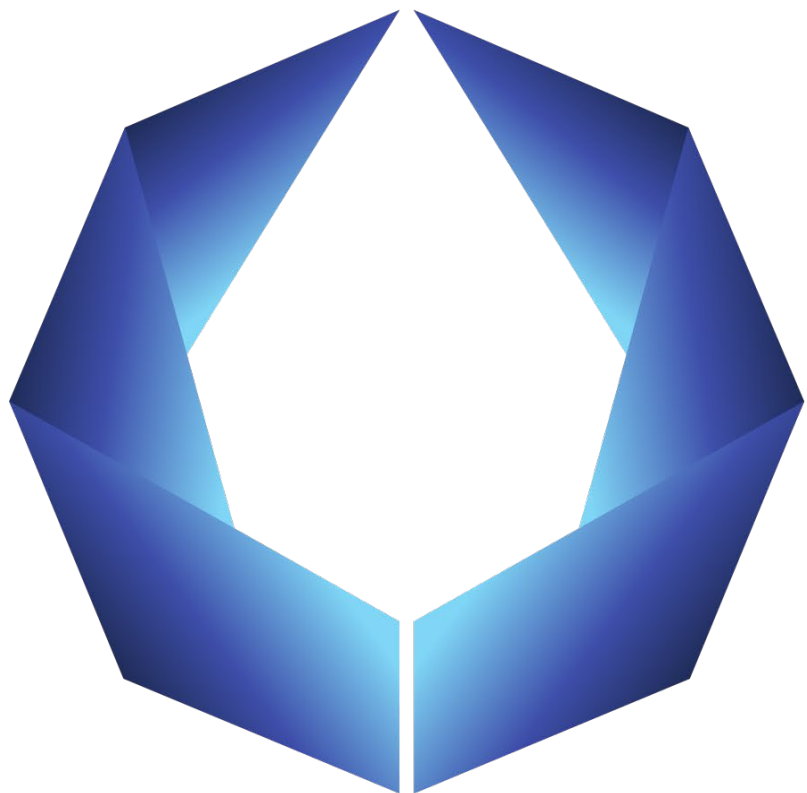
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SEASONALLY DIFFERENT USES



# BOSTON 2024

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A BID FOR SUMMER OLYMPICS – DID NOT GO THROUGH



# REAL-TIME CHANGE IN USAGE



THE SHED WITH "TELESCOPING", NEW YORK CITY, ROOFDILLER SCOFIDIO + RENFRO

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# ‘Proximity’: innovative urban spatial visions

The public sector has a key role to play in initiating and managing ‘proximity’ transformations in developing and implementing innovative urban spatial planning visions.

- **‘15-minute city’** approach
- **‘Superblock’** idea
- **“Liberating” city roads and squares from car traffic**  
(transforming shopping streets, climate-friendly streets, key spaces into public spaces)
- **transforming the road network**, turning access roads into ‘urban boulevards’

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15 minutes city in dense urban areas, 30 minutes city in less dense areas.

Proximity solutions are based on **6 basic factors**: work, care, care, learning, leisure, relationships.

The aim is **to break the monofunctional solutions** towards prosperity, sociability and sustainability, for which indicators have been developed.

There are **three rules for mixing nearby uses**: chrono-urbanism (the new rhythm of the city), chronotopia (multi-purpose functions), topophilia (love of place).

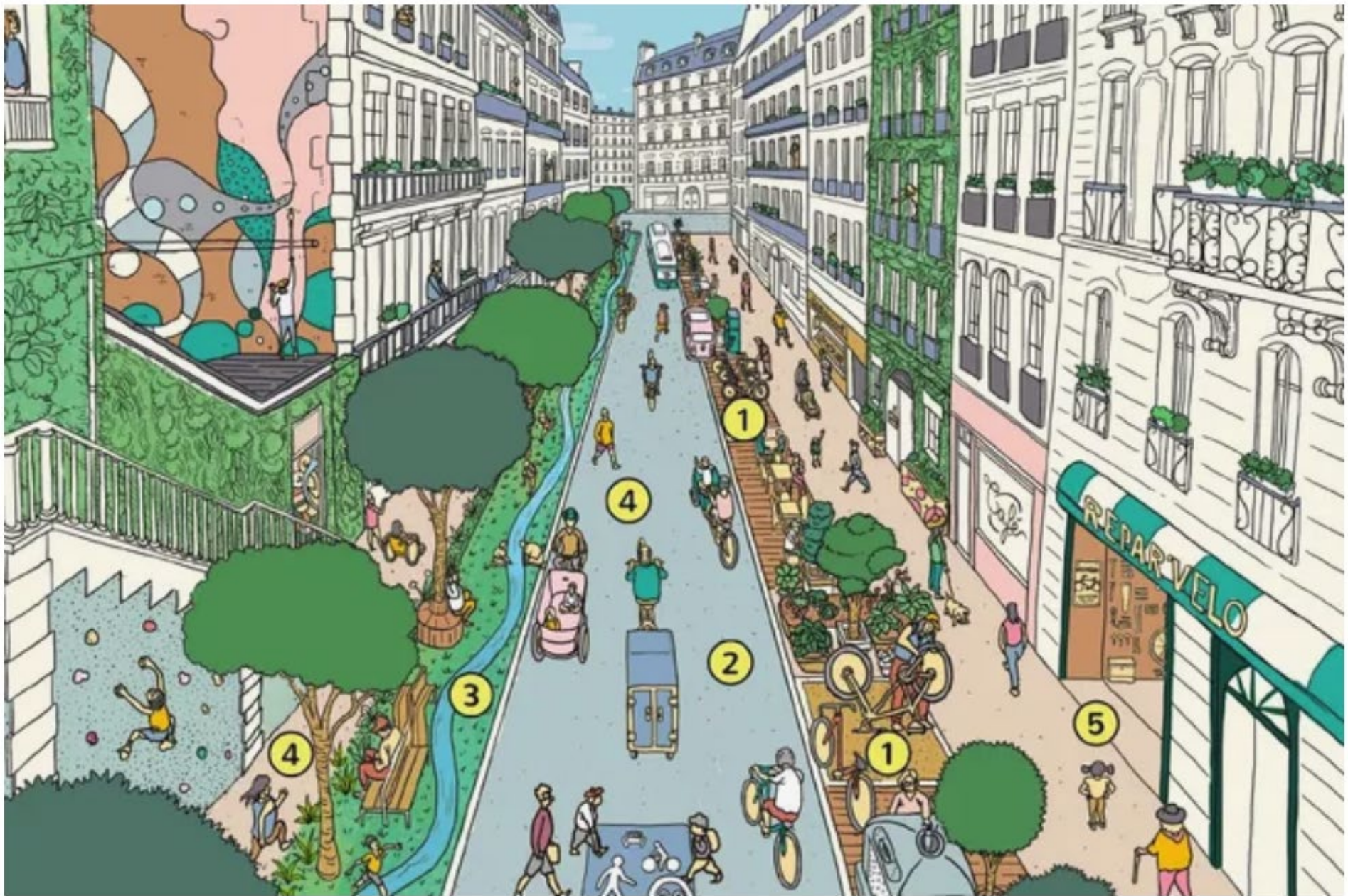
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Paris as 15 Minute City. Paris Commun

Source: <https://www.treehugger.com/the-15-minute-city-is-having-a-moment-5071739>

# SCHOOLS AS NEIGHBORHOOD CENTERS

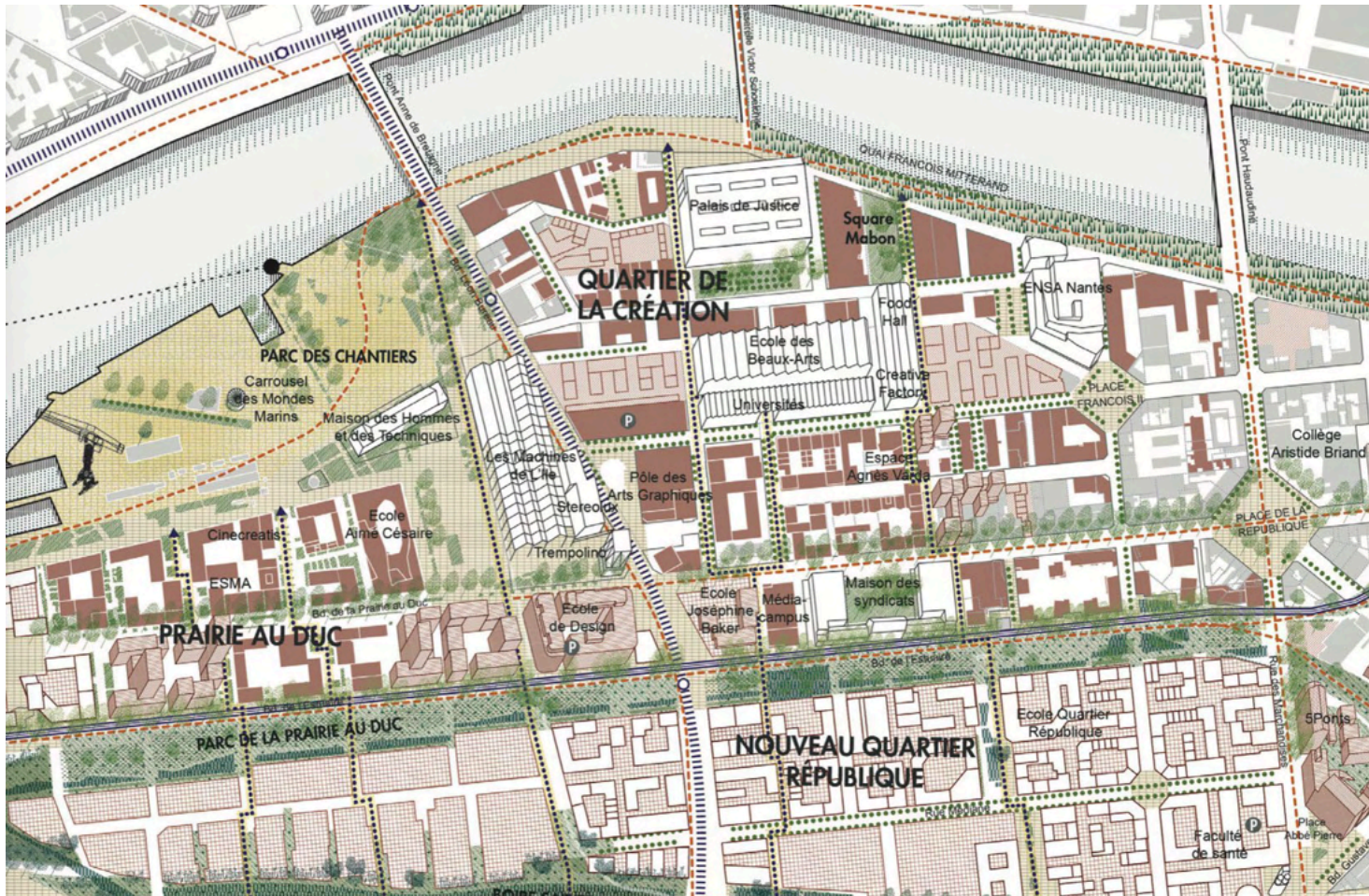


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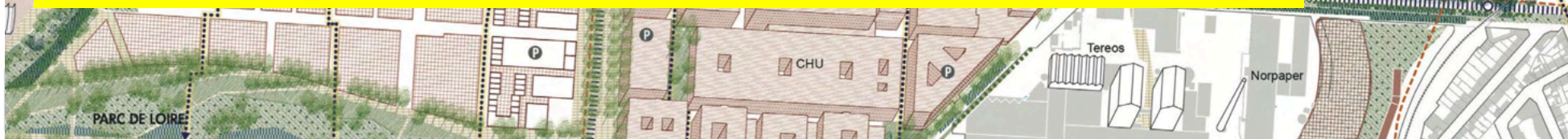
# MULTIPURPOSE USES AT VIENNA SCHOOLS, KLAMMER ZELENY, 2020

© Robert Tober

# ILE DE NANTES



MASTERPLAN ILE DE NANTES, ALEXANDRE CHEMETOFF, 2000-2010



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# THE BARCELONA SUPERBLOCK



BARCELONA, CATALUNYA, 2022

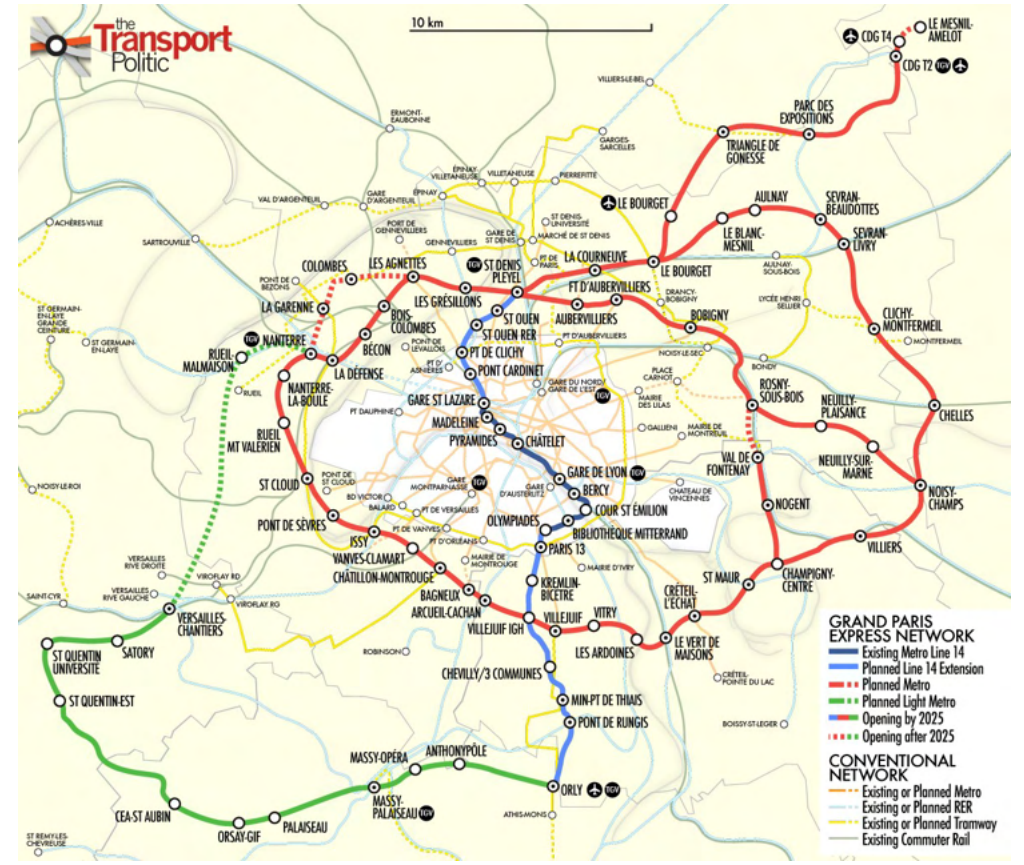
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# REGIONAL INTEGRATION OF MOBILITY: PARIS



## GRAND PARIS EXPRESS – OPPORTUNITIES IN THE PERIPHERY



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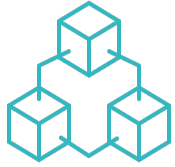
# Innovative *tools* to bring visions to life

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# Tools



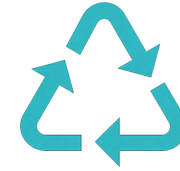
**Superblock**



**From highways  
to urban boulevards**



**Tempo 30**



**Circular mobility  
model**



**Parking  
management**



**Pedestrian priority city /  
Walkable city**



**School area**



**Shopping street**



**Public transport**



**Cycling network**

**Mobility hubs**

**Micromobility**

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# TRANSFORMING HIGHWAYS INTO URBAN BOULEVARDS



Source: Silvia Casorrán, Barcelona

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# TRANSFORMING HIGHWAYS INTO URBAN BOULEVARDS



**C/ Diagonal 2021**

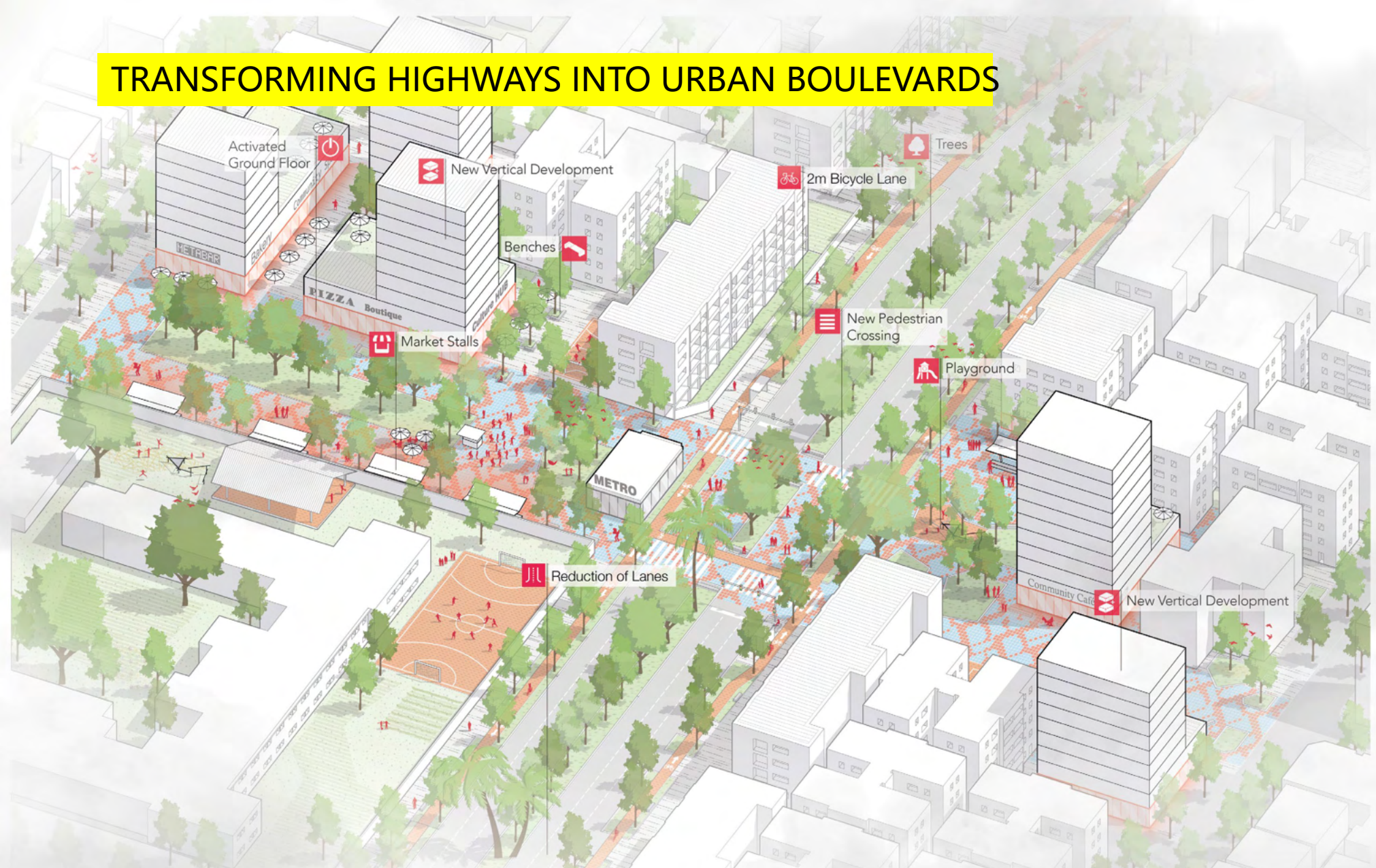


**C/ Diagonal 2023 (in transformation)**

Source: Silvia Casorrán, Barcelona

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# TRANSFORMING HIGHWAYS INTO URBAN BOULEVARDS



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## SANTO DOMINGO V CENTENARIO EXPRESSWAY TRANSFORMATION, SUPERWIEN, 2022

# Tempo'30: Brussels

- In 2019, a new city leadership was elected in Brussels with the following political program: "The government will create a large 30 km / h zone from 1 January 2021, with the exception of the largest roads.,,
- This policy agenda has been implemented in recent years. Of course, many actors initially resisted the idea, but **instead of reacting to everyone, the city focused primarily on supporters of the program.**
- **Tempo 30 became the new standard**, so 4,000 "Zone 30" boards were removed and new "Tempo 50" boards were placed in areas with higher speed limits.

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**#WalkAndRollCities**  
Where streets belong to people!

- New signs
- Remove signs « zone 30 »
- Informative signs
- Painted on the ground



Lesson 1: **get political support, with concrete deadline.**

Lesson 2: **Talk about it with your stakeholders** (but don't listen to everyone). There were many actors resisting. The city did not react on everyone, but focussed on allies. Over 1000 umbrellas were produced by a group with 30!

Lesson 3 : **Adapt the legislation and make a new map.** Tempo30 is the new normal

Lesson 4 : **Sell your story to everyone** (and do it on a large scale).

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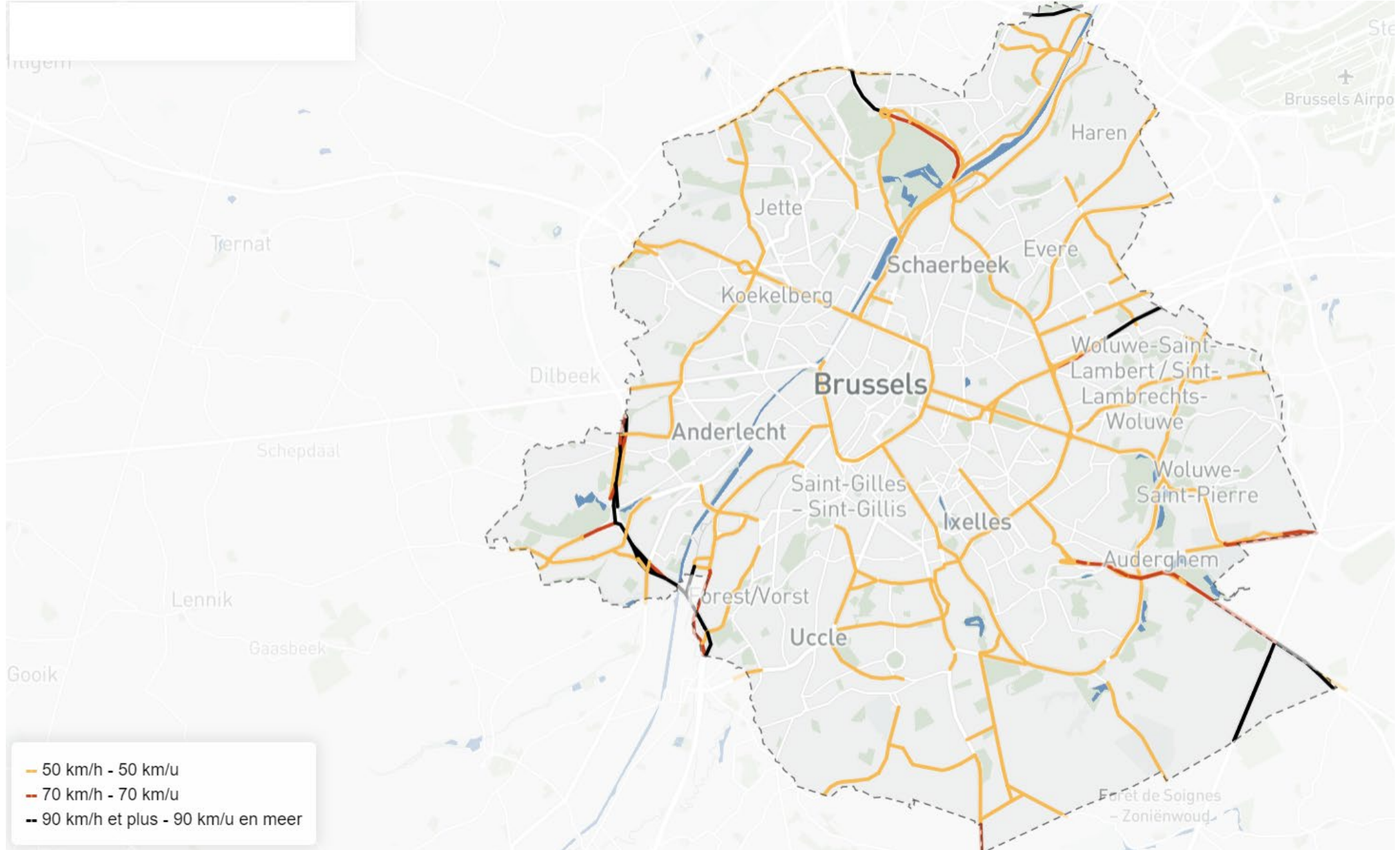
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Source: <https://city30.brussels/map/>

- **Communication** was very important: the idea was advertised everywhere and the information was mailed to 600,000 addresses. The press and social media sites were full of news about the change. The implementation was carefully controlled and the speed limit was checked thanks to 80 invisible new cameras.
- **Monitoring results:** recent observations show that the average speed of cars has declined, even on roads that have previously had a speed limit of 30 km / h. The total time spent traveling by car has increased, but not much, while the number of accidents has decreased. Noise levels have dropped: people have even begun to complain about the noise of the tram, which was previously hidden by louder road users.

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**#WalkAndRollCities**  
Where streets belong to people!

# Tempo'30: Graz – some short facts

- City wide speed limit 30 in place since 1992
  - Only exemption is priority roads
    - which were about 220 km of roads
    - and 770 km were residential roads
- > 85% of traffic takes place on priority roads!

Initial situation at the start of the idea:  
**Strong opposition from diverse stakeholders!**



# Tempo'30: Graz – the key elements

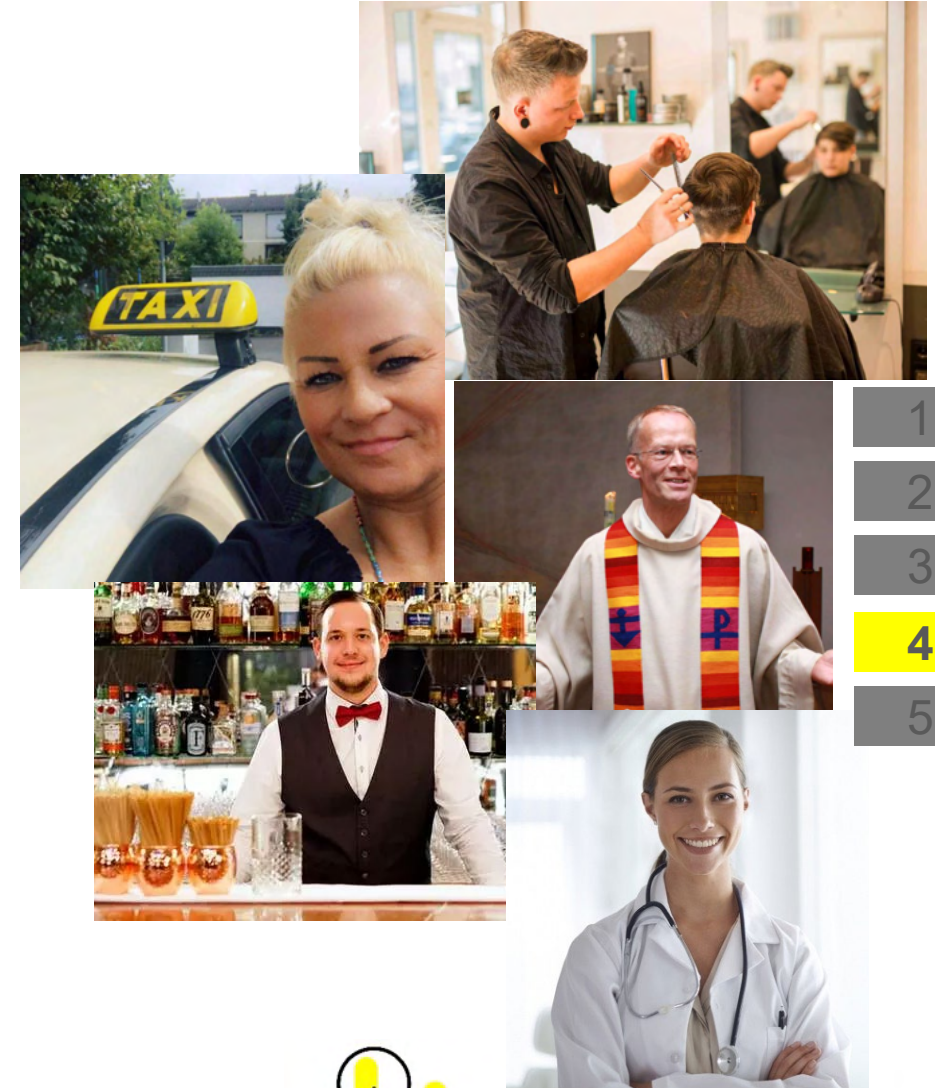
## The communication campaign

Used various standard elements such as ttt

- Media, discussion groups, leaflets, videos...

Used a multiplier campaigning approach!

- Invited people that talk a lot to others and are trusted persons to discuss the idea of speed 30
- Like taxi drivers, haircutters, bartenders, priests, doctors

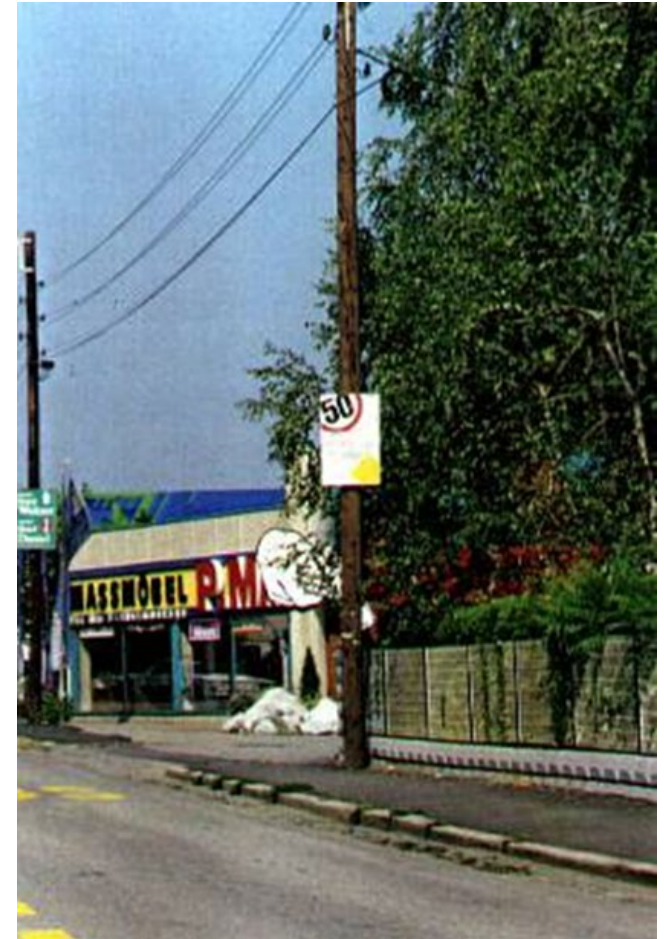


# Tempo'30: Graz – the key elements

## The pilot phase

- **Oppositions** to introducing speed 30 was **high start of the 90ies**
- **Reason:** campaign of opponents to fight it.
- City **transformed** their claims for a public vote on the idea to a test-phase first (...well knowing that a vote put a stop to the idea)
- **Argument:** people do not know what the vote on, since they did not experience it so far.

-> **2-year test phase starting 1992**



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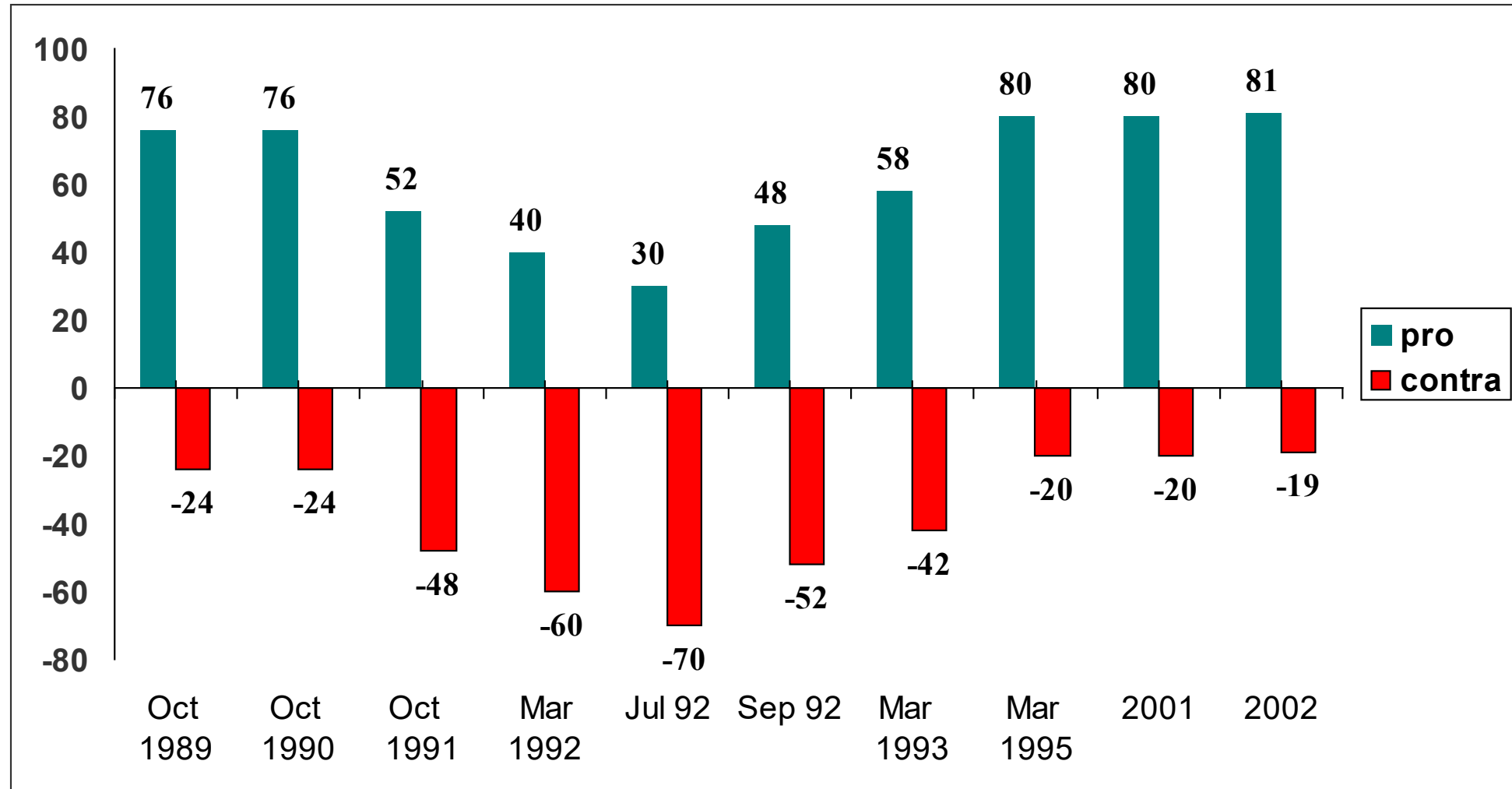
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# Tempo'30: Graz – the key elements



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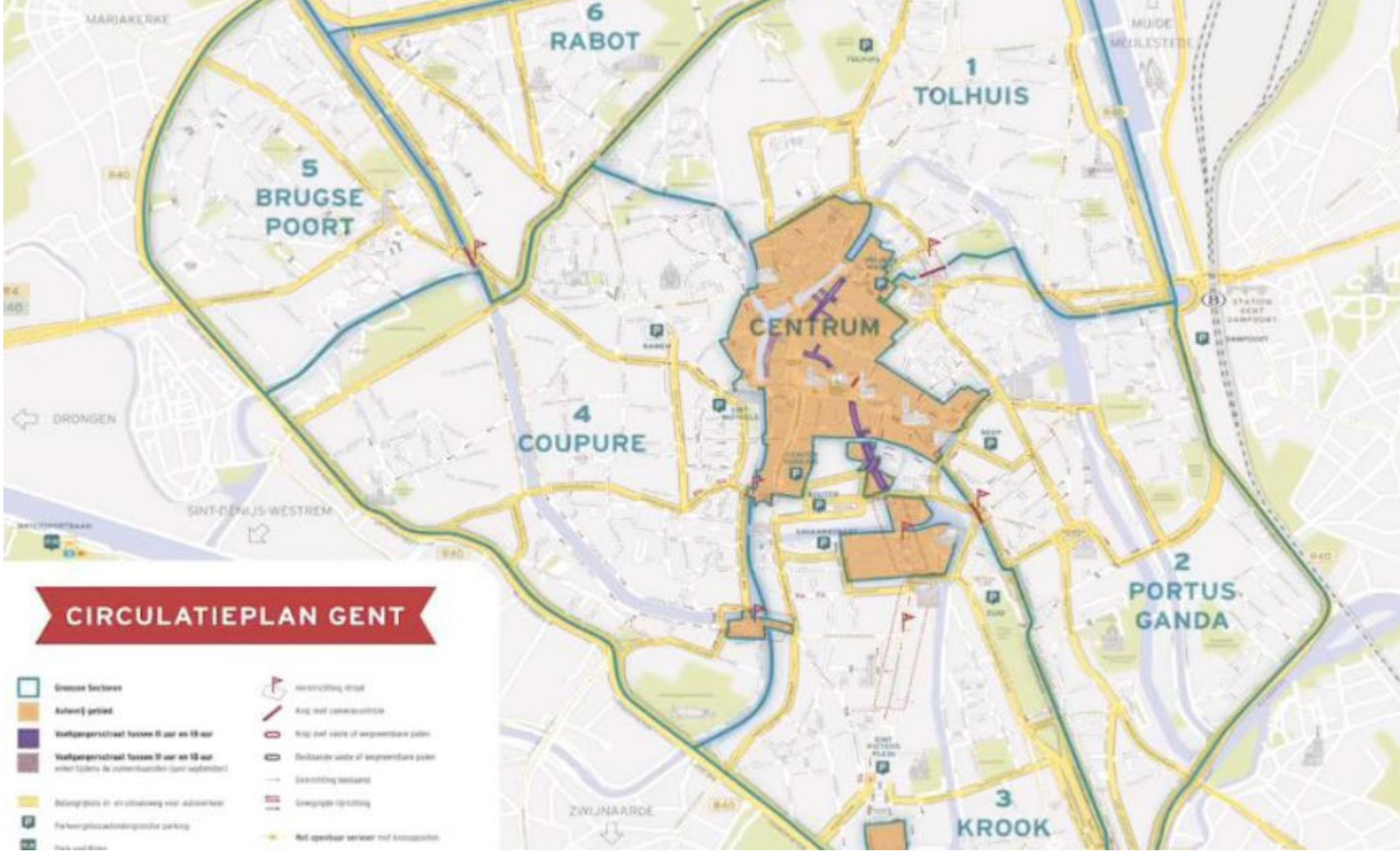


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Where streets belong to people!

# Circular mobility model: Ghent



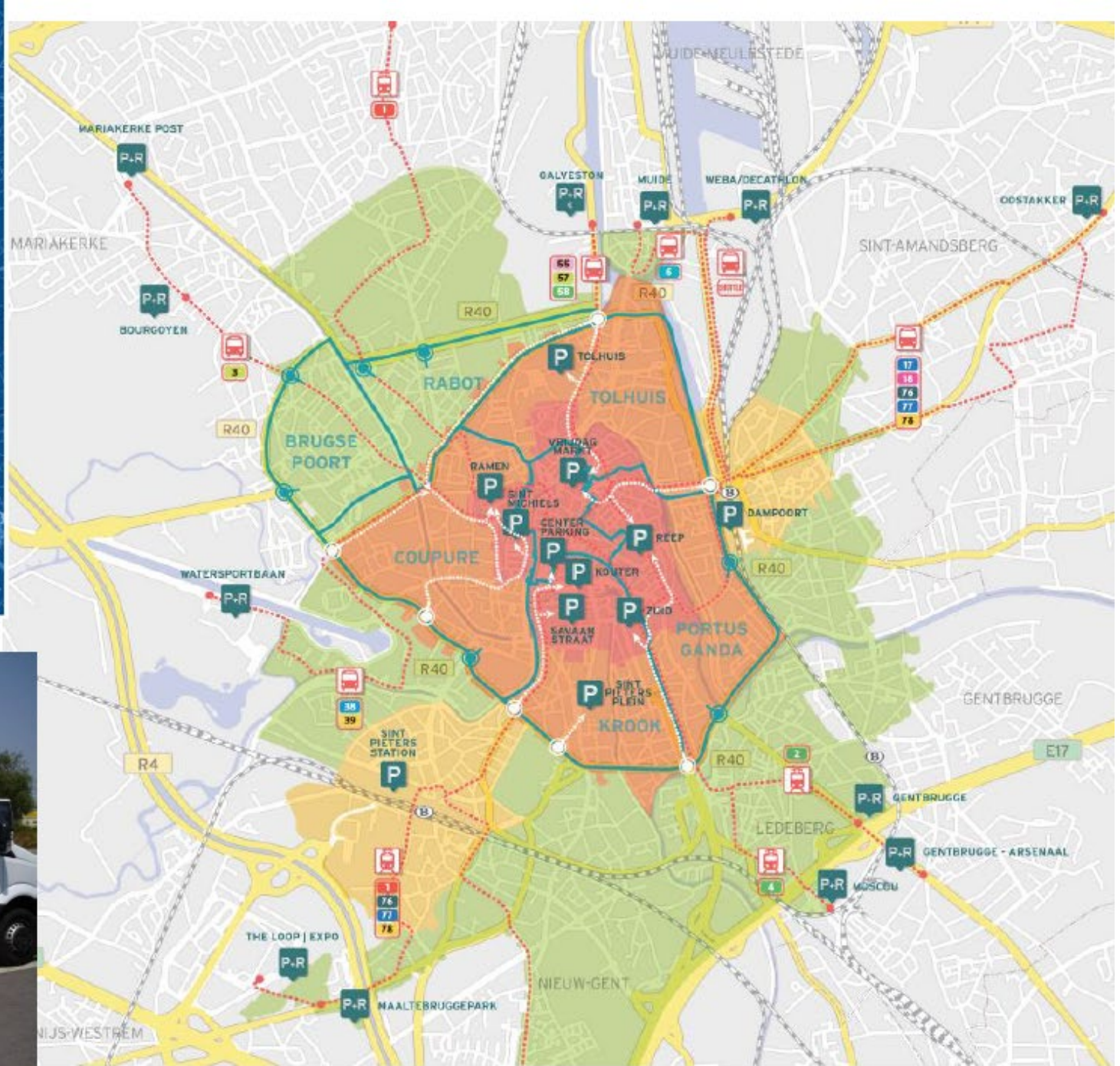
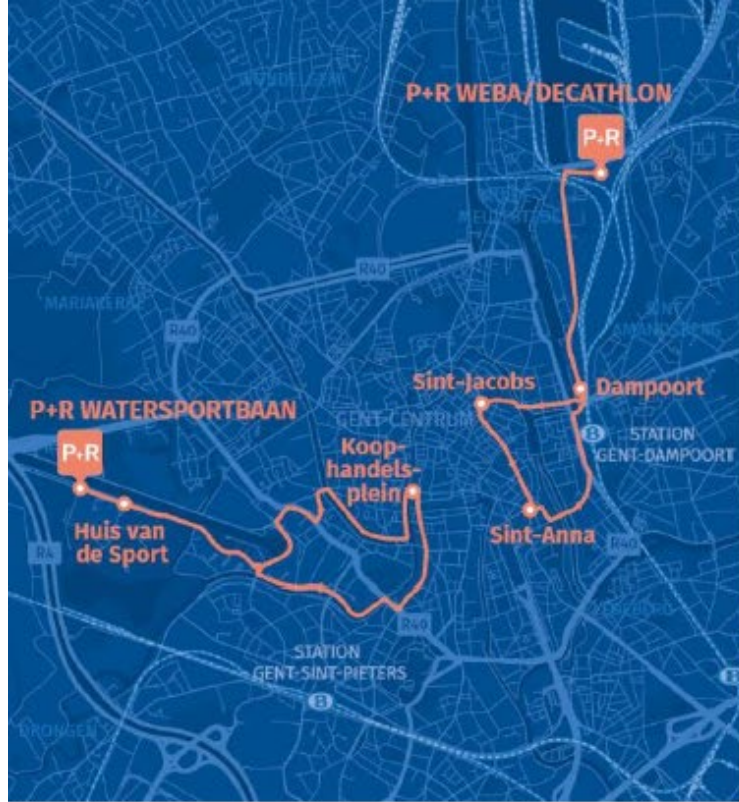
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Source: Ghent Circulation Plan, POLIS, April 2022





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# How did we measure the effects?

## 1. Intensity counts

- I. Pedestrian counts
- II. Bike counts
- III. Intersection counts
- IV. Origin-destination



## 2. Occupancy rates

- I. Public transport users
- II. Users shuttles and 'Wandelbus'
- III. P+R usage



Ex ante measurements –  
10/2016

Ex Post measurements –  
10/2017

Ex Post measurements –  
10/2018

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# How did we measure the effects?

3. Travel times
  - I. Floating car data
  - II. Public transport flow
4. Questionnaire data
  - I. Mobility surveys
  - II. Focus group interviews
5. Register data
  - I. Accident data
  - II. Air quality data
  - III. Economic indicators



Ex ante measurements –  
10/2016

Ex Post measurements –  
10/2017

Ex Post measurements –  
10/2018

1

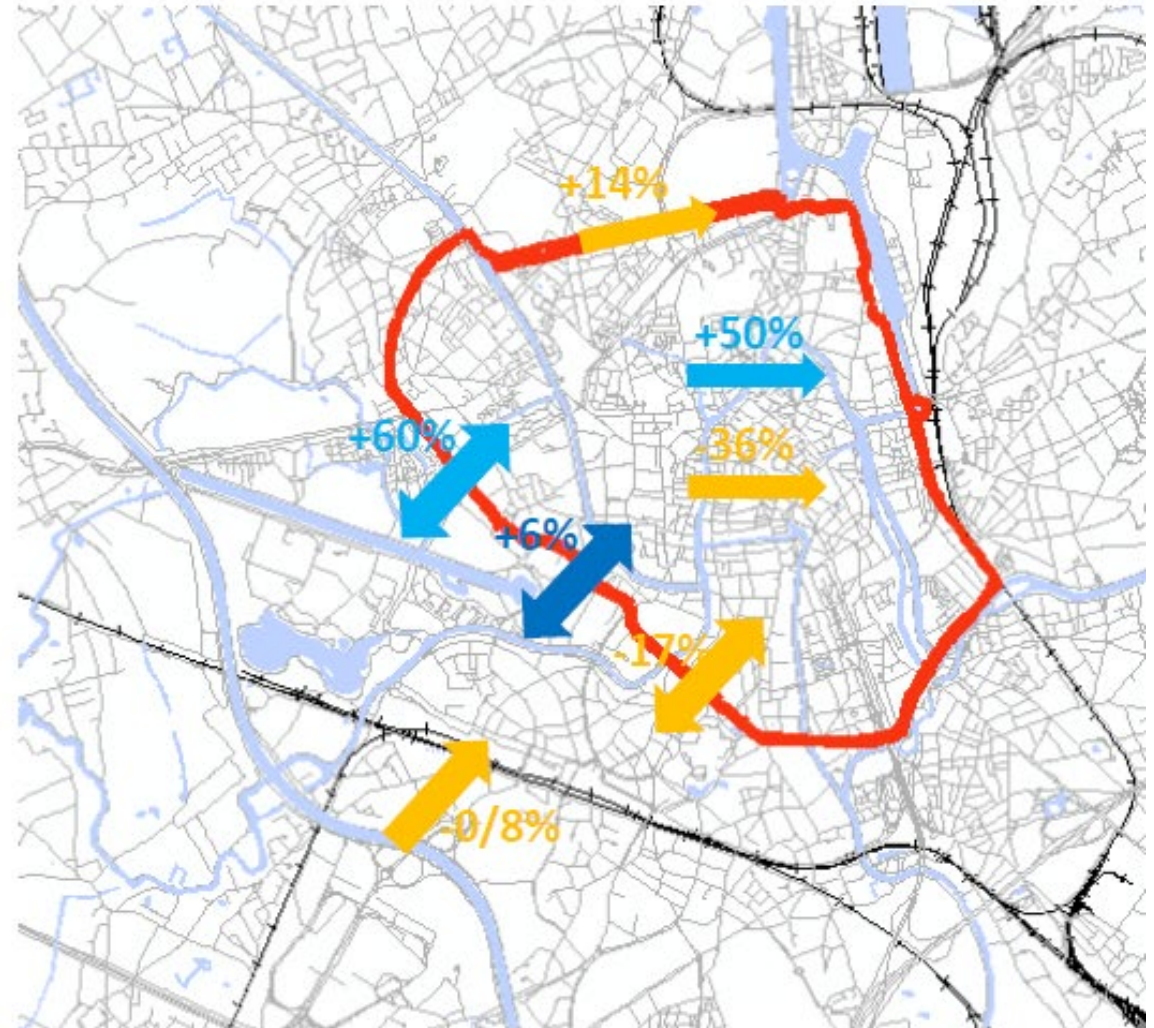
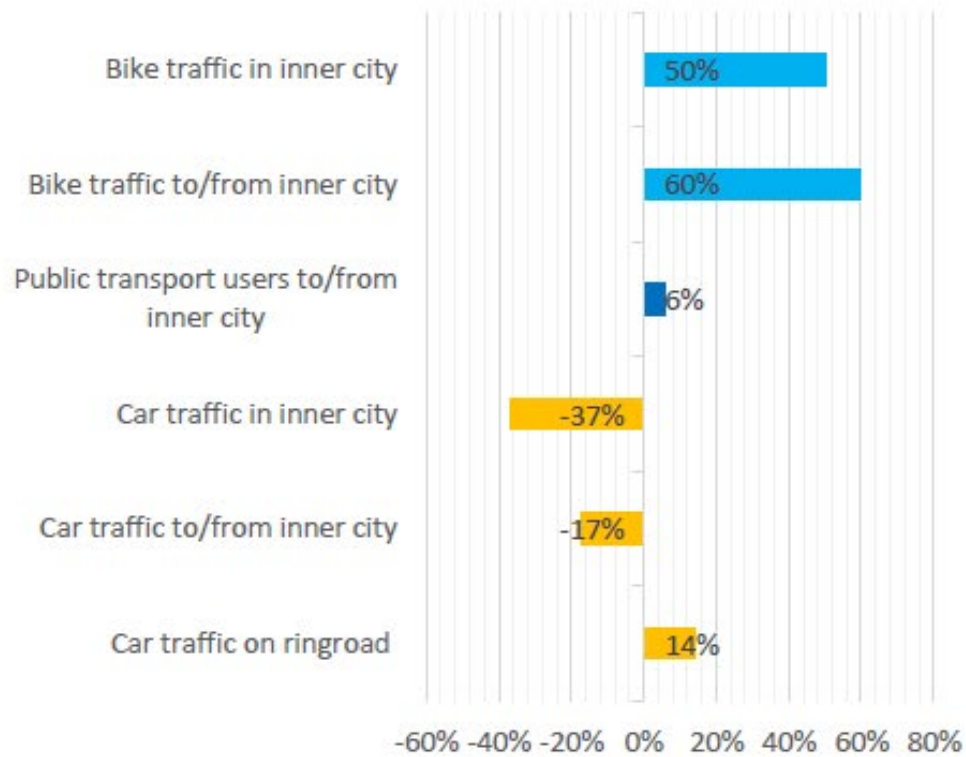
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# Use of different traffic modes



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FROM PARKING STREET TO THRIVING STREET

BERNARDGASSE IN VIENNA, SUPERWIEN + CLAU KÖLLINGER,  
202



# FROM PARKING STREET TO THRIVING STREET



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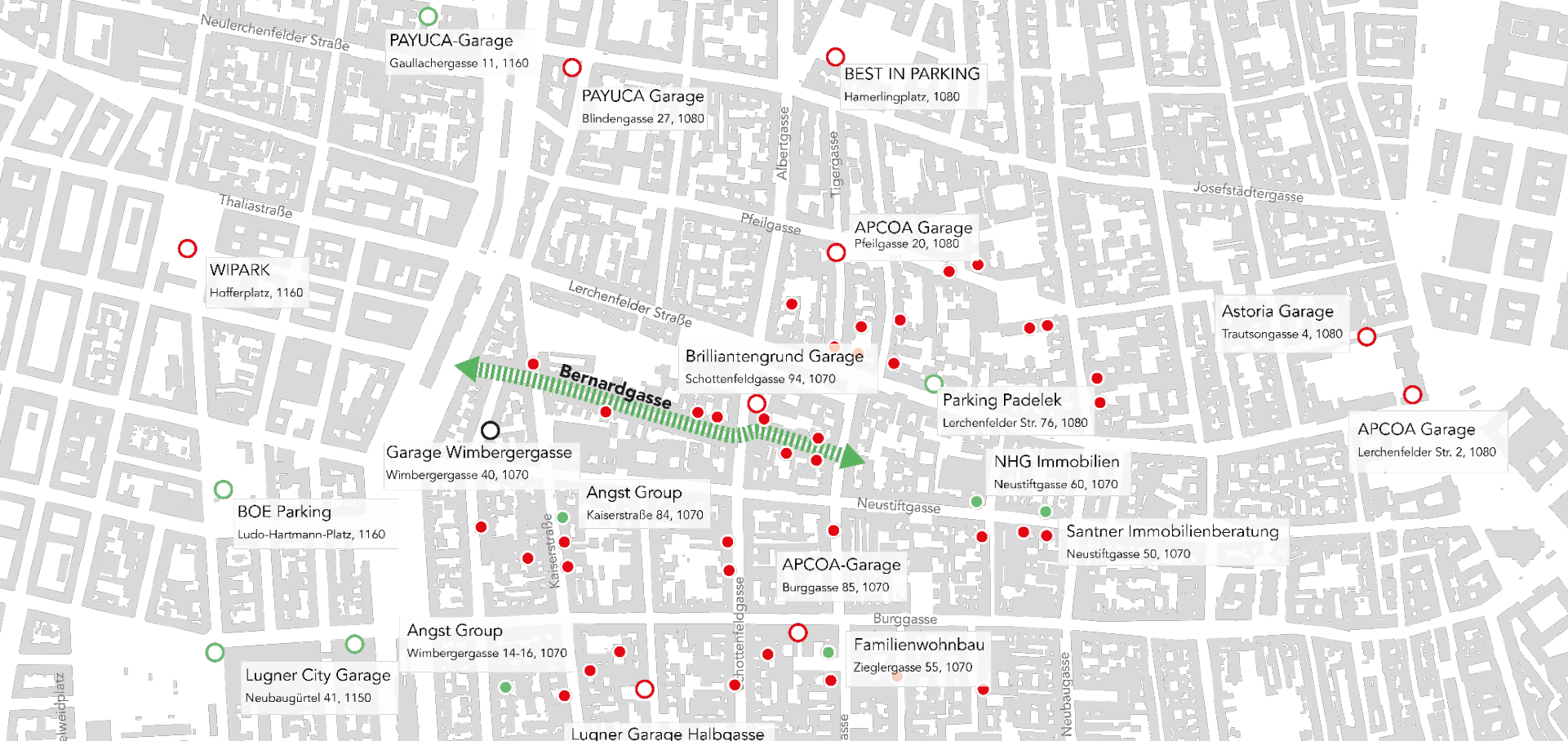
# BERNARDGASSE IN VIENNA, SUPERWIEN + CLAUSS KÖLLINGER, 2022



# FROM PARKING STREET TO THRIVING STREET

## LEGENDE

- Großgaragen
  - Ausgelastet
  - Frei
  - Außer Betrieb
- Kleingaragen
  - Ausgelastet
  - Frei



# BERNARDGASSE IN VIENNA, SUPERWIEN + CLAUSS KÖLLINGER,

2022



# DECENTRALIZED PARKING AT HAUPTBAHNHOF WIEN, VIENNA



MOBILITY CONCEPT BY SUPERWIEN,  
2013

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# DECENTRALIZED PARKING AT HAUPTBAHNHOF WIEN, VIENNA



## MOBILITY CONCEPT + MASTERPLAN BY SUPERWIEN, 2013

- 1
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#WalkAndRollCities  
Where streets belong to people!

# The Pedestrian-priority city



83.000 inhabitants – 120 km<sup>2</sup>

Inner city:  
62.000 inhabitants – 5,5 km<sup>2</sup>

- 1
- 2
- 3
- 4
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Source: Daniel Macenlle  
Diaz & Jesús Gomez



**#WalkAndRollCities**  
Where streets belong to people!

# 1999: just your usual car-oriented city



UNSAFE

1

POLLUTED  
AIR

2

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SPACE  
CONFLICTS

5

#WalkAndRollCities  
Where streets belong to people!

# 1999 – the start of change

New Mayor - Change the city serving cars into a city serving **PEOPLE**.



- 1
- 2
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#WalkAndRollCities  
Where streets belong to people!

# THE CHANGE

## WHY?

- Improve urban quality
- Provide universal access
- More public space for social living
- Urban Road safety

## HOW?

- Political will and decision
- Coordinated efforts
- Social involvement

## WHAT?

- Pedestrian priority
- Road traffic restrictions
- The concept of service / need
- Parking
- Speed limits

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# metrominuto Pontevedra

Móvetes coa túa propia enerxía.

Distancias e tempos camiñando pola cidade.

Tempos aproximados para camiñar, calculados sobre a base de 5 km/h de media.

Fixate na cor do traxecto, a distancia e o tempo que aproximadamente che levará percorrelo.



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<https://www.theguardian.com/cities/2018/sep/18/paradise-life-spanish-city-banned-cars-pontevedra>





Absolute pedestrian preference



Coexistence street



Segregated



Types of Streets

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#WalkAndRollCities  
Where streets belong to people!



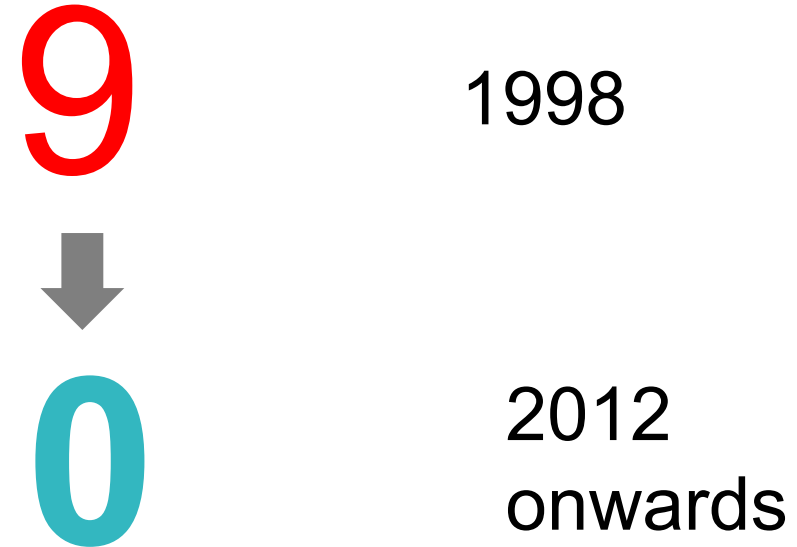
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# Results

## Motor vehicle traffic



## Traffic fatalities



(Same mayor since 1999)

„When you buy a car, you don't buy 10 m<sup>2</sup>  
*public space* with it.”

Miguel Anxo Fernández Lores,  
Mayor of Pontevedra

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# 'Transforming mobility': public transport and active mobility

- Public transport must become a **quality service, forming the backbone of an integrated urban transport system** and ensuring that cities remain the centers of functional urban areas.
- It is important **to increase the opportunities for active forms of mobility**: expanding the cycle path network, integrating micromobility forms into the system

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# Public transport - the backbone of urban mobility

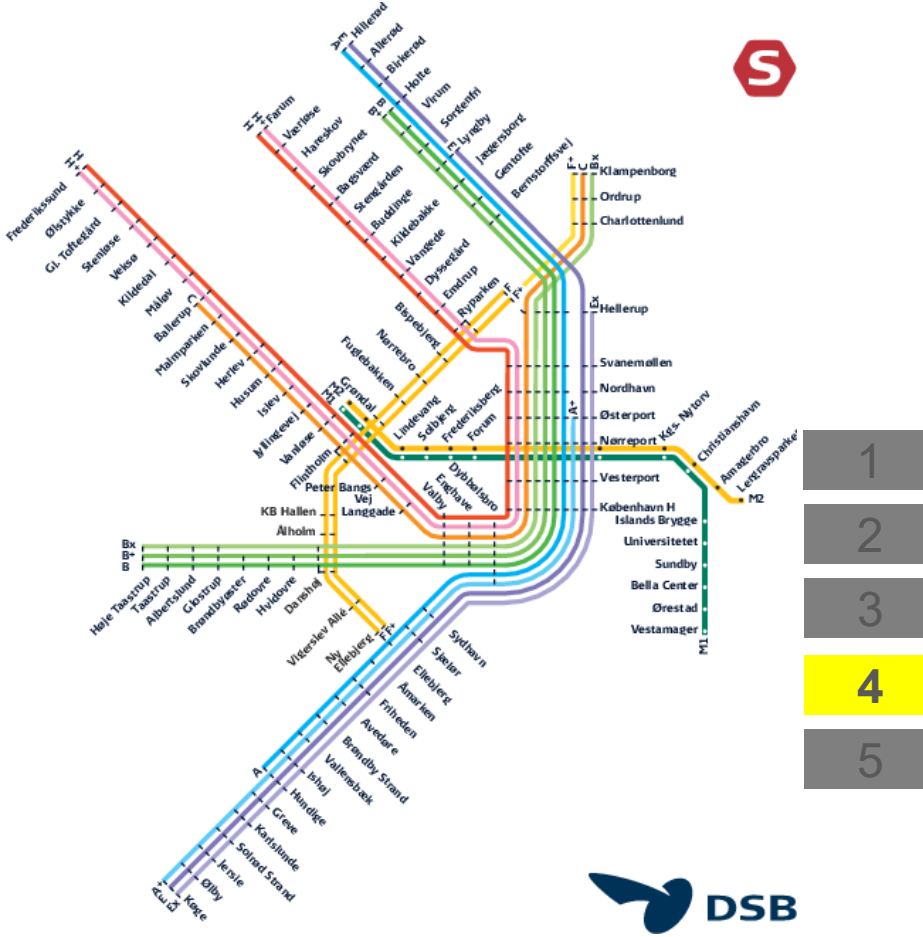
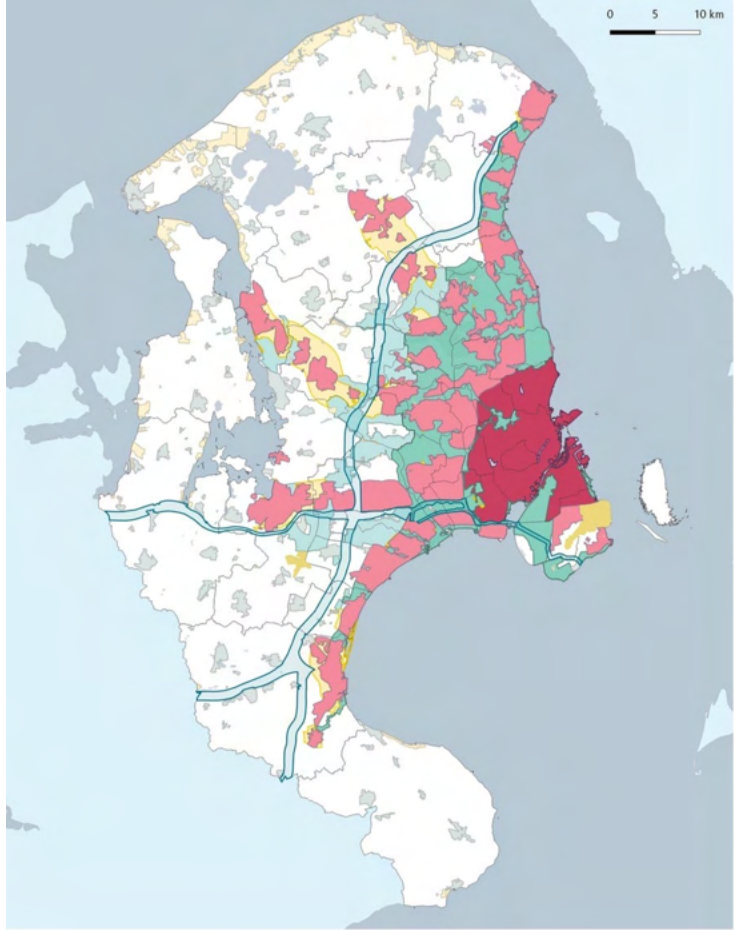


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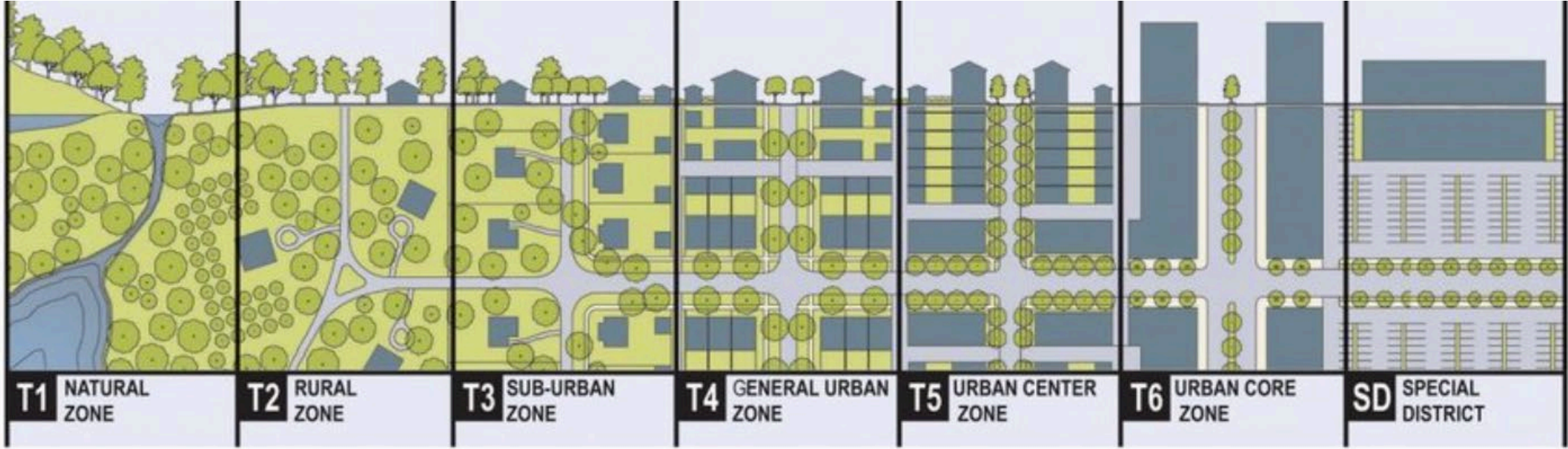
**#WalkAndRollCities**  
Where streets belong to people!

# TRANSIT ORIENTED DEVELOPMENT



# COPENHAGEN'S FINGER PLAN

# TRANSIT ORIENTED DEVELOPMENT

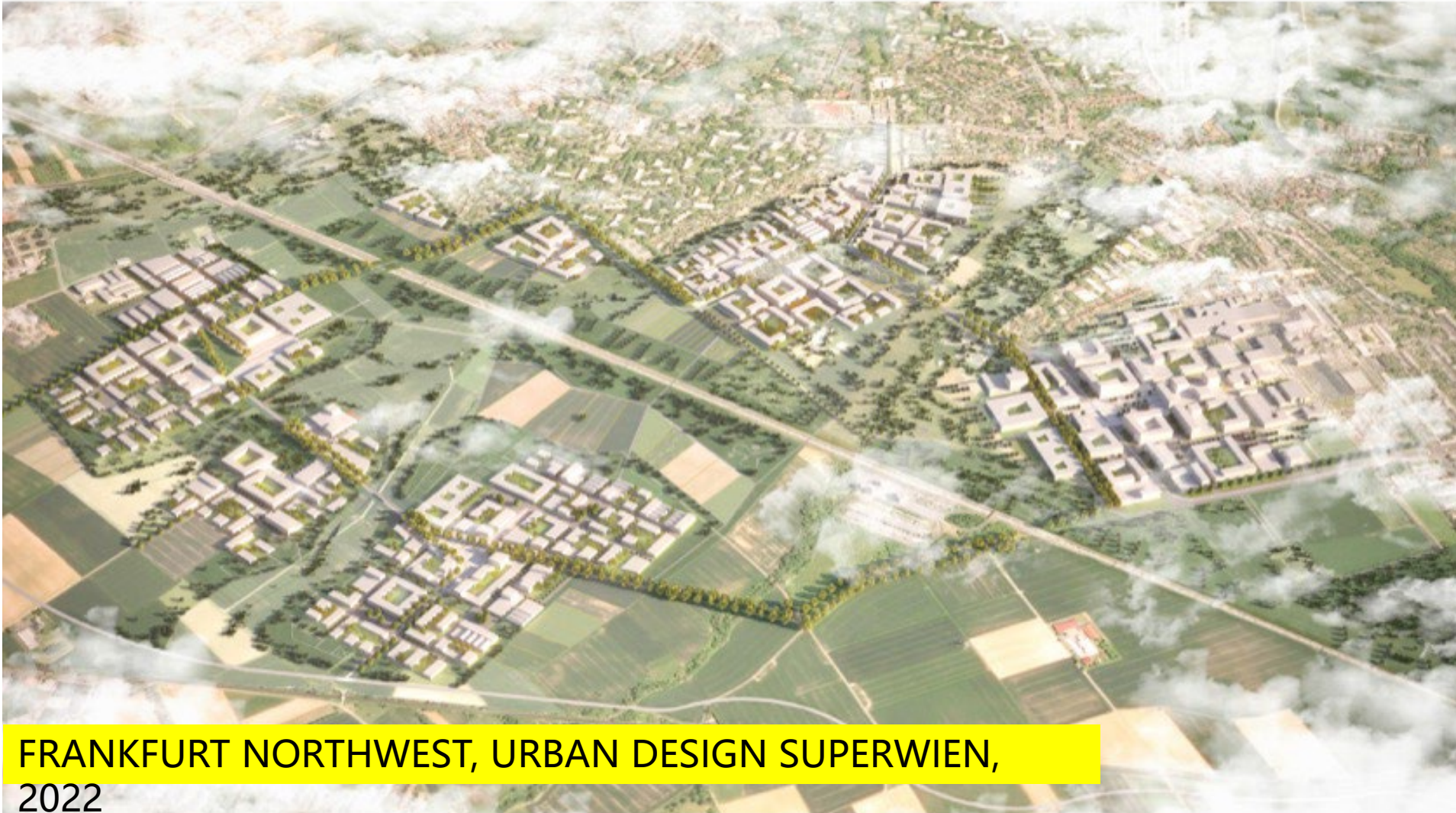


# TRANSEC CONCEPT BY NEW URBANISM, ANDRÉS DUANY





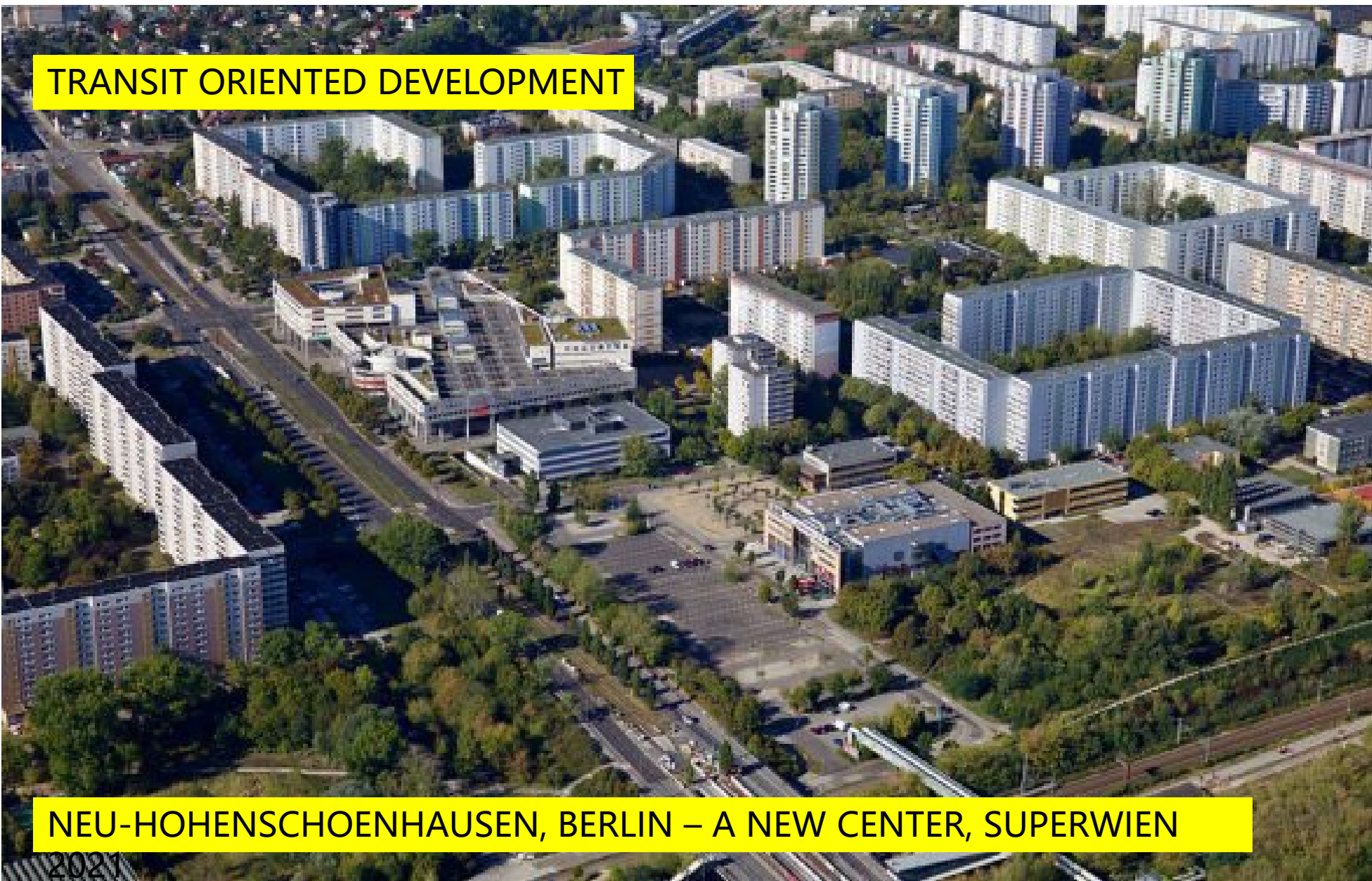
# TRANSIT ORIENTED DEVELOPMENT



FRANKFURT NORTHWEST, URBAN DESIGN SUPERWIEN,  
2022

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# TRANSIT ORIENTED DEVELOPMENT



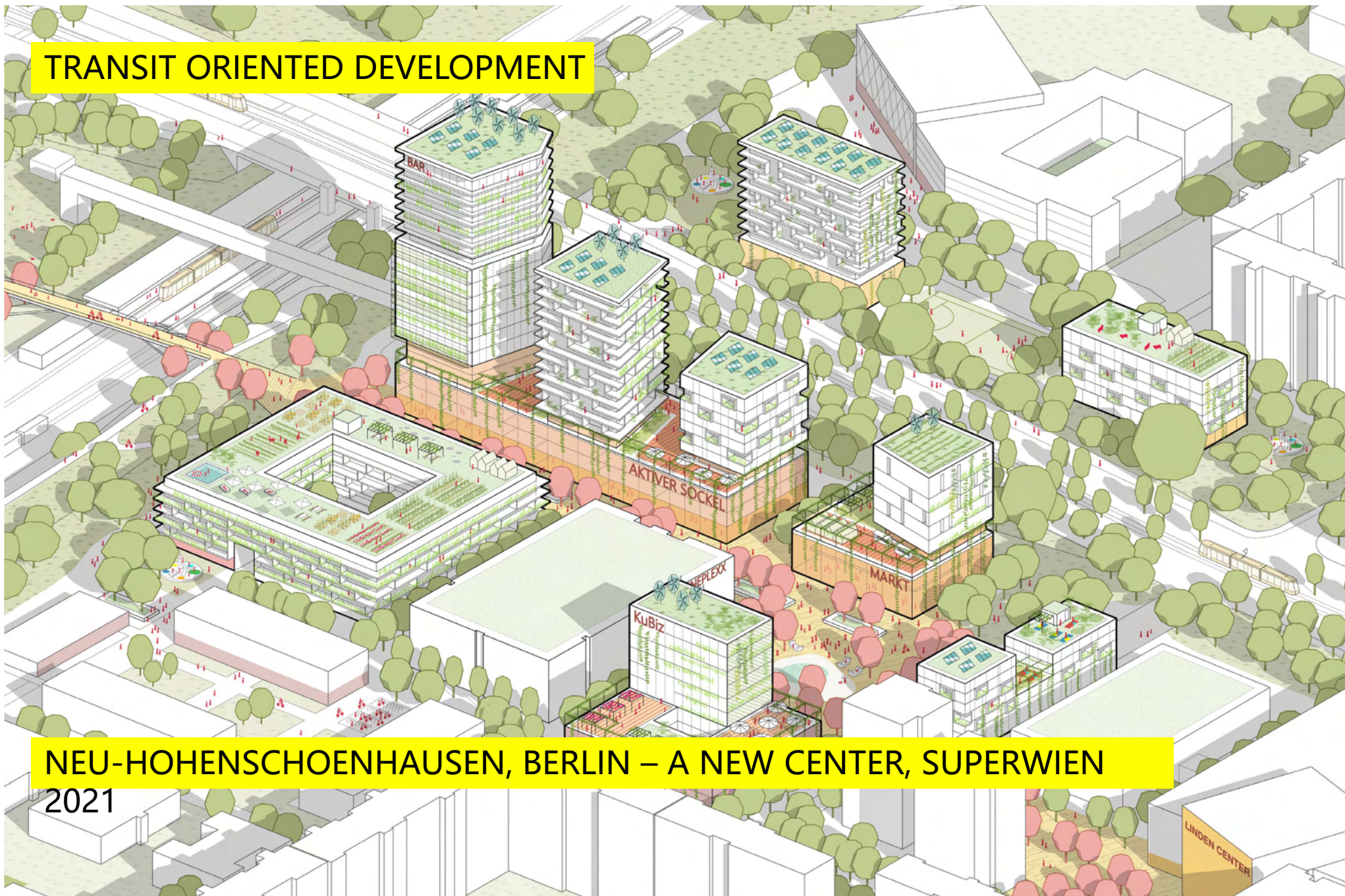
NEU-HOHENSCHOENHAUSEN, BERLIN – A NEW CENTER, SUPERWIEN

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#WalkAndRollCities  
Where streets belong to people!

# TRANSIT ORIENTED DEVELOPMENT



- 1
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## NEU-HOHENSCHOENHAUSEN, BERLIN – A NEW CENTER, SUPERWIEN

2021

# TRANSIT ORIENTED DEVELOPMENT

Für uns bedeutet kollektives Planen, in einem Dialog mit Stadtplanern, Landschaftsplanern, anderen Fachplanern und der interessierten Bevölkerung einen Konsens über die Entwicklung eines Stadtgebietes zu erstellen. Wir sehen das Obere Hausfeld als ein lebhaftes Quartier bestehend aus einem engmaschiges Netzwerk an öffentlichen und halb-öffentlichen Raumsequenzen, das spannende, abwechslungsreiche urbane Qualitäten erkennen lässt. Der städtebauliche Grundsatz für das Hausfeld ist die Entwicklung von Dichte mit klarem Bekenntnis zu Großzügigkeit auf den Freiflächen am Baufeld, als Beitrag zu Wohnqualität und Privatheit und zu Kompaktheit im öffentlichen Straßenraum zur Stimulierung von Frequenz und Urbanität. Aufbauend auf dem Konzept entwickelten wir gemeinsam mit verschiedensten Disziplinen einen intelligenten Raster, welcher als Basis für die Entwicklung eines Regelwerks für die Implementierung diente. Die Stadtsockelzone gilt als Herz des urbanen Alltags. Daraus resultierte die Idee eines Think-Tanks. Gemeinsam mit unterschiedlichen Interessenten wurde die Zukunft der Erdgeschoßzonen reflektiert. Daraus hat sich ein Netzwerk kristallisiert

## OBERES HAUSFELD, VIENNA, SUPERWIEN, 2015-2022

fürte zu einem Masterplan. Dieser spiegelt ein durchdachtes urbanes Quartier wieder und liegt der Stadt Wien zur Widmung vor.

Ein Aktivitätenprogramm unterstützt die Schaffung von Urbanität durch Frequenz im Quartier.

Dichte, soziale und wirtschaftlichen, aber auch kulturellen Aktivitäten ermöglichen die Schaffung eines lebhaften Grätzls. Initiiert werden diese durch Impulse als strategische Initialnutzungen räumlicher sowie inhaltlicher Interventionen

Urbanität in peripherer Lage  
Ein engmaschiges Netzwerk an öffentlichen, semi-öffentlichen und halb-privaten Orten erzeugt Ordnung mit vielfältigen Potentialen ohne Langeweile und Monotonie aufkommen zu lassen.

Neue Qualität des Wohnens  
Inspirierende Aktivierungsflächen und nutzungs-neutrale öffentliche und halb-private Räume ermöglichen eine kollektive Aneignung und schaffen soziale Kohäsion und Identität. Das Quartiersmanagement entwickelt als

# TRANSIT ORIENTED DEVELOPMENT



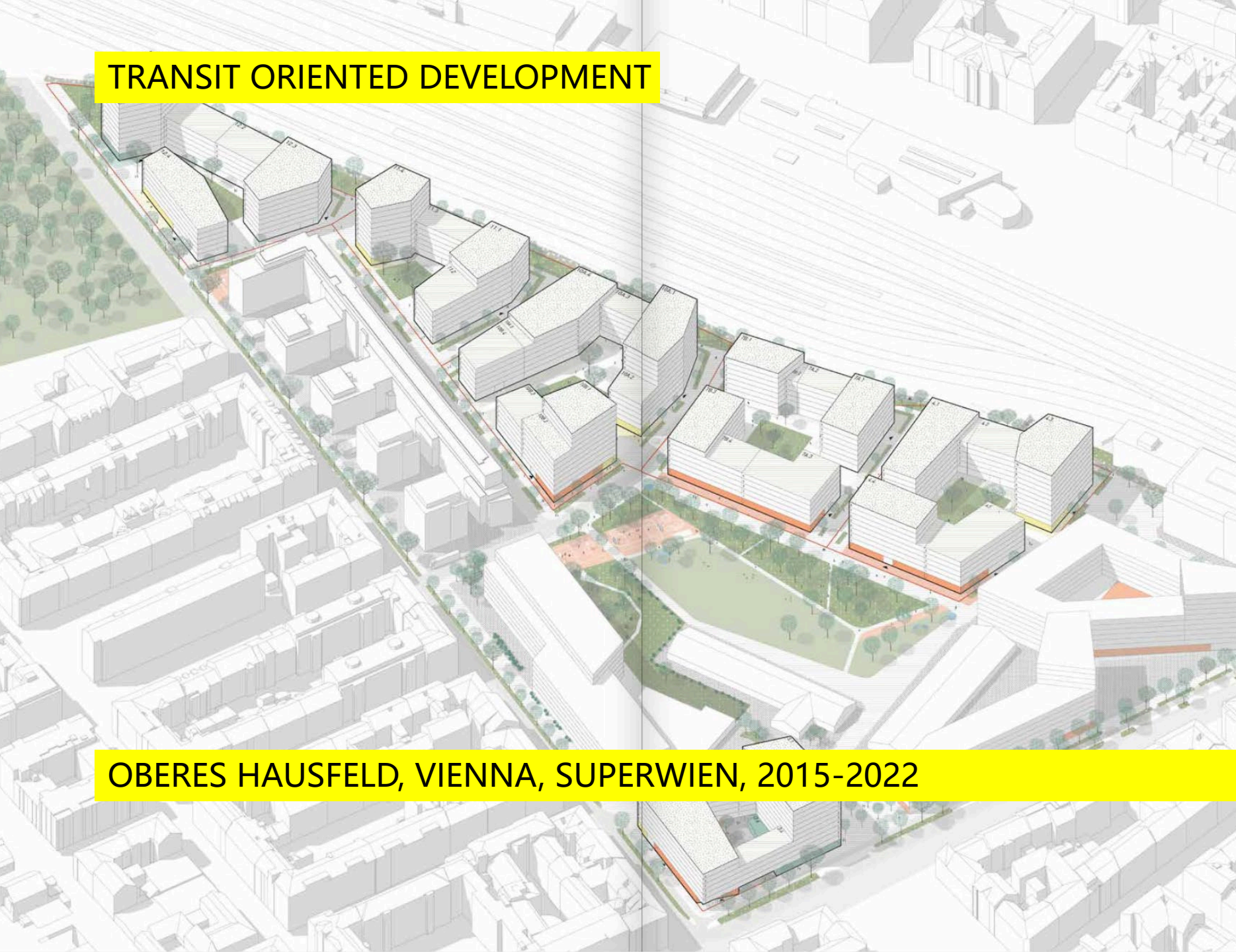
NEUES LANDGUT, VIENNA, SUPERWIEN 2019-2022

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#WalkAndRollCities  
Where streets belong to people!

# TRANSIT ORIENTED DEVELOPMENT



OBERES HAUSFELD, VIENNA, SUPERWIEN, 2015-2022

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**#WalkAndRollCities**  
Where streets belong to people!

# Pushing cycling – Bici Bolzano



***Bici Bolzano***  
***Fahrrad Bozen***

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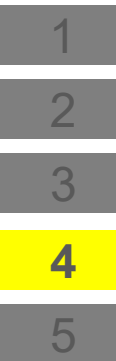
**#WalkAndRollCities**  
Where streets belong to people!

# Pushing cycling – Bici Bolzano

## Comprehensive approach to promote cycling!

- Cycling map with metro system
- Respective signposting
- Bicycle tracks
- Bicycle parking
- Bicycle infrastructure
- Bike Sharing
- Marketing

Source: [https://www.eltis.org/sites/default/files/trainingmaterials/cycling\\_promotion\\_en.pdf](https://www.eltis.org/sites/default/files/trainingmaterials/cycling_promotion_en.pdf)





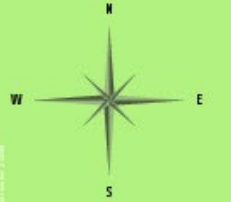
# Percorsi ciclabili *Fahrradwege*



- **R1** Centro storico - Ospedale Altstadt - Krankenhaus
- **R2** Tribunale - Palasport Gericht - Stadthalle
- **R3** Lido - Palasport Lido - Stadthalle
- **R4** Cardano - Bivio Kardaun - Abzweigung Kaiserau
- **R5** Centro storico - Ortisarco Altstadt - Oberau
- **R6** Ospedale - Mase della Pieve Krankenhaus - Pfarrhof
- **R7** Eries - Fiera Eries - Mase
- **R8** Accademia Europea - Castel Roncolo Europ. Akademie - Schloss Runkelstein
- Rete ciclabile extraurbana überörtliches Fahrradnetz
- Percorsi ciclabili consigliati e di collegamento Empfohlene und verbindende Fahrradwege
- Percorsi secondari Nebenradwege

- Zona traffico limitato Verkehrsberuhigte Zone
- Noleggio bici e Info Point Fahrradverleih und Info Point
- P Parcheggio bici coperto überdachter Fahrradstellplatz

- 1
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# Percorsi ciclabili principali

## Fahrrad Hauptachsen



### R1 Centro storico – Ospedale Altstadt – Krankenhaus

- Centro/Piazza Walther Zentrum/Waltherplatz
- Piazza Sernesi/Università Sernesi Platz/Universität
- Ponte sul Talvera Brücke über die Talfer
- Piazza Vittoria Siegesplatz
- Piazza Mazzini Mazziniplatz
- Piazza Gries Grieser Platz
- Ospedale Krankenhaus

4,2 km

### R2 Tribunale – Palasport Gericht – Stadthalle

- Tribunale Gericht
- Auditorium Roen Auditorium Roen
- Viale Druso Drususallee
- Zona Artigianale Viale Druso Handwerkerzone Drusus Allee
- Palasport/Parco Europa Stadthalle/Europapark

2,1 km

### R3 Lido – Palasport Lido – Stadthalle

- Lido/Stadio Druso Lido/Drusus Sportplatz
- Viale Roma Romastraße
- Via Palermo Palermo Straße
- Palasport/Parco Europa Stadthalle/Europapark

2,6 km

### R4 Cardano – Bivio Kardaun – Abzweigung

- Ponte Campiglio/Zona Artigianale Kampillerbrücke/Handwerkerzone Cardano Kardaun 2,8 km
- Ponte Virgolo Virglbrücke
- Ponte Loreto Loreto Brücke
- Accademia Europea Europäische Akademie
- Lido/Campo Sportivo Druso Lido/Drusus Sportplatz
- Ponte Roma Roma Brücke
- Ponte Palermo Palermo Brücke
- Via Parma Parma Straße
- Ponte Resia Reschenbrücke
- Bivio Trento/Appiano Merano Abzweigung Trient/Eppan Merano Trento Trient 31,0 km Appiano Eppan 8,5 km Merano Meran 39,0 km

5,0 km



### R5 Centro storico – Oltresarco Altstadt – Oberau

- Centro/Piazza Walther Zentrum/Waltherplatz
- Nuovo Teatro Comunale Neues Stadttheater
- Ponte Loreto Loreto Brücke
- Campo Sportivo Asiago Sportplatz Haslach
- Viale Roma Rom Straße
- Oltresarco Oberau

1,1 km

### R6 Ospedale – Maso della Pieve Krankenhaus – Pfarrhof

- Ospedale Krankenhaus
- Palasport/Parco Europa Stadthalle/Europapark
- Via Parma Parma Straße
- Ponte Resia Reschenbrücke
- Via Buozzi Buozzi Straße
- Cimitero comunale Städtischer Friedhof
- Zona Sportiva Maso della Pieve Sportzone Pfarrhof

1,4 km

### R7 Gries – Fiera Gries – Messe

- Piazza Mazzini Mazzini Platz
- Tribunale Gericht
- Via Novacella Neustifterweg
- Ponte Roma Roma Brücke
- Via Claudia Augusta Claudia Augusta Straße
- Ponte Palermo Palermo Brücke
- Via Volta Volta Straße
- Fiera/Stazione Bolzano Sud Messe/Bahnhof Bozen Süd

4,2 km

### R8 Accad. Europea – Castel Roncole Europ. Akad. – Schloss Runkelstein

- Accademia Europea Europäische Akademie
- Ponte sul Talvera Brücke über die Talfer
- Campi Sportivi Talvera Talfer Sportplätze
- Fanivia San Genesio Jenesiener Seilbahn
- Castel Roncole Schloss Runkelstein Sarentino Sarnthein 18,0 km

5,0 km



Ciclovie Fahrradwege



## Noleggjo Bici Fahrradverleih

Piazza Walther Walther Platz  
Piazza Gries Grieserplatz

Aperto tutti i giorni, tranne la domenica dalle ore 7.30 alle 19.30 (dal 1 aprile al 31 ottobre; in ottobre fino alle 18.30)

Täglich geöffnet von 7.30 bis 19.30 (vom 1. April bis zum 31. Oktober; im Oktober bis 18.30)

Numeri di telefono utili  
Nützliche Telefonnummern

Soccorso pubblico di emergenza Notruf 113

Vigili Urbani Stadtpolizei 0471 997 788

Tourist Information 0471 307 000

Ferrovie dello Stato Staatsbahn 848 888 888

Trasporto pubblico locale Öffentlicher Nahverkehr 800 846 047



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 **Ponte Roma**  
**Rom Brücke**

 **Bivio**  
**Kaiserau**

 **0,5** 



- 1
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# Bici Bolzano – cycling paths



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**#WalkAndRollCities**  
Where streets belong to people!



- 1
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ities  
people!



### Emotional marketing

Client: City of Bolzano  
www.bolzano.it  
Contribution: **Associazione Nazionale Adg**  
www.adg.it  
Concept, Design, Production: **Bolzano**  
www.bolzano.it



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Cities  
people!

# Mobility hubs and points

- Serve as a focal point of alternatives to classic modes and as a range extender to public transport.
- Include elements such as:
  - Cargo bike rentals
  - Bike-sharing, Car-Sharing, scooter-sharing
  - Service points with air pumps and repair gear
  - Bicycle and scooter parking
  - E-charging stations
- Work as service offers at **public transport interchanges**, smaller versions at **PT stops** and stand-alone solutions in e.g. **residential areas**



# The role of micromobility

Survey on E-scooters potential as first/last mile access to public transport stations in Munich:

- Compared coverage of public transport access by 5min of walking and 5 min of E-Scooter ride
- Analysis for
  - a) all high-frequency public transport stops (> 288 departures / day)  
AND
  - b) all high-frequency rail stations (metro and light rail)
- Result for a) are that 5 min walk covers 80% of population and b) that 5 min E-scooter ride covers 99% of population

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Source: cities-multimodal: Planner's Guide to Sustainable Urban Mobility Planning



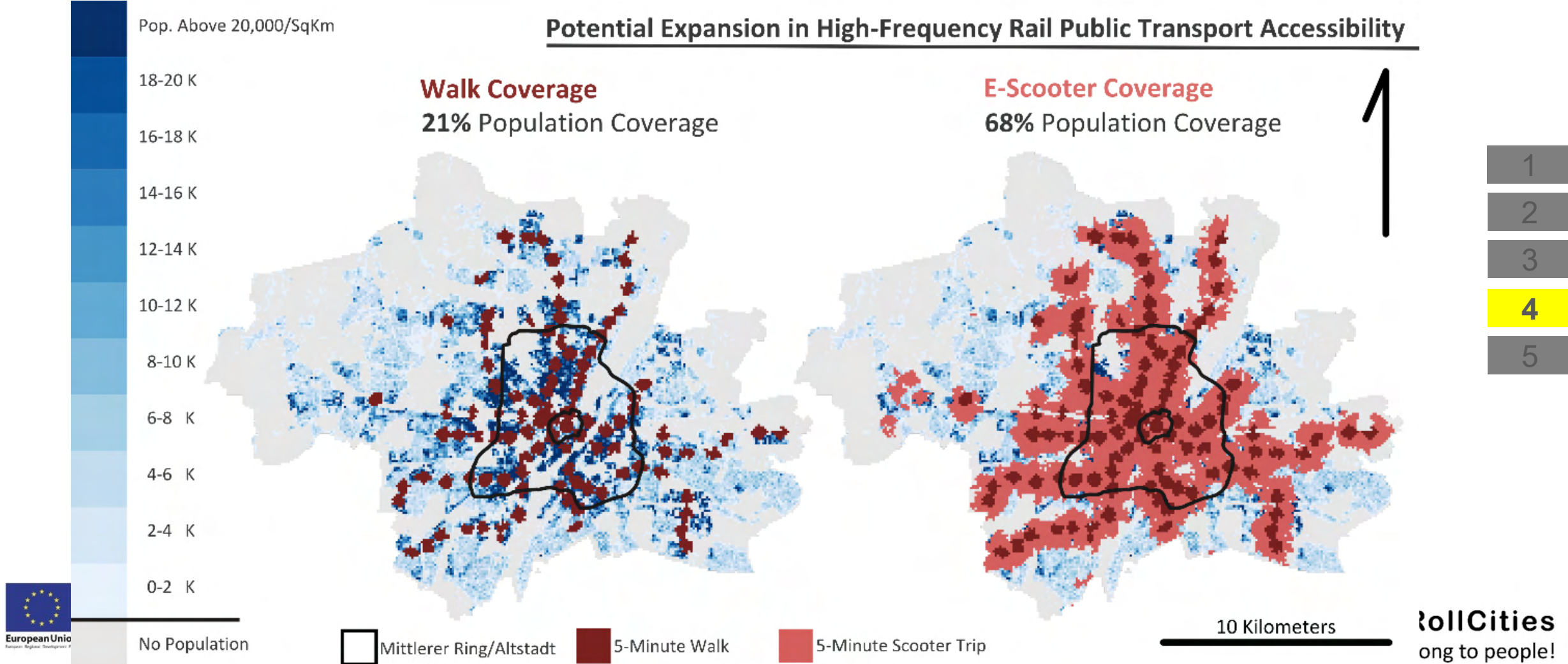
**#WalkAndRollCities**  
Where streets belong to people!



# The role of micromobility

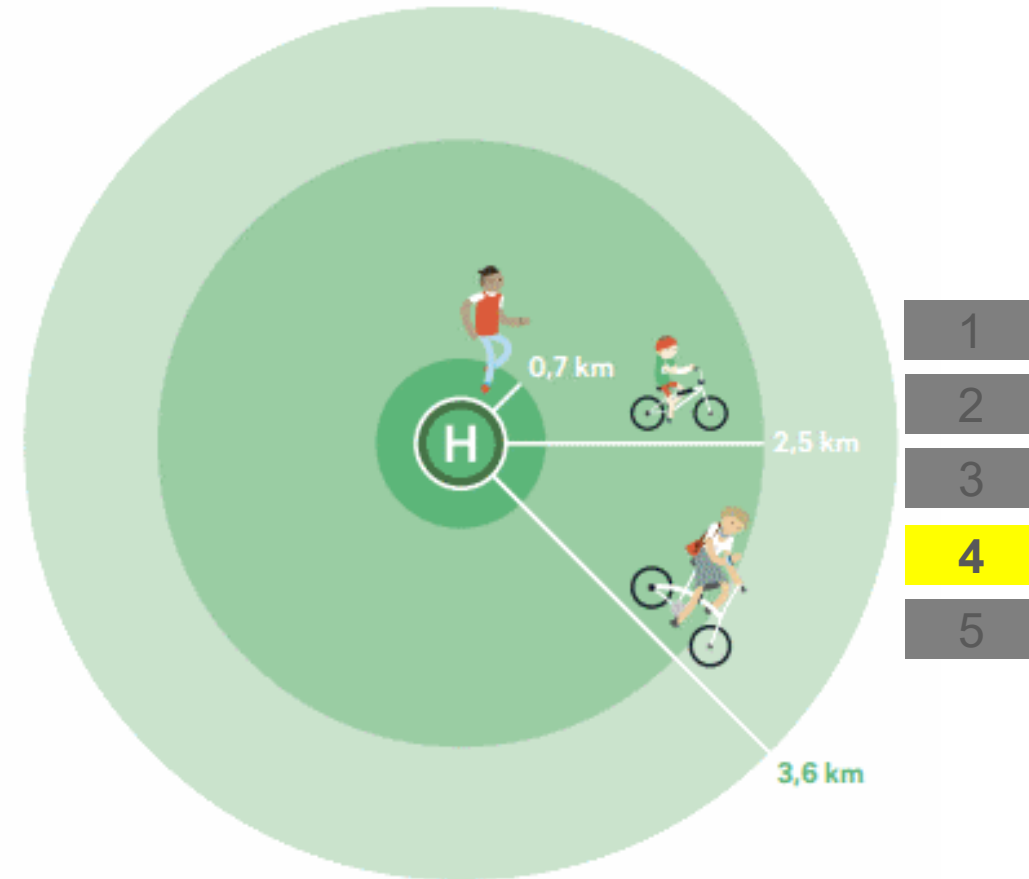
- For high-frequency rail stations, the difference is significantly higher:

## Potential Expansion in High-Frequency Rail Public Transport Accessibility



# The role of micromobility

- E-bikes and E-scooters can:
  - Substitute public transport where service are not sufficient
  - Extend public transport's catchment areas
- They replace however in most cases:
  - Public transport trips
  - Walking
  - Taxis or other ride-sharing services



# Facilitate Combination



Photo: SBB, 2020

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**#WalkAndRollCities**  
Where streets belong to people!

# California state law restrictions on e-scooters



Driver License



Bike Helmet



Max. Speed



Sidewalk Prohibited



Bike Lane



Ride with Traffic



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# New challenges, new mobility actors, new dilemmas

- **Customer needs and mobility patterns** change due to teleworking, e-commerce, accelerated digitalization, increased attention to the 'local' (15-minute city), safety concerns.
- **New mobility players** are coming in, and an innovative and dynamic ecosystem are built up, based on more electrified, shared technologies. All these need space and raise the challenge of how they can be connected.
- All this leads to the **scarcity of space**: how to better manage urban space and mobility services towards more sustainable cities. First question: is the space for parking, or a bus lane, or pedestrians...? Next questions: where to put the bike-share rack, the e-roller rack; to whom to give parking space: residents, long-term visitors, loading of goods? (Source: Tiago Lopes Farias)

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Source:  
Tiago  
Lopes  
Farias



Source:  
City of  
Turku



Source:  
Tiago  
Farias

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# HOW can we make this happen?

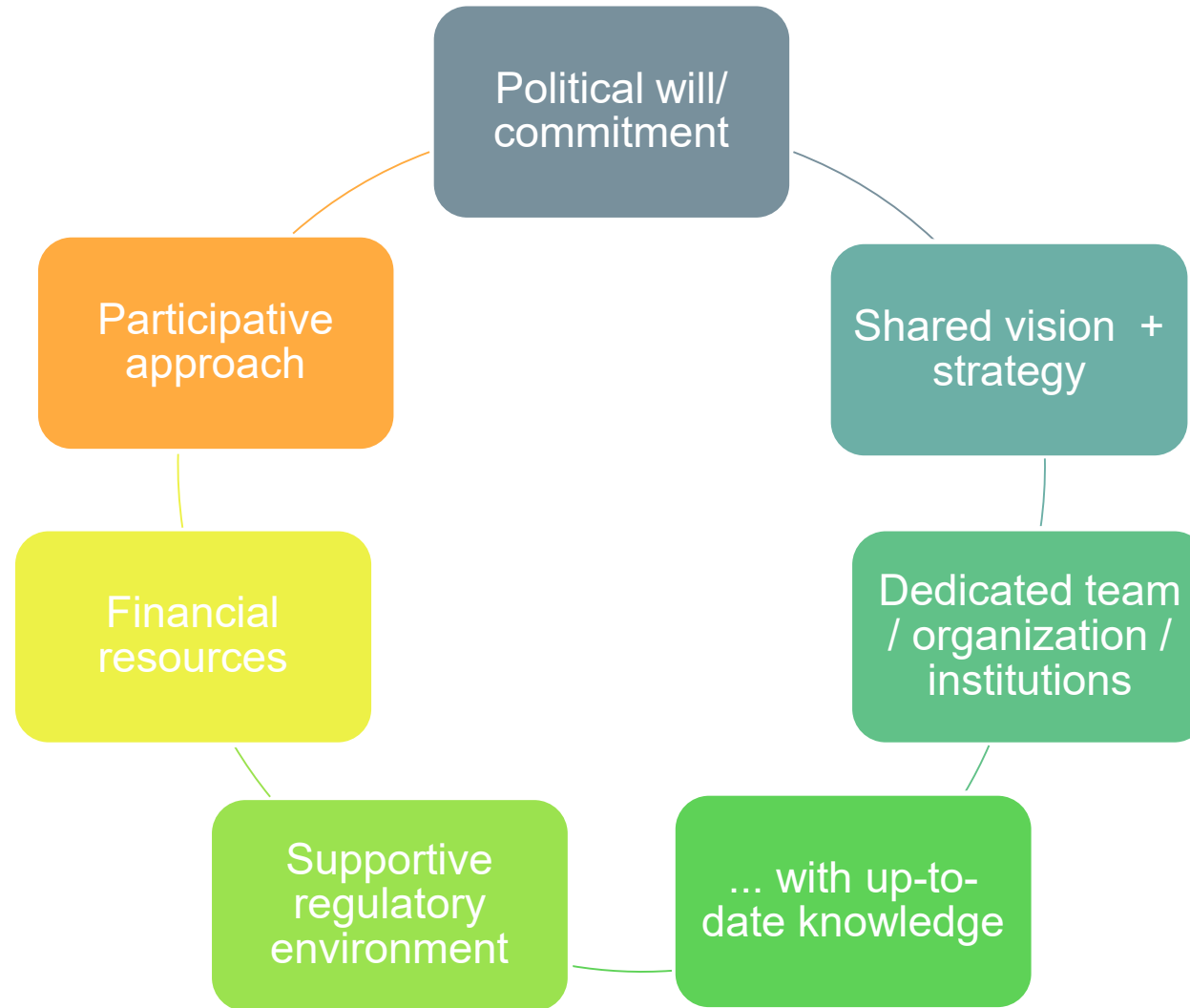
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# You need good governance to implement



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# Further tips to implement the ,accessibility revolution

- **Comprehensive mobility plans** to integrate different forms of mobility, connecting to public transport, as backbone
- **Metropolitan Transport Associations:**
  - integrating different modes of transport,
  - using innovative financial techniques to discourage car use + reducing inequalities in mobility
- **Encouraging bottom-up initiatives and experiments**

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# Summary: an accessibility revolution

- **WHAT:** connect changes in the use of public space and mobility innovations to each other. Public space interventions can push for the mobility change, and vica versa.
- **HOW:** involve schools/children, connect other positive aspects, eg greening as incentive. Testing and experimenting are important means to convince people. Concentrate on supporters instead of dealing with all protesters in details.
- **MAKE PERMANENT:** convince politicians, create institution, use the EU money (New Green Deal, RRF). Co-creation and innovative planning can lead to regulatory and institutional changes on the level of the whole urban area, connecting the scales from metropolitan down to neighbourhood and street level.

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**THANK YOU FOR YOUR ATTENTION!**

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