URBAN DEVELOPMENT VISIONS AND CHANGING HOUSING MARKETS

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Structure of the presentation

- **Introduction**: how car use became dominant; basic directions for change
- **Innovative urban spatial visions**: ‘15-minute city ’, the city as network of car-free spaces, pedestrian priority/walkable city, active mobility/cycling city, integrated metropolitan planning and mobility systems
- **Tools to restrict car use in cities**: superblock, transforming highways into urban boulevards, Tempo30, circular road regulation, parking management, shared space and co-existence streets, school area and shopping street pedestrianization.
- **Other tools to achieve the visions**: public transport driven urban development, electromobility, biking networks
- **Housing related aspects** of the new mobility and public space visions

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

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

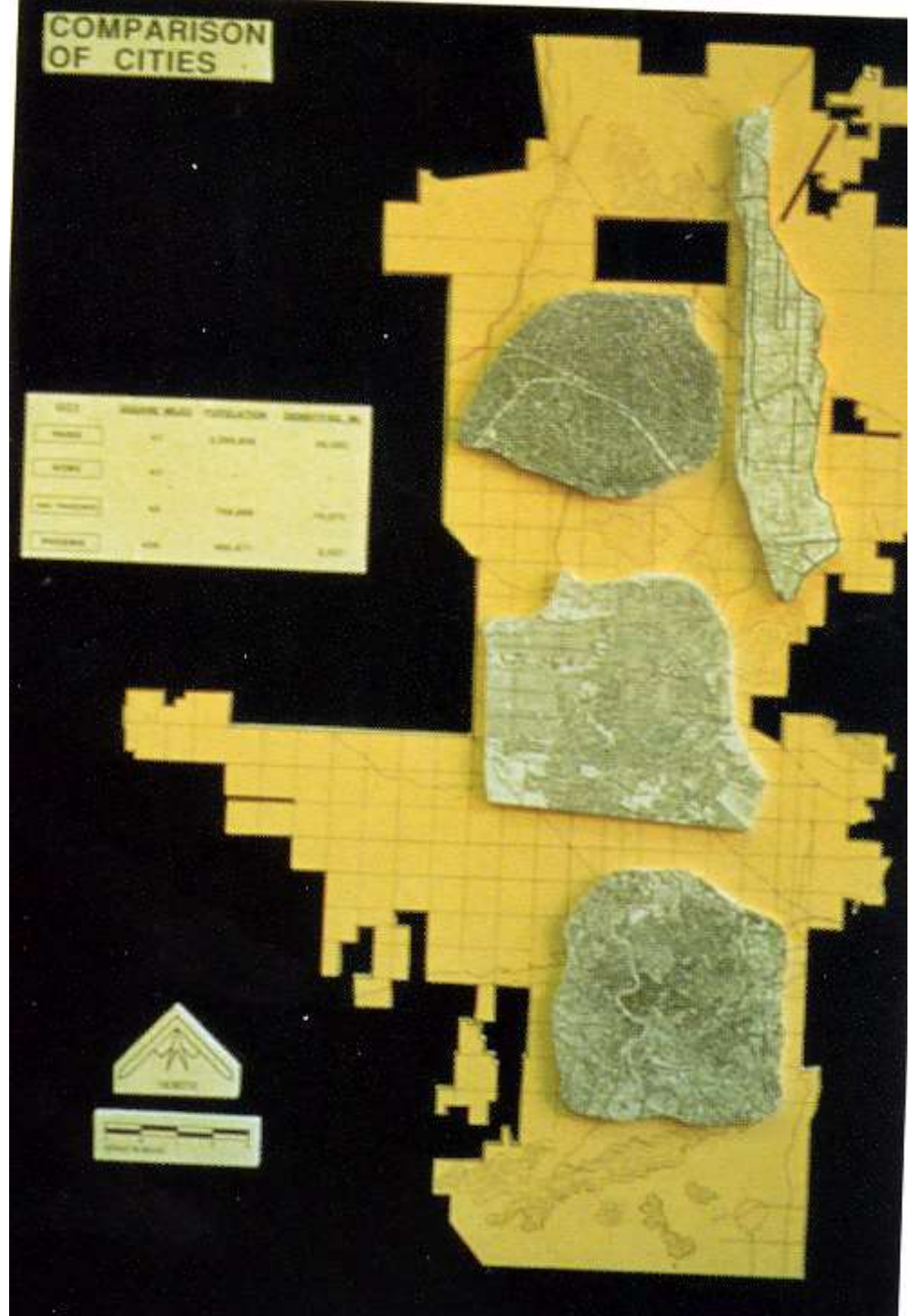
Starting in 1942, the building of first urban freeway creates a corridor through downtown Detroit.

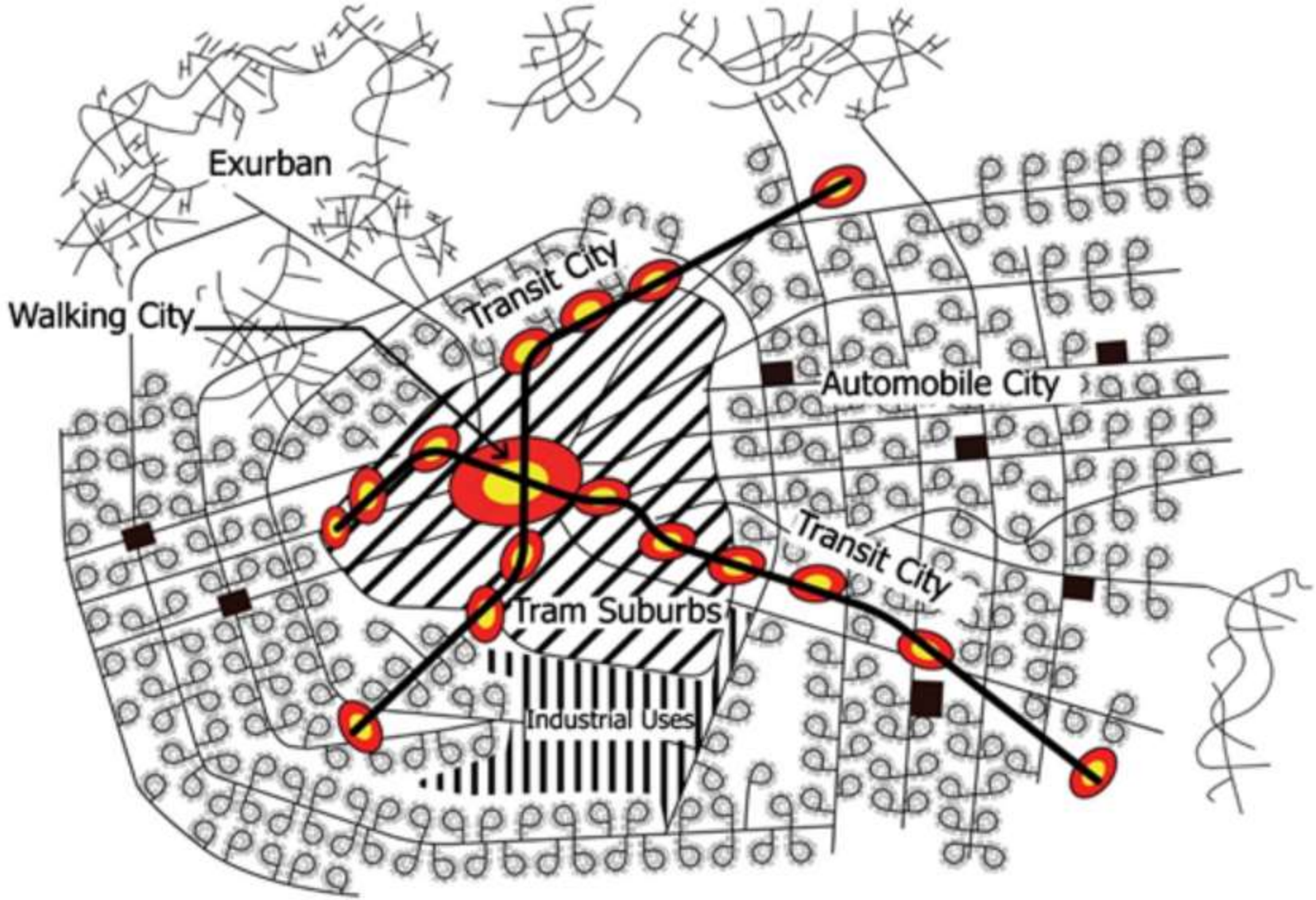
1954

Mit dem Einkaufszentrum Northland Mall beginnt ein massiver Suburbanisierungsprozess.

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

1960


COMPARISON
OF CITIES



Source: Newman et al. (2016).

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**.

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

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

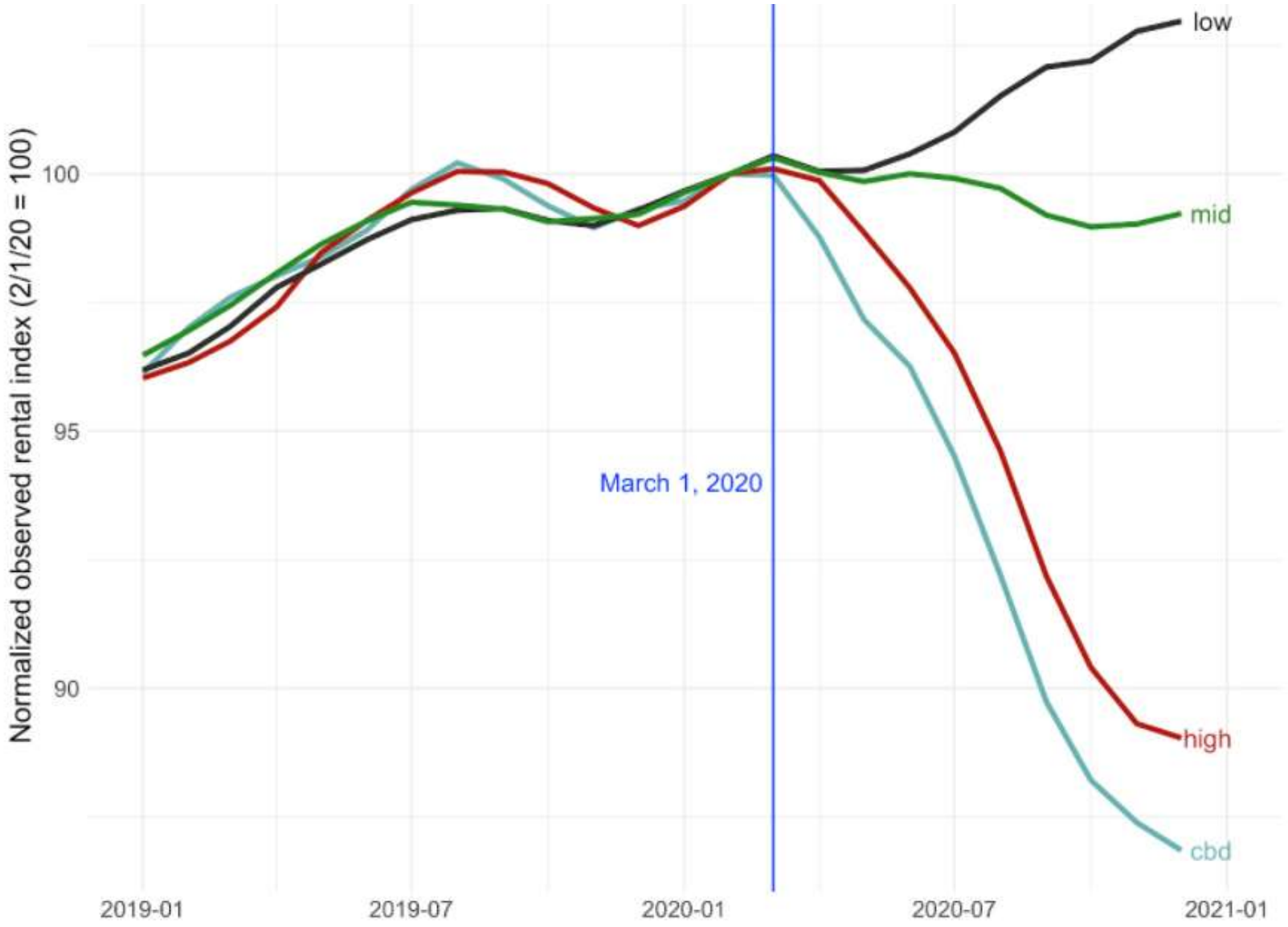
Oslo analysis

- 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 conferewnce (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

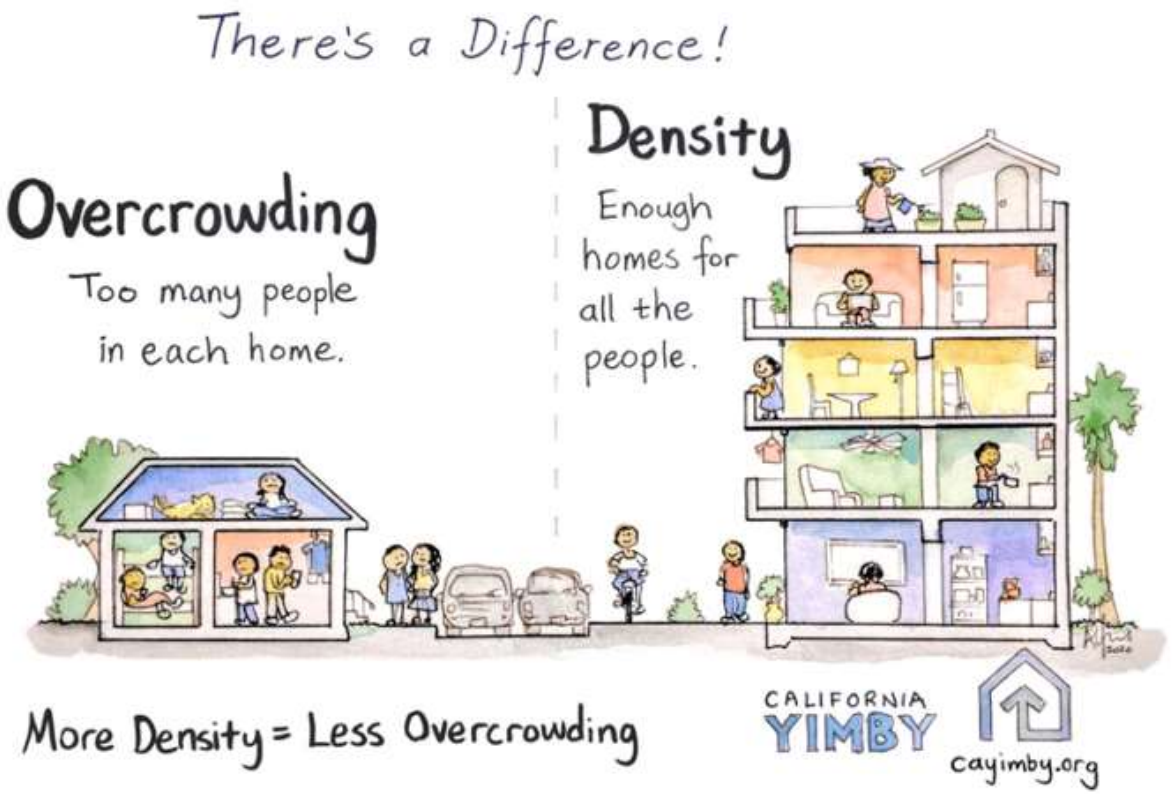
Rental index for 12 largest US metros broken by density groups



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**

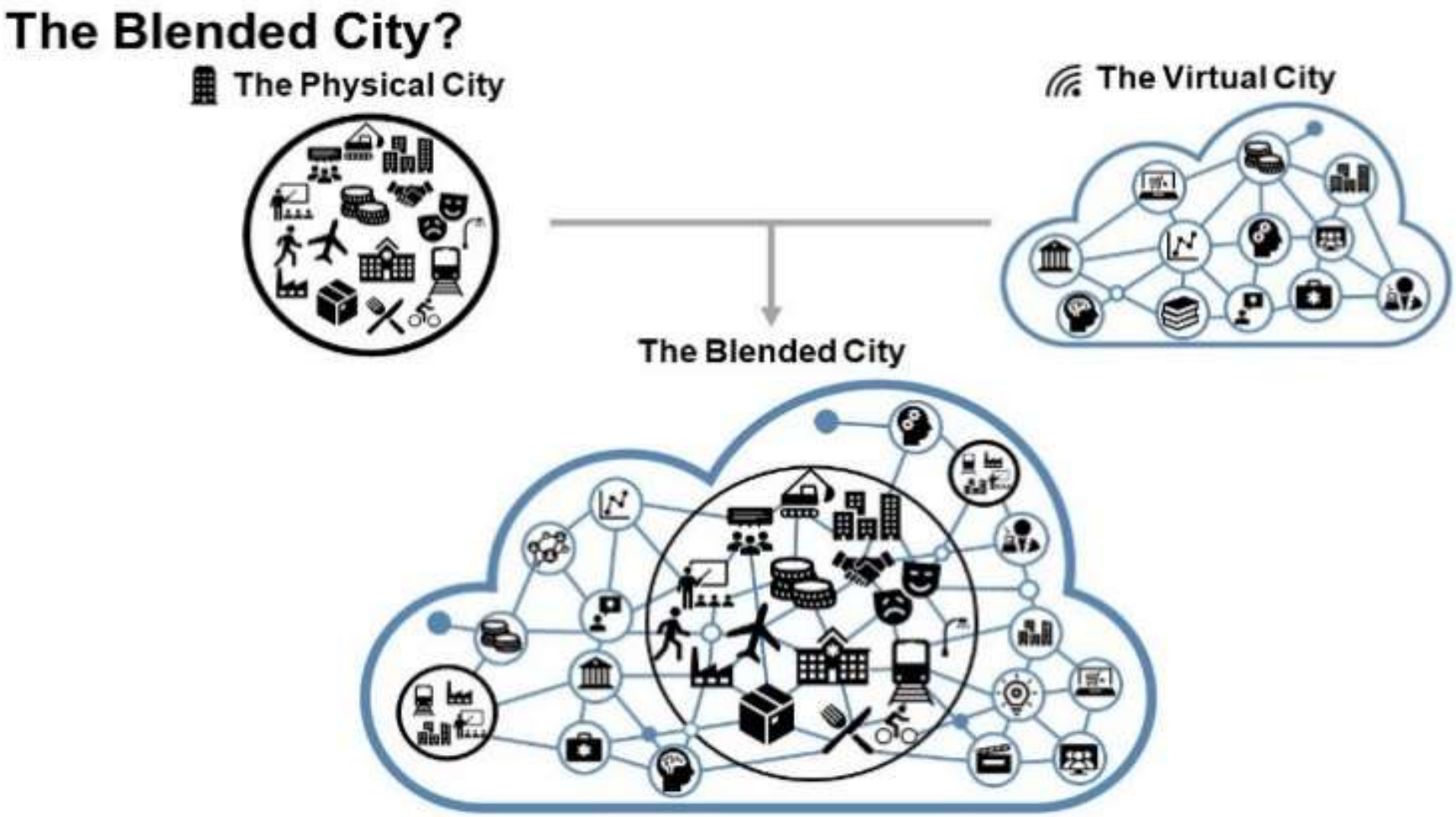


Ideas about the post-COVID city

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

New metropolitan model



© Greg Clark

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’

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.

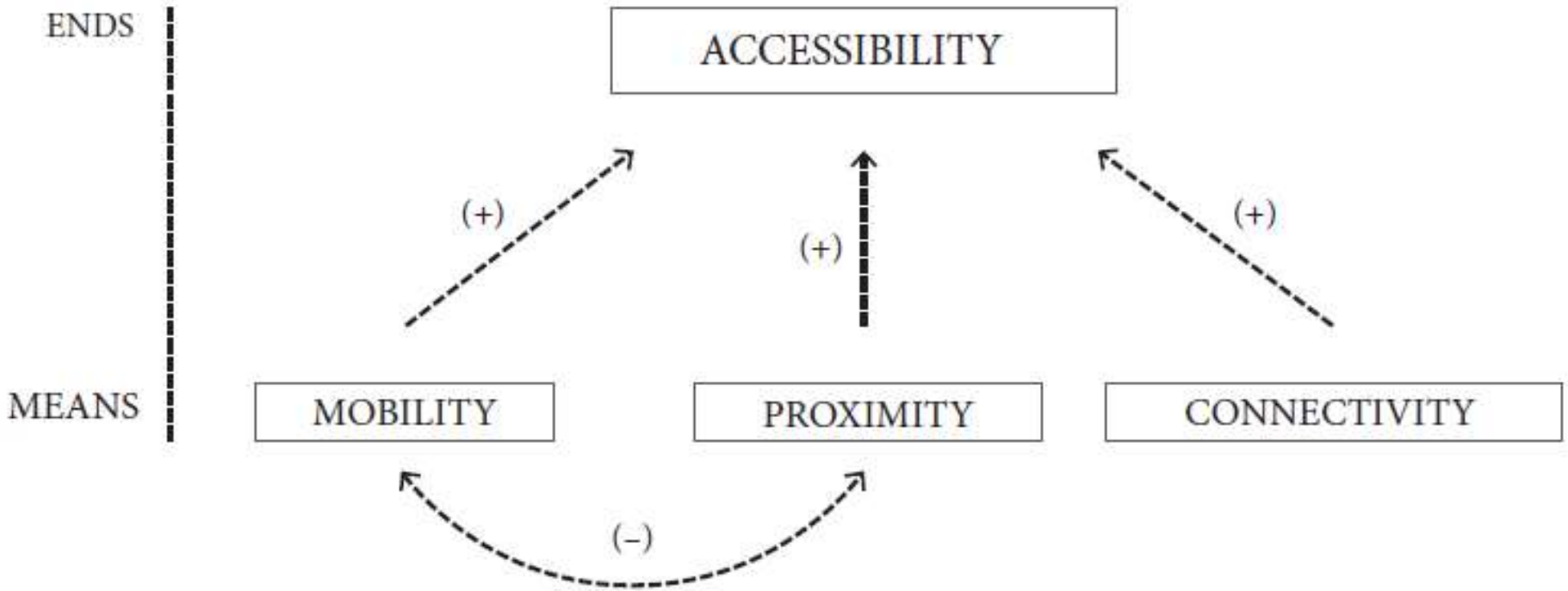


FIGURE I.1 Relationships among mobility, proximity, connectivity, and accessibility in a revised hierarchy of transportation goals

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

Chronotopia (multipurpose functions)

- Refers to a time-dependent shifting use of a space. The main square of the village is an example of a tradition-based chronotypic space, as it provides different areas of use depending on the time of day or season: a marketplace, a village holiday, a car park or a demonstration venue.
- A given place can be used differently depending on the time of day (car parks, classrooms, etc.), the day of the week (market, school yard), the season (university, conference room).
- For example, chronotyping allows for a new concept in the design, construction, and layout of workspaces. Instead of focusing on buildings and their level of efficiency, we look at the relationships, reception and participation of people, the ways in which places are occupied, as a function of perceived time.

Creative working place reform

- We are witnessing a real creative revolution that is redefining the work environment.
- Coworking, corpoworking, third places, and the like are just the beginning of a broader movement characterized by the richness and diversity of jobs.
- The work is no longer determined by the place where it is performed, but by the type of activity performed. You will be able to move smoothly from a central office to a third location, stopping at your home office on the go, depending on usage and needs.

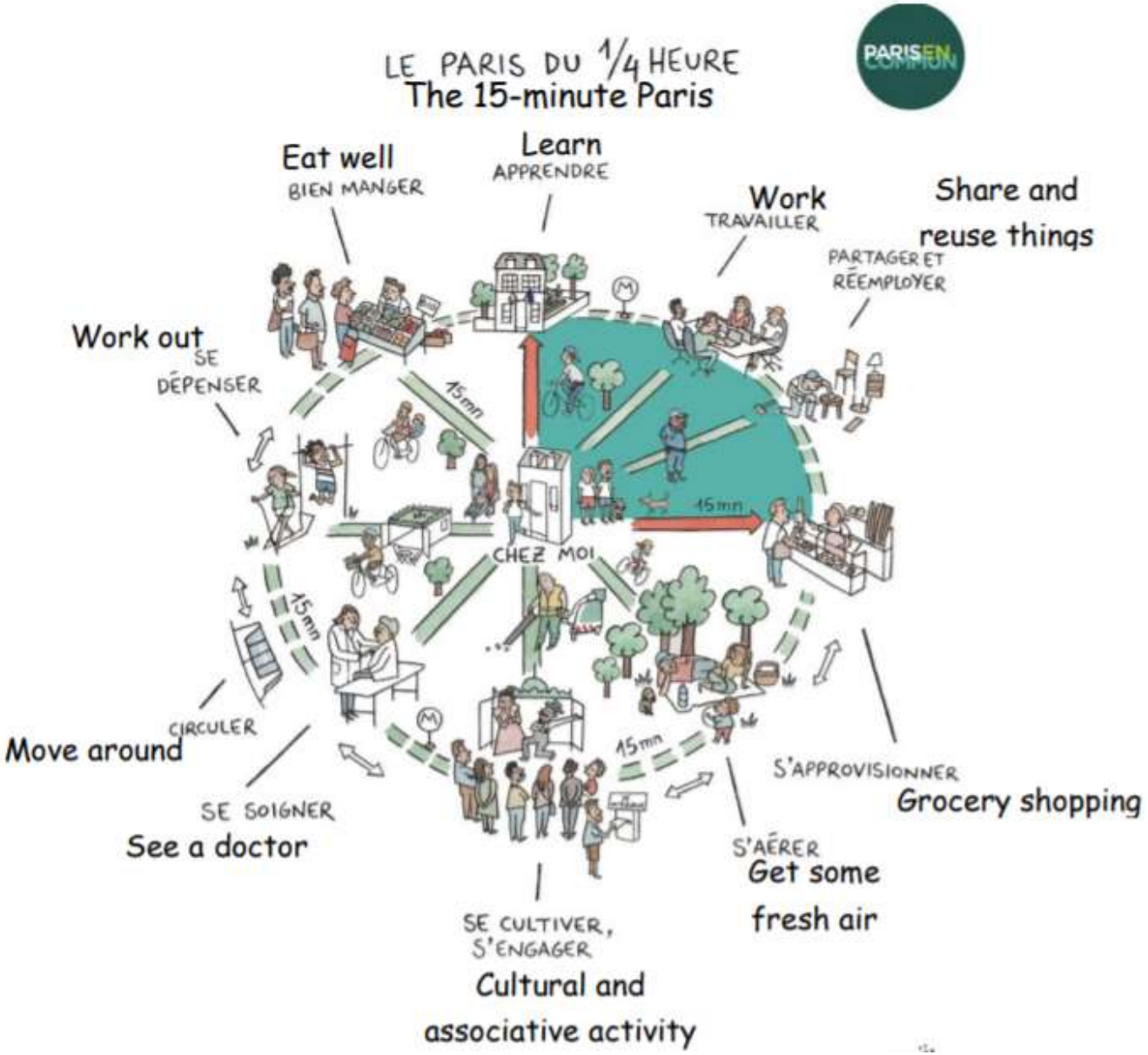
Topophilia (attachment to place)

- "Attachment to place" means the **relationship between the city and the environment and the development of an emotional - and thus subjective – attachment**
- The 15-minute city also takes into account the relationship to **nature, water and biodiversity**. A densely built-up city that has managed to incorporate nature into its spatial planning is a city in which residents restrain their “escapes” to “green” out of town.
- One of the goals of the 15-minute city is to provide a **full-fledged natural green space close to home**, serving the local social quality of life.

‚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
- **exempting 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'

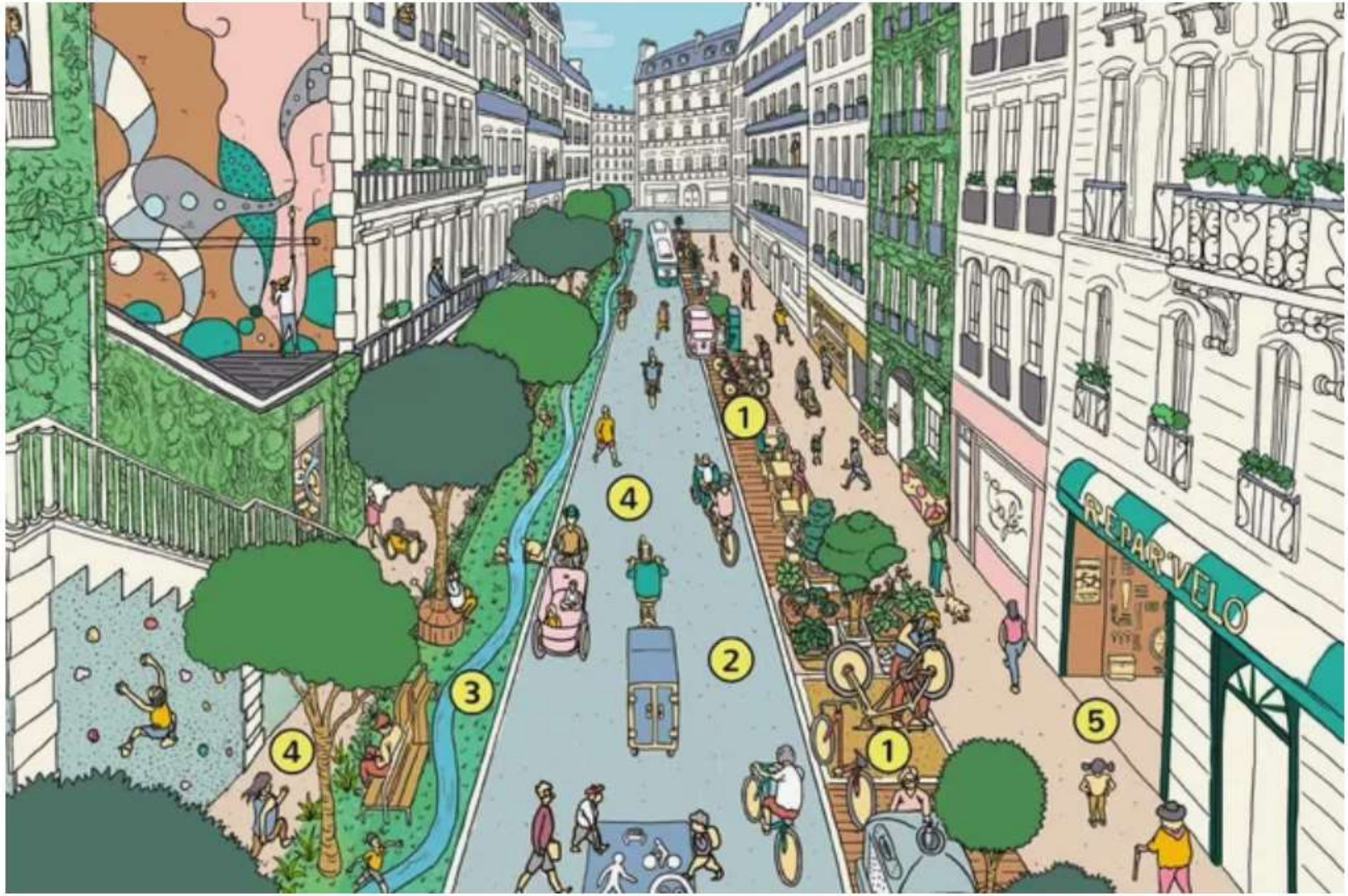


15 minutes city in dense urban areas, 30 minutes city in less dense areas.

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), chrono-topia (multi-purpose functions), topophilia (love of place).



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

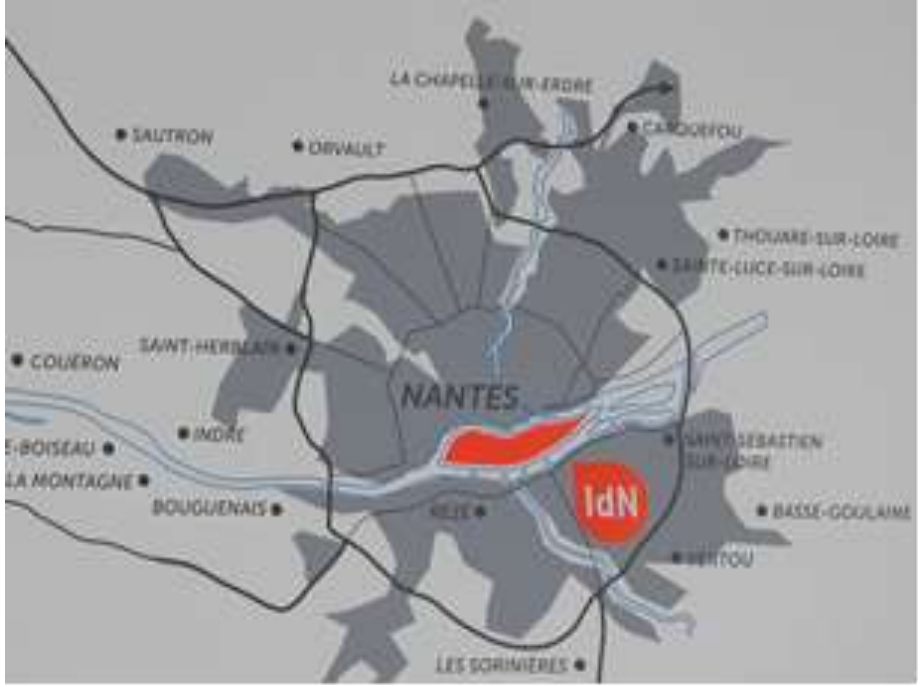
- Paris has been working for years to transform schools , engaging them in the fight against global warming **as islands of fresh air: “oasis courtyards”.** Concrete was removed, replaced with plants, creative spaces were created with paintings on the ground and seated blue.
- The next step is to make the courtyards of 650 public schools in Paris **accessible to local residents during extracurricular activities**. These courtyards become public spaces where, under the supervision of neighborhood associations, parents can play with their children in a safe environment, read, play sports, relax, or even put together a civic project.
- In parallel, **the streets adjacent to the schools are gradually being transformed into pedestrian areas**, their use being determined together with the local residents.

The island of Nantes

- The island of Nantes was an industrial area. With the decline of the industry in the late 20th century, a **large-scale brownfield urban renewal project was created in the 2000s** that helped transform the 337-acre neighborhood in the heart of the Nantes metropolis. The project was driven by far-reaching goals: to create a city for all, to reconnect with the Loire region, to develop alternative mobilities and to create a new metropolitan center.
- At the initiative of Nantes Métropole, **a local public company Samoa was set up to manage a development project** on the island of Nantes and support the development of cultural and creative industries in the metropolitan area. Its unique status and agility allow it to experiment with new ways of building and using cities.

Ile de Nantes

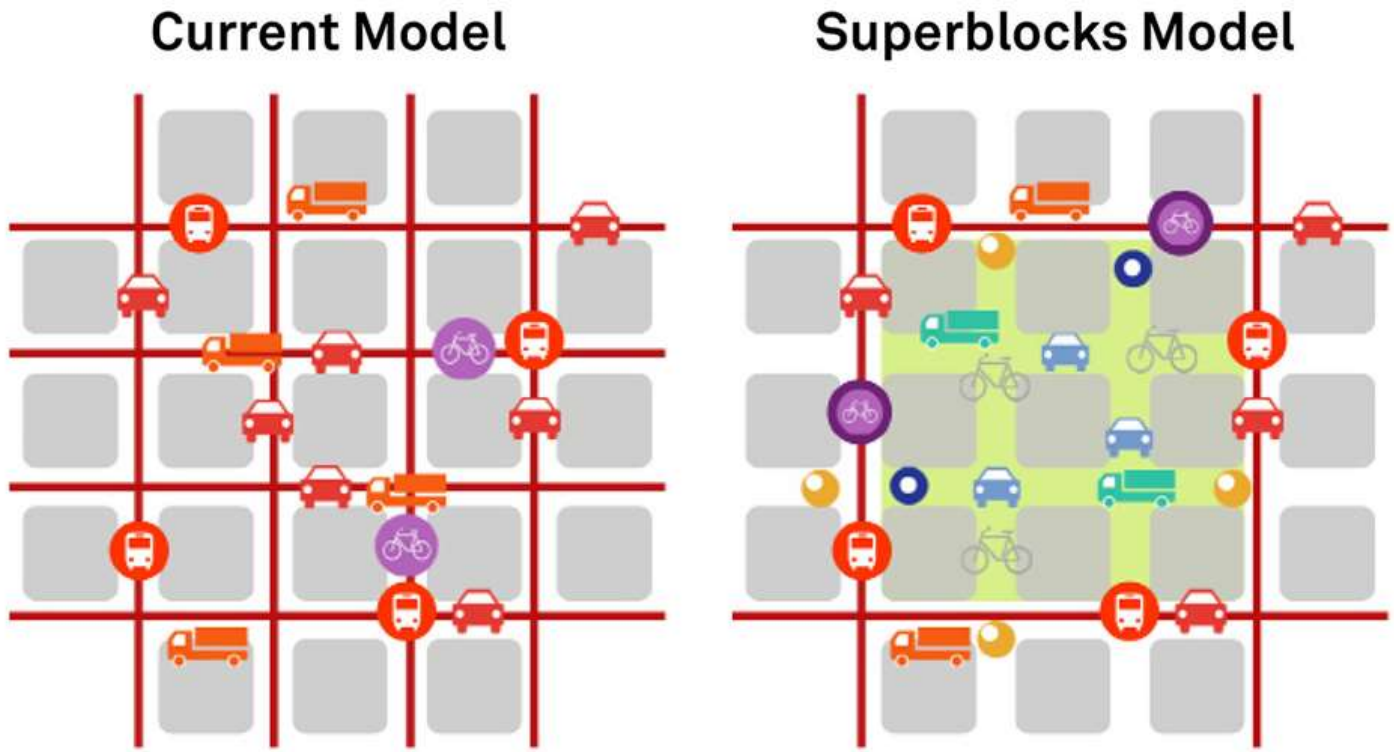
Use empty places in the city as **opportunity/space for experimentation** about future activities: creative district, **Ile de Nantes**.



Superblock

- Superblocks or “superillas” are one of the key ideas for the renewal of Barcelona. Salvador Rueda raised the idea in the 1990s, but only **in 2016 did it become widely known** about the Superilla in Barcelona’s Poblenou district.
- The basic idea is **to exclude the passage of cars from a designated area consisting of three times three blocks**, defining the inner streets and spaces as common areas, giving priority to walking.
- In the superblock, **everyone has access to green and public areas, and cyclists and pedestrians take over the space previously used by cars**.
- When creating superblocks, **40 indicators are used**: 10-10 public areas, mobility, environmental quality, socio-economic dynamics. Participation strategies are taken seriously, with the help of the Decidim platform and a participation budget.

SUPERBLOCKS MODEL



PUBLIC TRANSPORT NETWORK
BICYCLES MAIN NETWORK (BIKE LANE)
BICYCLES SIGNPOSTS (REVERSE DIRECTION)
FREE PASSAGE OF BICYCLES

PRIVATE VEHICLE PASSING
RESIDENTS VEHICLES
URBAN SERVICES AND EMERGENCY
DUM CARRIERS

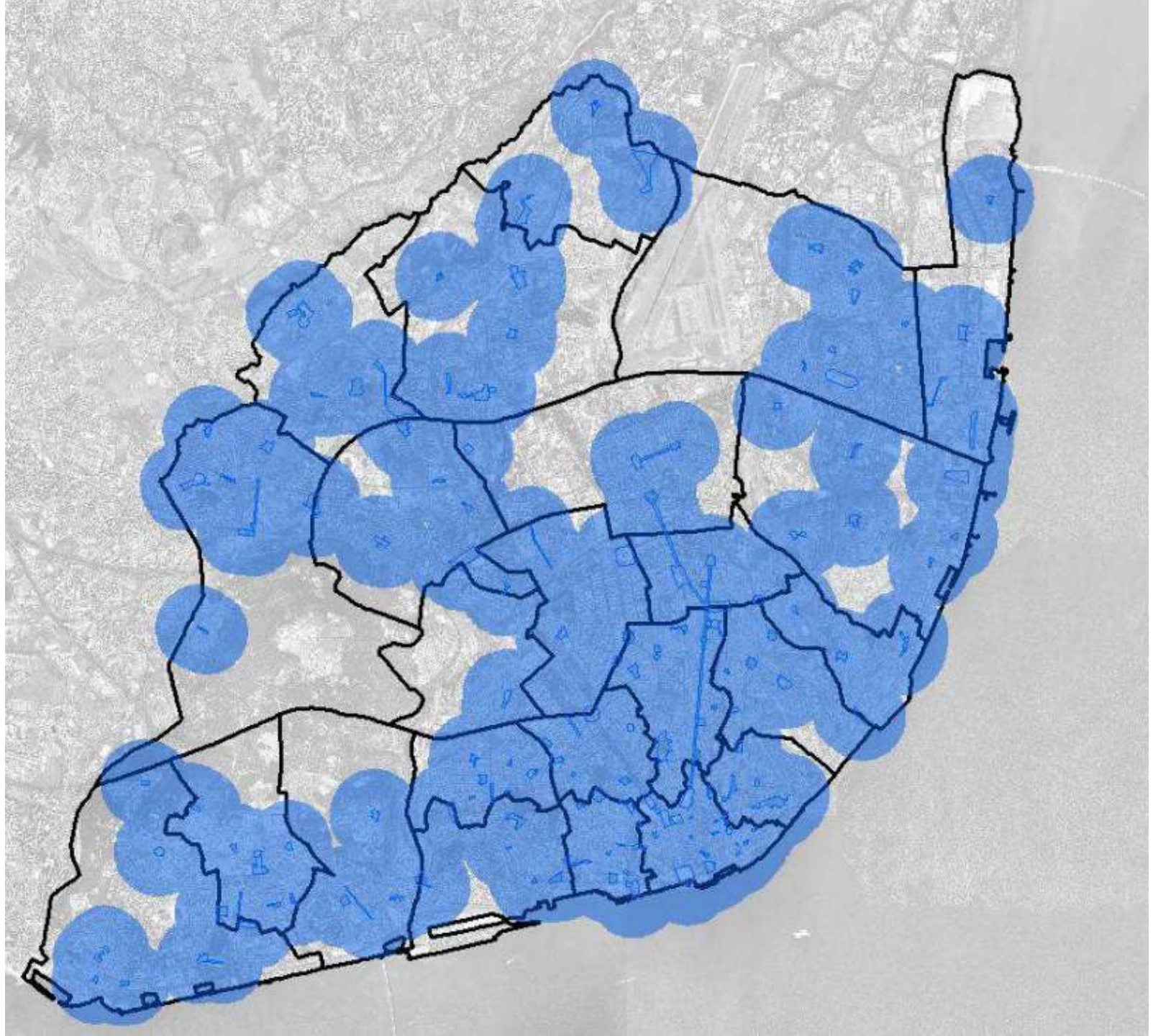
DUM PROXIMITY AREA
ACCESS CONTROL
BASIC TRAFFIC NETWORK
SINGLE PLATFORM (PEDESTRIANS PRIORITY)

Superblock Barcelona: city-wide vision

- Recently, the city is further expanding the idea: **six superblocks are being developed in Barcelona**, and in the longer term, the municipality intends to create more than 500 such areas.
- There is a **new idea of “Superblock Barcelona”** to have **green streets connect local projects**. So far, 21 of these streets have been designed, completely transforming the street view and turning the intersections into habitable spaces. The first of the green streets will be built in the summer of 2022.

Lisbon: a square in every neighborhood

- In Lisbon, a program called “Uma Praca em Cada Bairro” (“A space in every neighborhood”) is helping to rehabilitate key public spaces in the city with the aim of getting people out of cars and turning roads into public spaces.
- **The squares and streets will become the meeting point of the local community**, a microcentre concentrating activity and employment, as a public place where walking and cycling, public transport are favored and where car traffic is restricted.
- The **contribution of the population** is very important at the stage of public participation.

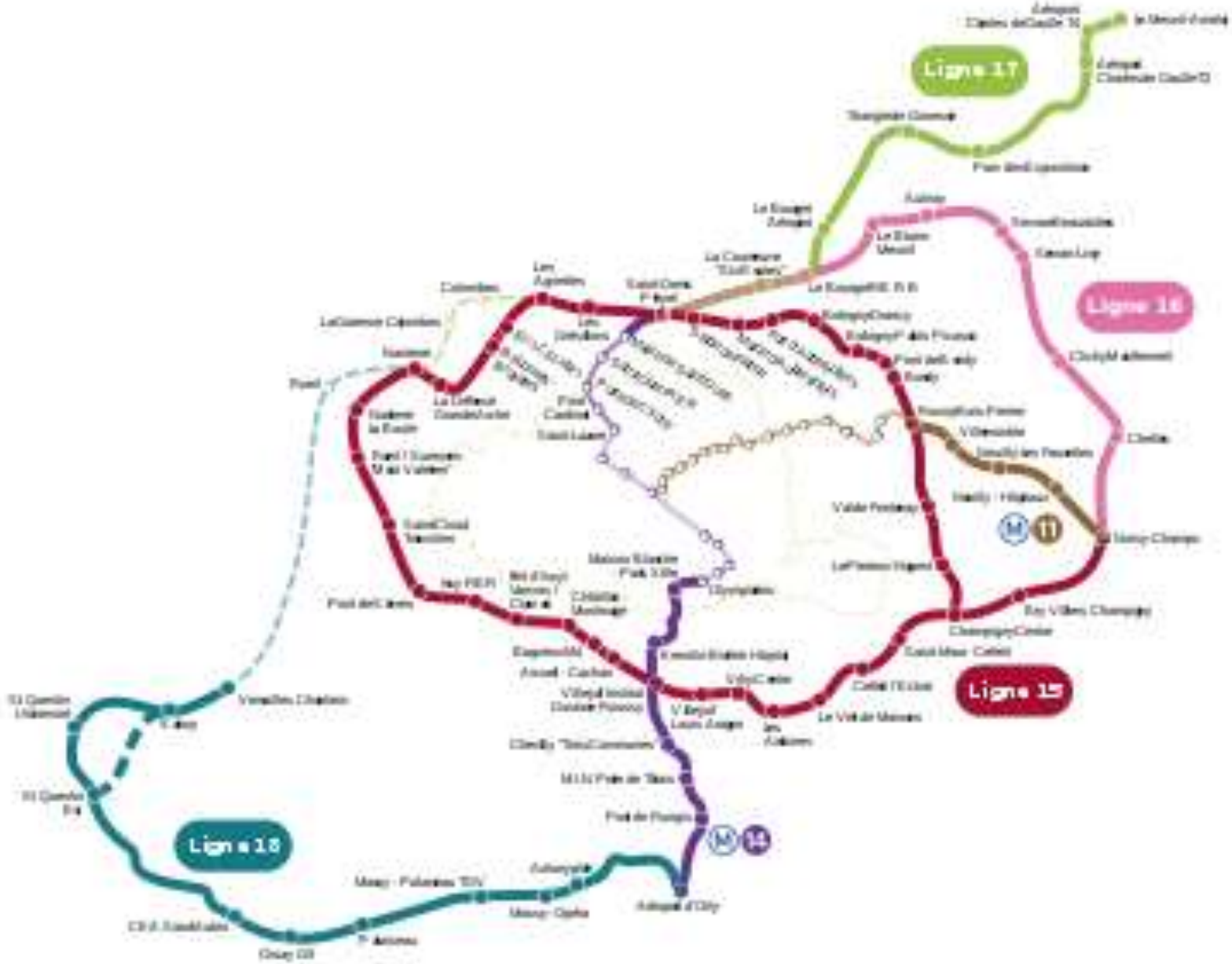


Regional integration of mobility: Paris

- 2010 electoral promise by the governing socialist (PS)/green (EELV) coalition
- eliminate the current five-zone transit fare system for people holding weekly or monthly passes and replace them with an **universal, unlimited fare**
- **monthly fare option costs €70 for regular users**, up slightly from €67.10 for previous unlimited rides in Paris and small areas just adjacent to the city and way down from previous **€113.20 for unlimited rides across the full region**

Expanding the metro system: Grand Paris Express

- Paris is in the process of **constructing the biggest underground project** in the history of the French nation. With about 170km of new underground infrastructure in total, the 205km Grand Paris Express will expand the city's metro system to one of the largest in the world.
- In 2030 Paris expects 10.5 million passengers to use the city’s metro every day, initiating the need to expand the current system as used by 8.5 million travellers per day. To deal with the expected 2 million growth increase, **the city has chosen to construct a 205km orbital network** which will connect the city suburbs to each other.


Ligne 17
Ligne 16
Ligne 15
Ligne 18

‘Transforming mobility’: restricting car use

- **superblock** on concrete, small scale (Barcelona),
- transforming **highways into urban boulevards** (Barcelona and many other cities),
- **Tempo30** (Brussels),
- **circular road regulation** (Ghent),
- **parking management** (Vienna, Graz, Zürich and many other cities),
- **shared space and co-existence streets, pedestrian zones** (Pontevedra)
- **school area and shopping street mobility regulations** (Barcelona, Paris, Vienna)

Transforming highways into urban boulevards

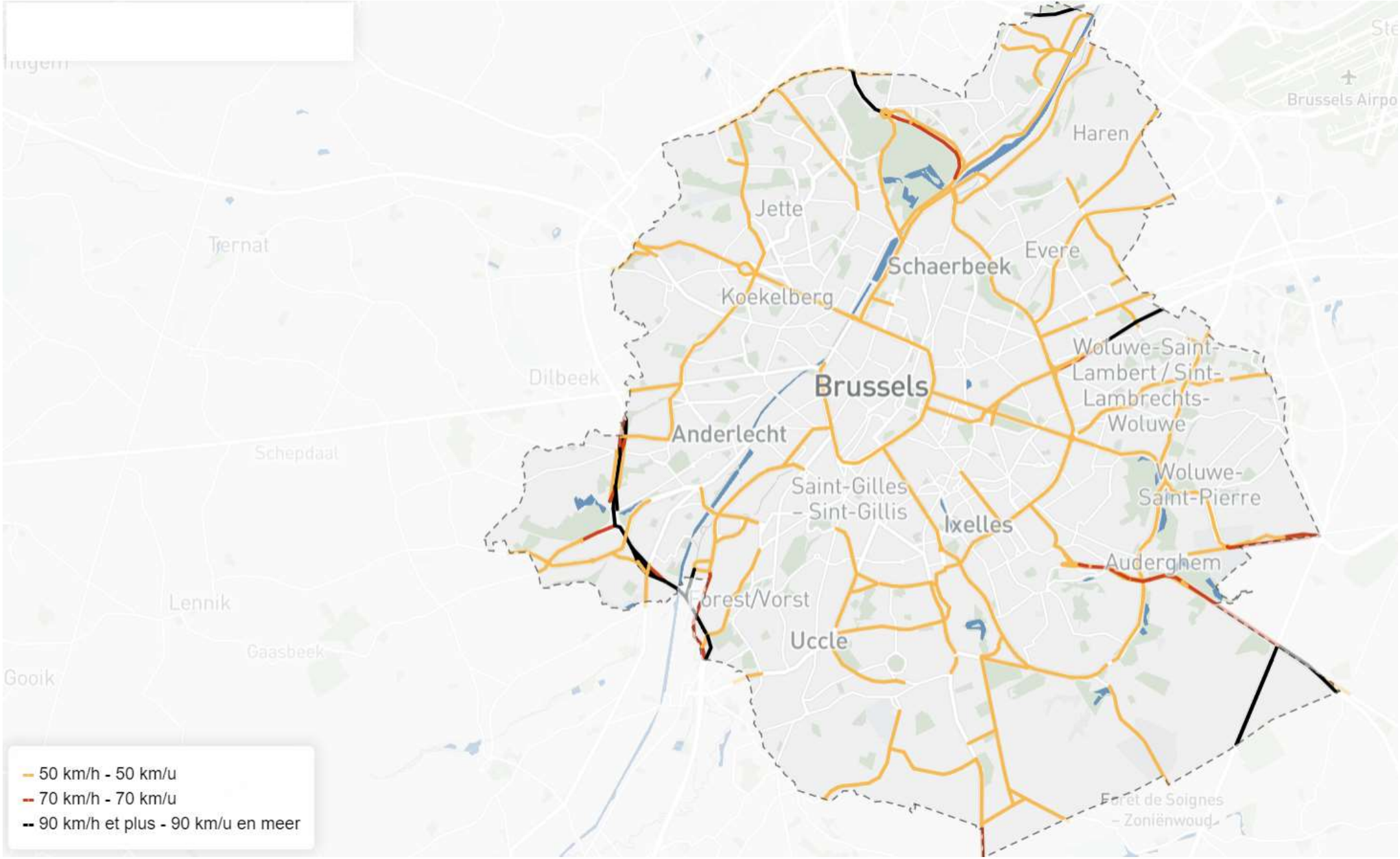
Source: Silvia Casorrán, Barcelona

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.

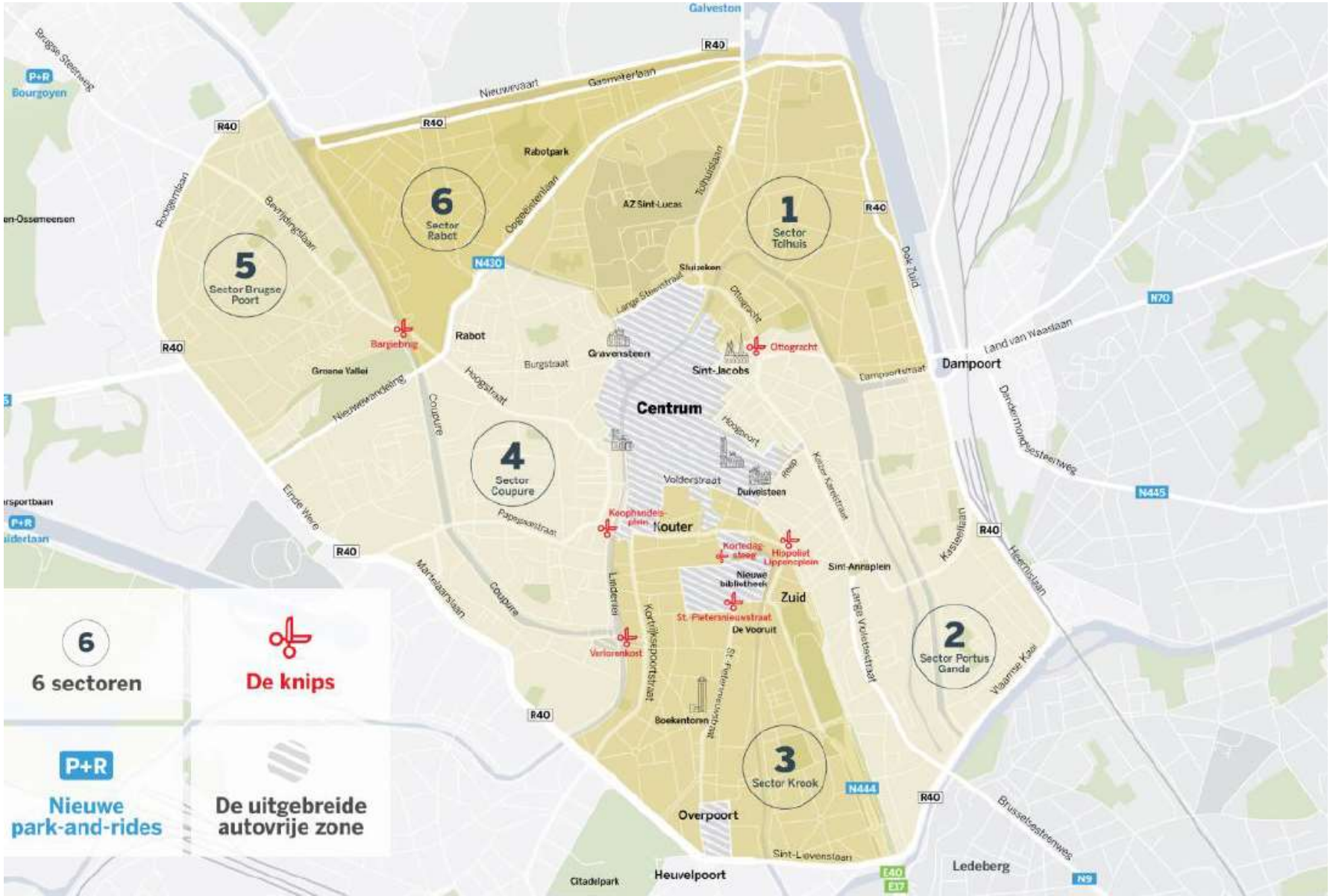
- New signs
- Remove signs « zone 30 »
- Informative signs
- Peinted on the ground

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).



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

Circular mobility model: Ghent




UITGEZONDERD
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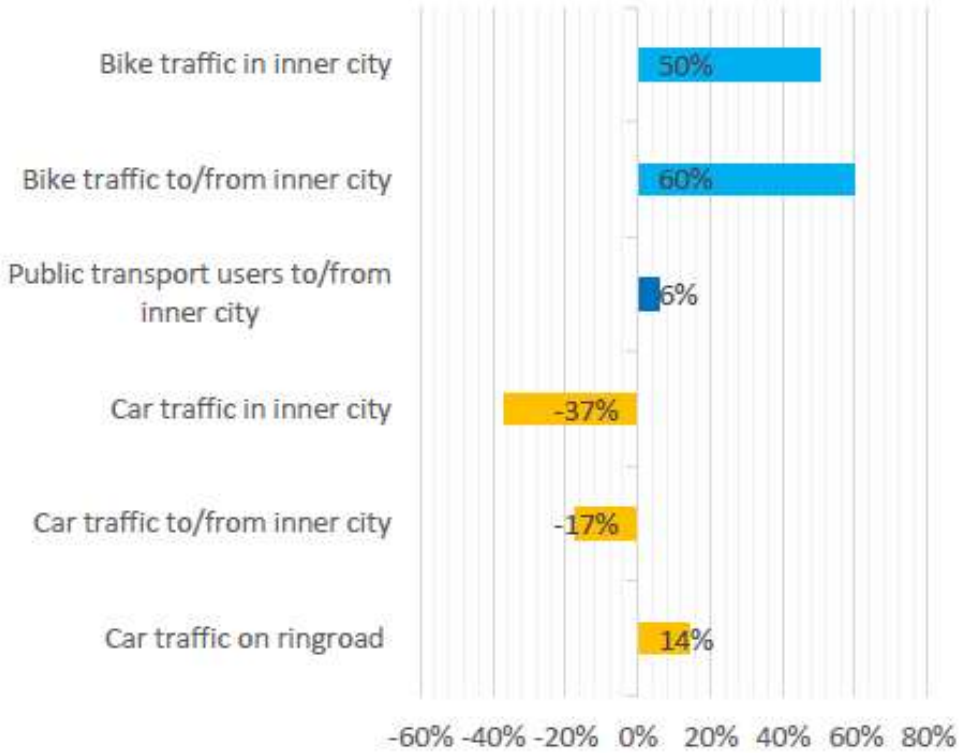
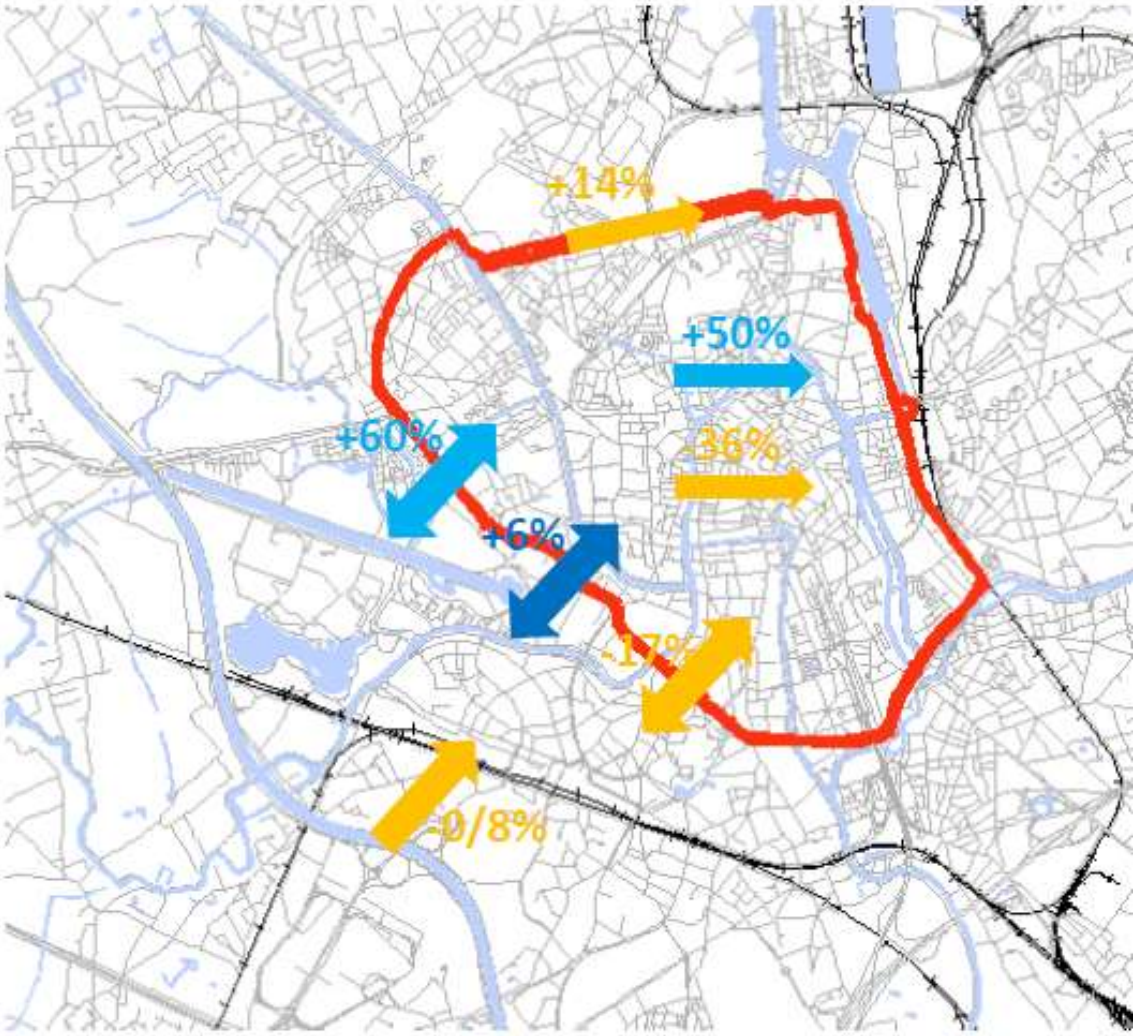
UITGEZONDERD
BUS, TAXI EN
PRIORITAIRE
VOERTUIGEN

Use of different traffic modes





Parking-management

- Graz: **parked cars occupy 92% of public space**, compared to 47% in modal split (traffic).
- UVAR - Urban Vehicle Access Regulations - method of **managing street parking spaces**: time limits, restrictions on the entry of certain groups, charging, or designating areas where parking is prohibited.
- One innovative tool is **shared parking**, such as day theater parking for offices; or downtown parking for locals during the night. Copenhagen offers pre-school parking for bicycle parking between 08:00 and 17:00.
- It is important **to implement additional improvements**, such as improving the sidewalk when introducing paid parking, as seen in Sofia, or creating parking discount zones to use the extra revenue.

Photos: Stadt Zürich

Source: https://park4sump.eu/sites/default/files/2020-07/PARK4SUMP_good%20reasons_and_principles_4_parking_management_final_36_EN_print.pdf

Changing the ‚right to parking'

Pontevedra (83,000 inhabitants): In 1999, the mayor told citizens that by buying a car no one is allowed to reserve a 10 sqm parking space in a public space. Basic concepts:

- **necessity** (differentiating mobility according to the social importance of the need for mobility);
- **putting people in the foreground**, at least half of the street area should be for pedestrians;
- **creating intersections** without lights and highlighting pedestrians on raised promenades;
- **15-30 minutes parking time in downtown** with strict control;
- underground garages built in many concession forms;
- **providing free public parking spaces within a 15-20 minute walk** of the center


1999
Pontevedra is
disorganised and
poorly lit
CORDAL
PO 5421 AL

Traffic reduction

Drivers leave their vehicles outside the city centre or underground


ATENCIÓN
EN TODA A PRAZA
PRIORIDADE PEONIL
MAX. 20 KM/H
ABANCA

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

'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

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)

Source: Tiago Lopes Farias

Source: Tiago Farias

Implementation of the ‚accessibility revolution': integration of different forms of mobility with comprehensive plans and institutions

- The integration of different forms of mobility should be regulated by **comprehensive mobility plans**, ensuring that other forms of mobility are well connected to public transport, as backbone.
- **Metropolitan Transport Associations** are important, integrating different modes of transport, using innovative financial techniques to encourage the abandonment of car use, and reducing inequalities in mobility within the urban area.
- **Initiatives and experiments from below** are important in achieving change. However, **politicians have a crucial role** to play in perpetuating new systems by **innovating regulations and institutional systems.**

Summary: the accessibility revolution

- **dense inner city neighbourhoods**: pedestrian priority/walkable city (e.g. Pontevedra), superblock, shared space and co-existence streets, parking management
- **special areas of the city**: school areas, shopping streets, climate-friendly streets with car mobility restrictions (e.g. Barcelona, Paris, Vienna)
- creating **networks of car-free spaces** (Barcelona aiming for a system of superblocks connected by green streets; Lisbon striving for having car-free squares in each neighbourhood),
- improving conditions for **active mobility/cycling** in the city
- **transforming highways into urban boulevards** (e.g. Helsinki, Barcelona and many other cities),
- **integrated planning and mobility systems on the metropolitan scale** (e.g. Paris, Barcelona)

Housing to be added to the new mobility and public space visions

- 15 minute city vision: **functional mix** can be achieved in monofunctional residential areas with **bringing in other uses** (through changing uses in time, multipurpose functions and temporary uses, topophilia: greening). There is, also another possibility, with **bringing housing into monofunctional areas dominated by other uses** (inner-city commercial areas, office districts, post-industrial areas, etc).
- An important addendum to the 15 minute city vision is **social mix.** The presence of low income families in transforming areas can be ensured by housing interventions, **controlling the share of affordable housing** in the neighbourhoods (inclusionary zoning in new areas; controlling gentrification in areas undergoing restructuring). Another social consideration should be **to assure the minimal living conditions (e.g. the presence of basic functions) in poor areas** in which living conditions are precarious.

The role of housing in a less carbon-intensive way of living

- **Housing is a key aspect of neighbourhood approaches to more sustainable living,** e.g. considering how housing is built in relation to public transport, applying the principle of transit-oriented development. In order to achieve a less carbon-intensive way of living, the space for cars has to be reduced.
- The essence of the accessibility revolution is that all city residents are able to meet most of their needs within a short walk or bicycle ride from their homes. To achieve that an **innovative regulatory environment** has to be created that encourages **inclusive zoning, mixed-use development and flexible buildings and spaces**.

Urban development interventions and their potential housing consequences

Urban development interventions	Potential housing/social consequences		Potential regulatory or planning tools in regard of housing	
	negative externalities	positive opportunities	regulatory tools	planning tools
Pedestrian priority / walkable city	gentrification		rent control, anti-segregation interventions	zoning affordable housing
School area / shopping street mobility regulation		more social mix	control over the transformation of housing units into other use	
Superblock on neighbourhood scale	gentrification	more social mix	rent control	
15-minute city: different use of buildings in time, temporary use	disturbing existing residential areas (e.g. noise)	introducing affordable housing through building conversion	protecting and supporting the housing function	zoning affordable housing
Transforming highways into urban boulevards		opportunity for affordable housing	inclusionary zoning	zoning affordable housing
City as network of car-free spaces		opportunity for more social mix		
Transit oriented development		opportunity for affordable housing		zoning affordable housing
Integrated metropolitan planning			growth control through land use regulation, anti-segregation interventions	housing fund, strategic planning with housing element

The new urban visions and the role of housing

- **Metropolitan planning and regulatory control are of key importance, both regarding the functional and social aspects of urban development**.
- This has been clearly proved e.g. by **Utrecht, where two alternative models for further growth** have been calculated. It was shown that the proximity model would lead to 20% less car use and large saving in energy, compared to the dispersed growth model. Besides, the more compact model is also better from social perspective, giving more accessibility for average and lower income people to urban opportunities.

The role of housing in metropolitan planning

Metropolitan planning usually concentrates on transport and economic development. Besides these housing could also play important role:

- suggesting, through land-use planning, **where to create new residential neighbourhoods**, assuring that mixed functions prevent people to use cars (accessibility through proximity, instead of mobility). Thus new housing should concentrate on the existing compact city area and on those existing suburban sub-centres, which are well connected to the city by public transport.
- suggesting, through combined mobility-public space planning, **interventions to improve the livability of existing neighbourhoods**, creating opportunities for mixed functions and new environmental values by taking away spaces from car use. This means that regeneration should take an area-wide view, not only depending on and dealing with individual buildings, while protecting the housing function in general and its social relevance in particular.

Innovative metropolitan planning: linking accessibility and housing

- All metropolitan level plans should include **anti-segregation and social mix analyses**, preventing unwanted social externalities (e.g. gentrification) of the interventions.
- Ideal metropolitan development models should consider properly the housing aspects. This needs a real, double-direction **multi-level governance collaboration**, where the national level calibrates the potential metropolitan framework, while the actors on the local and metropolitan level fill it up with their plans. The metropolitan framework has to ensure strong financial and regulatory means, enabling the implementation of the ideas, aiming for better functional mix and balanced social functioning on metropolitan scale.

THANK YOU FOR YOUR ATTENTION!

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