

# Walk'n'Roll Cities Guidebook

Where streets  
belong to people

## 2. What?

Visions and  
interventions



# Walk'n'Roll Cities Guidebook

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# The visions

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# The 15-minute city



## What is the problem?

The development of urban spaces in the second half of the 20th century followed the functional city approach, physically separating the basic functions of living and working areas. At the same time, cars became relatively affordable, allowing people to cover large distances in the shortest time possible. The proliferation of cars pushed cities to develop massive car infrastructure in urban areas, like wide roads and parking places. All this resulted in largely monofunctional city neighbourhoods and large shares of public space dedicated to transport. The cities' territorial expansion, usually led by car use, has further increased car traffic levels and, consequently, the need for even more car related infrastructure.

# What can cities do about it?

The **concept of the 15-minute city** stipulates a complete overturn in this general approach. Its underlying principle **is to provide all basic functions people use regularly** –living, working, shopping, education, healthcare and leisure services– **within a 15-minute walk or bike ride**. Alternatively, within a 30 min journey time in less dense cities and towns. The 15-minute city concept replaces the previous approach of “accelerating trip speeds to get to as many places as possible within the travel time budget<sup>1</sup>” with “providing an inclusive city of access, proximity and safety for all”. It represents an antidote to the car-oriented urban vision.

This can be achieved by **creating dense and mixed-use urban neighbourhoods**, which will eventually replace monofunctional areas. This approach leads to exchanging the, so far, prevalent model of the functional city by **a more human model of a mixed city**. A crucial aspect of the concept is to avoid applying the 15-minute approach only in selected neighbourhoods, as for instance in the city centre. Quite the opposite, **this approach needs to be rolled out to most, or preferably, all different parts of the city**. In this way, not only can all (or most) inhabitants enjoy the benefits of accessibility, but also the city can prevent the gentrification process. Creating only a selective number of 15-minute neighbourhoods will inevitably lead to the gentrification of these areas, due to the higher quality of life they can provide, which in turn results in higher costs of living, ultimately driving away low-income citizens.

**The 15-minute concept addresses the creation of mix-use areas**, not just by purely mixing how space is used in a neighbourhood, but also by **using the same space or building for different purposes** over the course of a day. Paris (FR) is the forerunner and originator of the 15-minute city model. In this city, **school yards** take a central role in this approach, with the idea that school yards **should extend to public spaces** in their immediate proximity, like squares and streets. On the one hand, this improves the experience of pupils during breaks and outdoor time, on the other hand, the school yards are accessible to the public outside school time and serve as attractive locations to meet, socialise and play. It’s a win-win situation. In most cities, schools hold the potential to serve as centres for public life in (aspiring) 15-minute neighbourhoods.

**Remodelling various neighbourhoods** to become a proper 15-minute city requires **massive interventions**. Using tactical urbanism interventions can sometimes also be useful to make quick and inexpensive changes, as the city of Bielefeld (DE) demonstrated by remodelled public space use in its Old Town to showcase how permanent changes could look like. The **road network needs a major revamp to create liveable streets** that meet the needs of residents and mainly accommodate active mobility options for their traffic function, as well as a comfortable space for pedestrians and possible activities (see 5.1 - Reducing car access to city centres and 5.7 - Superblock). Cities need to support retail and service providers to decentralise some of their facilities, as well as give incentives to businesses investing in co-working spaces to avoid longer commutes of employees. With all these in mind, it’s crucial that cities use participative processes and co-creation – involving all different stakeholders, if possible – while implementing the 15-minute city concept (see 6.4 - Participative approach).

1. In the 1970s transportation engineer Yacov Zahavi came up with the concepts of the travel time budget (TTB) and the travel money budget (TMB). Zahavi argued that travellers tend to combine these budgets in order to maximize the distance they can travel within their constraints of time and money.



# How does city size matter?

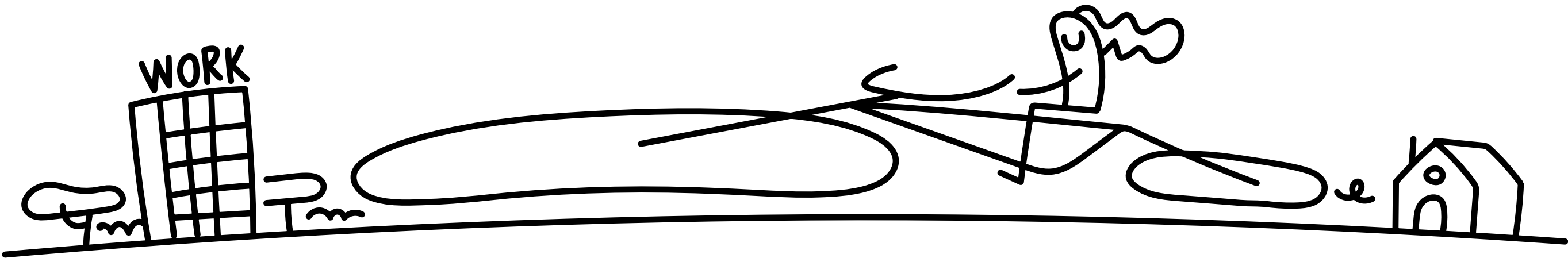
The 15-minute city idea is relevant for all city-size categories.

**Small towns** can develop most of their urban area as one 15-minute city, as they can almost be entirely crossed in a similar amount of time. In fact, most of the foundations are probably already in place, but usually they need to address challenges like reducing out-commuting, as in creating attractive co-working spaces, and reintegrating retail and services that migrated out of town. They also need to re-orientate their entire road network to meet the needs of active mobility as a default option.

Cities of **medium, large and metropolitan scale** need to identify a structure for the different centres of the 15-minute areas and address the full scope of tasks as described above. They can however exploit the advantage of better density.



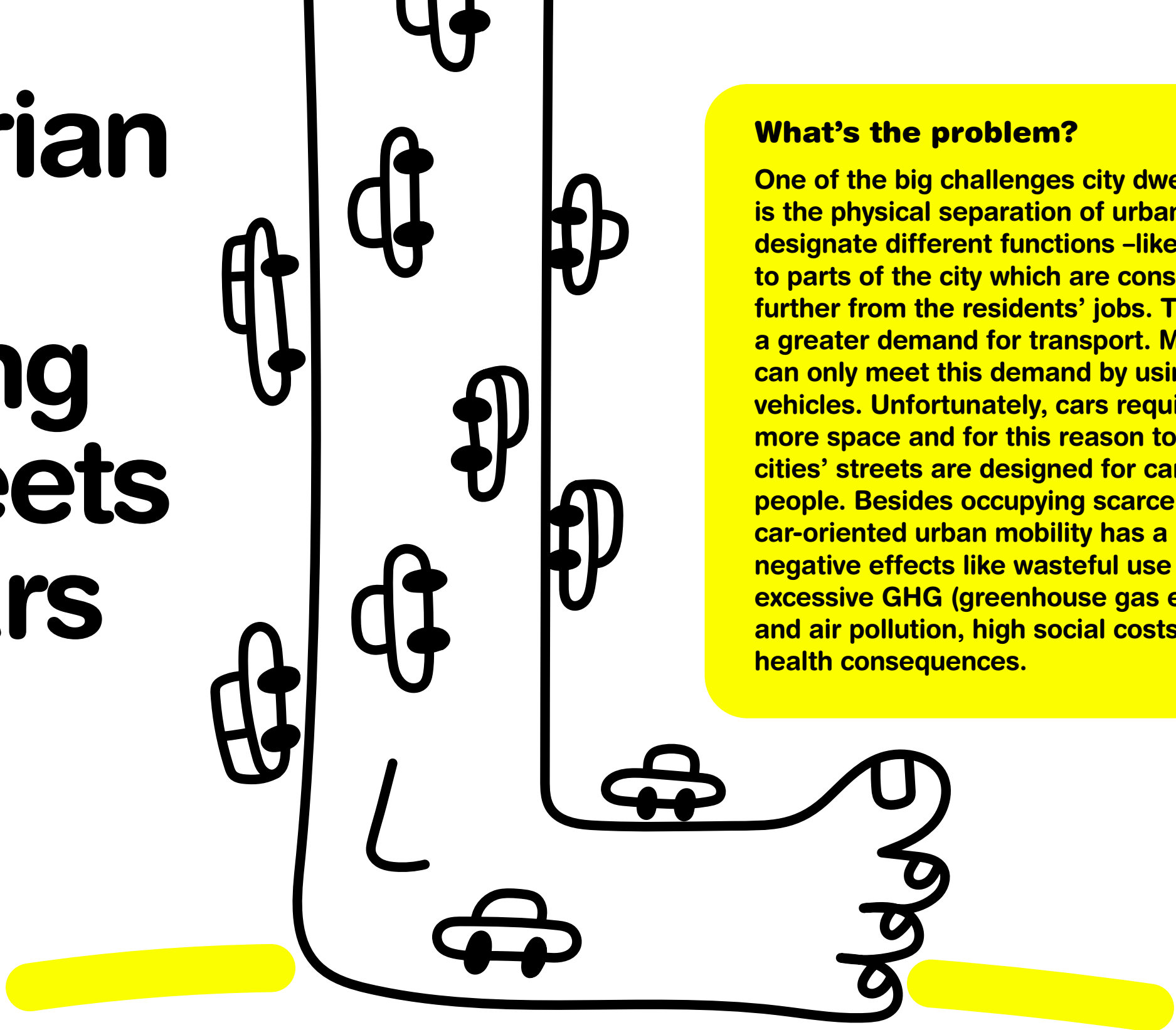
Rue Montorgueil in Paris - Iván Tosics



# Pedestrian priority: liberating city streets from cars

**What's the problem?**

One of the big challenges city dwellers face is the physical separation of urban areas that designate different functions –like housing– to parts of the city which are considerably further from the residents' jobs. This leads to a greater demand for transport. Many cities can only meet this demand by using motorised vehicles. Unfortunately, cars require more and more space and for this reason today, most cities' streets are designed for cars, and not for people. Besides occupying scarce city spaces, car-oriented urban mobility has a range of other negative effects like wasteful use of energy, excessive GHG (greenhouse gas emissions) and air pollution, high social costs and harmful health consequences.

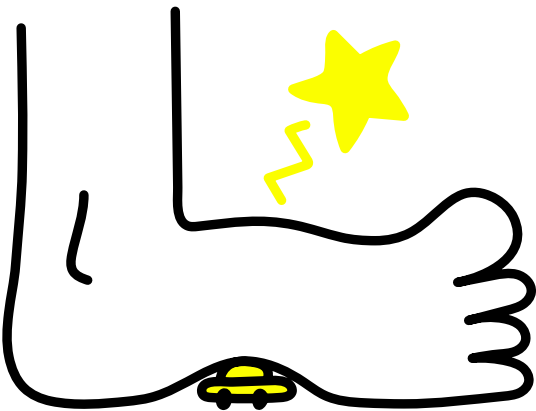


What can cities  
do about it?  
What is the vision?

Cities need to be designed for people, not for individual motorised vehicles. In this regard, **accessibility should be the priority, not mobility**. Certainly, planned mobility is key for more accessible cities. There’s increasing need for **compact cities and neighbourhoods** where most services and functions are easily accessible by walking, cycling and by public transport. When planning for sustainable mobility, the fundamental principles should reflect this commitment by **prioritising transport modes that ensure inclusivity, while providing a better use of space, energy efficiency** and cost effective investments. These principles require “reversing” the mobility pyramid – giving **priority to walking, cycling (and public transport) at the expense of cars**, both in terms of resources and space.

Pedestrian priority **does not mean that cars need to totally disappear from our cities**, there will still be plenty of situations when the use of a motorised vehicle is inevitable. Nevertheless, by significantly **reducing their share in the mobility mix** can lead to positive changes and make our public spaces better places for people. This reduction can be done by completely banning them from certain streets, severely limiting their access to other streets, reducing their speed and limiting parking options, for instance.

But this is not all. Making the use of cars less convenient, more expensive – and in certain situations even impossible – is not enough. Cities need to offer **viable alternatives to individual motorised vehicles**, while simultaneously improving the conditions and user experience of active mobility and public transport, which ultimately make **leaving the car behind an easier decision**.



It’s also important to note that **public spaces do not automatically become “places for people”** by simply taking cars out of the equation. Changing the perception of these places, actively stimulating new uses are also important. The combination of physical and soft measures is fundamental. These include implementing visual improvements, greening, installation of urban furniture, organising events that attract people and using incentives that could encourage certain activities.

While all cities need to adapt the mix of interventions to their **unique local circumstances**, specific actions can include:

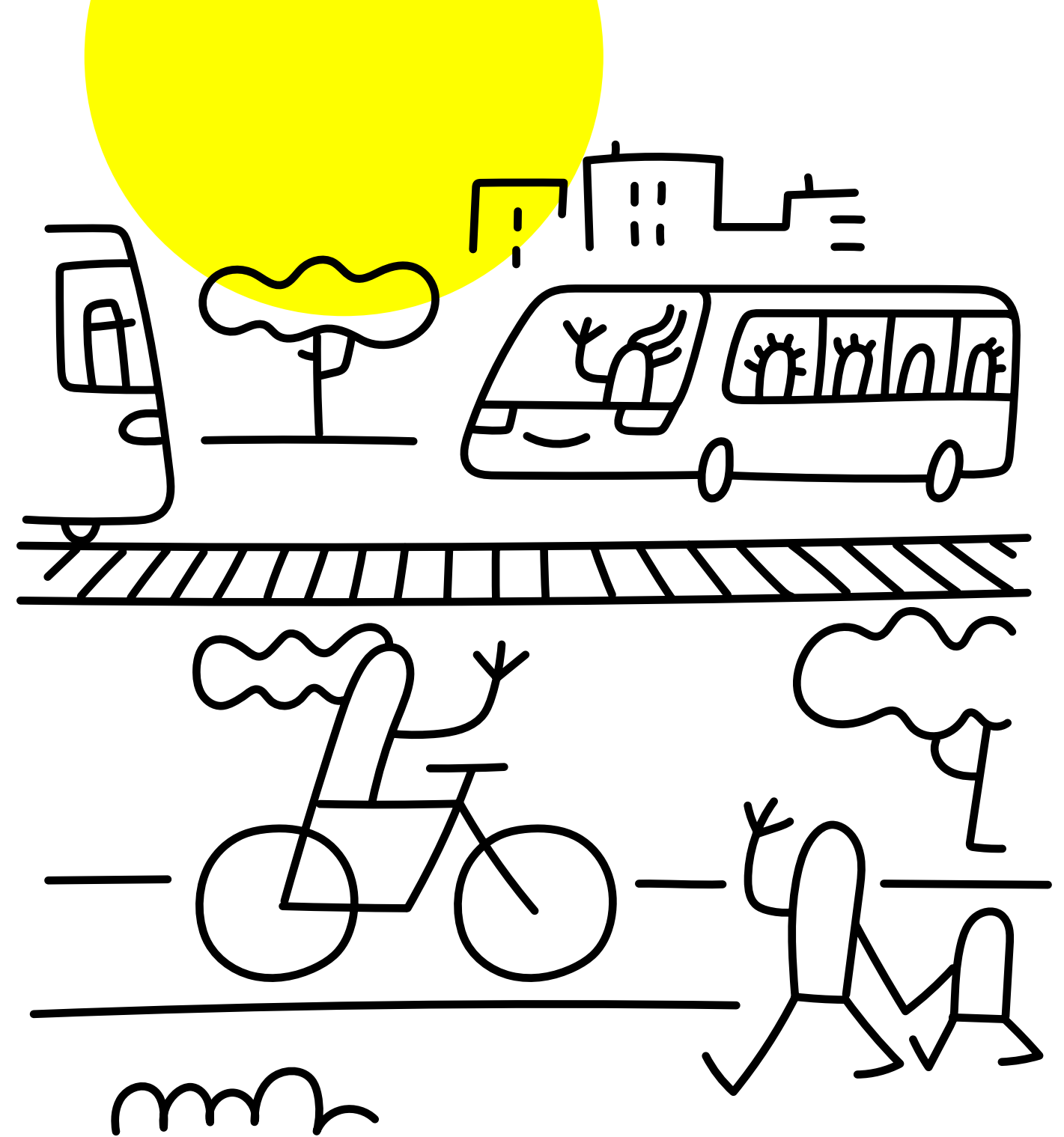
- Applying a **citywide approach of pedestrian priority** by creating pedestrian-only zones, co-existence streets and allocating at least 50% of the street space to people, not cars, (with wide sidewalks, narrow lanes, physical traffic calming).
- Introducing **road traffic restrictions**, discouraging – or even banning – cars to speed through inner city areas in a straight line by introducing circularity regulation ([see 5.1 - Reducing car access to city centres](#)).
- **Acknowledging the occasional need for car use** even in pedestrian-priority streets (delivery, loading-unloading, transporting people with mobility impairments, etc.) but applying strict limitations.
- Using strategic **parking management to regulate traffic flow** and to discourage people from driving to certain neighbourhoods ([see 5.3 - Parking management](#)).
- Setting and enforcing **strict speed limits** in all streets (pedestrian only streets - no cars allowed; coexistence streets - max 6 km/h, segregated streets - max 30 km/h) ([see 5.2 - Tempo 30](#)).





## How does city size matter?

In **small and medium-sized** cities it is easier to manage such measures through a citywide plan. In smaller cities cycling alone can be a viable alternative to car use in most cases, while in **large cities and metropolitan areas** public transport plays an increasingly important role. Sharing schemes and on-demand public transport can also be part of the solution, with bikes, e-scooters and cars. However, these are only viable in larger urban areas. Regardless of the city size, it is important that the various alternatives to individual motorised vehicles are put in place **simultaneously with traffic restriction and pedestrianization measures**. In big cities and city regions parking can be a significant challenge (especially resident parking).





## Pontevedra

The city of Pontevedra (ES) started its journey in 1999 with the objective to improve urban life quality, mainly **through the drastic reduction of motorised traffic in the extended city centre**. Instead of totally prohibiting car use, the city has applied the **principle of necessity**: anyone can use a car, even in the city centre, but only when it is really necessary, and only for a limited time.

**Through-traffic was totally eliminated** by introducing circularity and **parking was also transformed**: surface parking in the city centre is only allowed for 15 minutes or long-term in (paid) underground garages; otherwise, anyone has the option to use the free municipality parking facilities located within 10/15 minute walking distance from the centre. To encourage active mobility, a **metro-style walking map** has also been developed, which indicates the distances between various spots in the downtown area, as well as the estimated walking time to get to each one of these destinations.

As a result of all this, **motorised traffic in the heart of the city decreased by over 90%** and it dropped by nearly 80% in the extended centre. Urban **noise level has also been drastically reduced**, similarly to fatal road accidents in the city centre. As a bonus, Miguel Anxo Fernández Lores, **the Mayor who started this urban transformation process, is still in office**. To find out more about the project check the [video explaining the Pontevedra mobility model](https://www.youtube.com/watch?v=8_WS05BJfT8) and the [Euronews article](https://www.euronews.com/next/2022/09/20/how-pedestrianization-halted-a-spanish-citys-decline) and footage about the city's transformation.

1. [https://www.youtube.com/watch?v=8\\_WS05BJfT8](https://www.youtube.com/watch?v=8_WS05BJfT8)

2. <https://www.euronews.com/next/2022/09/20/how-pedestrianization-halted-a-spanish-citys-decline>



The former main road cutting through the inner city of Pontevedra (now a pedestrianized street) – Béla Kézy

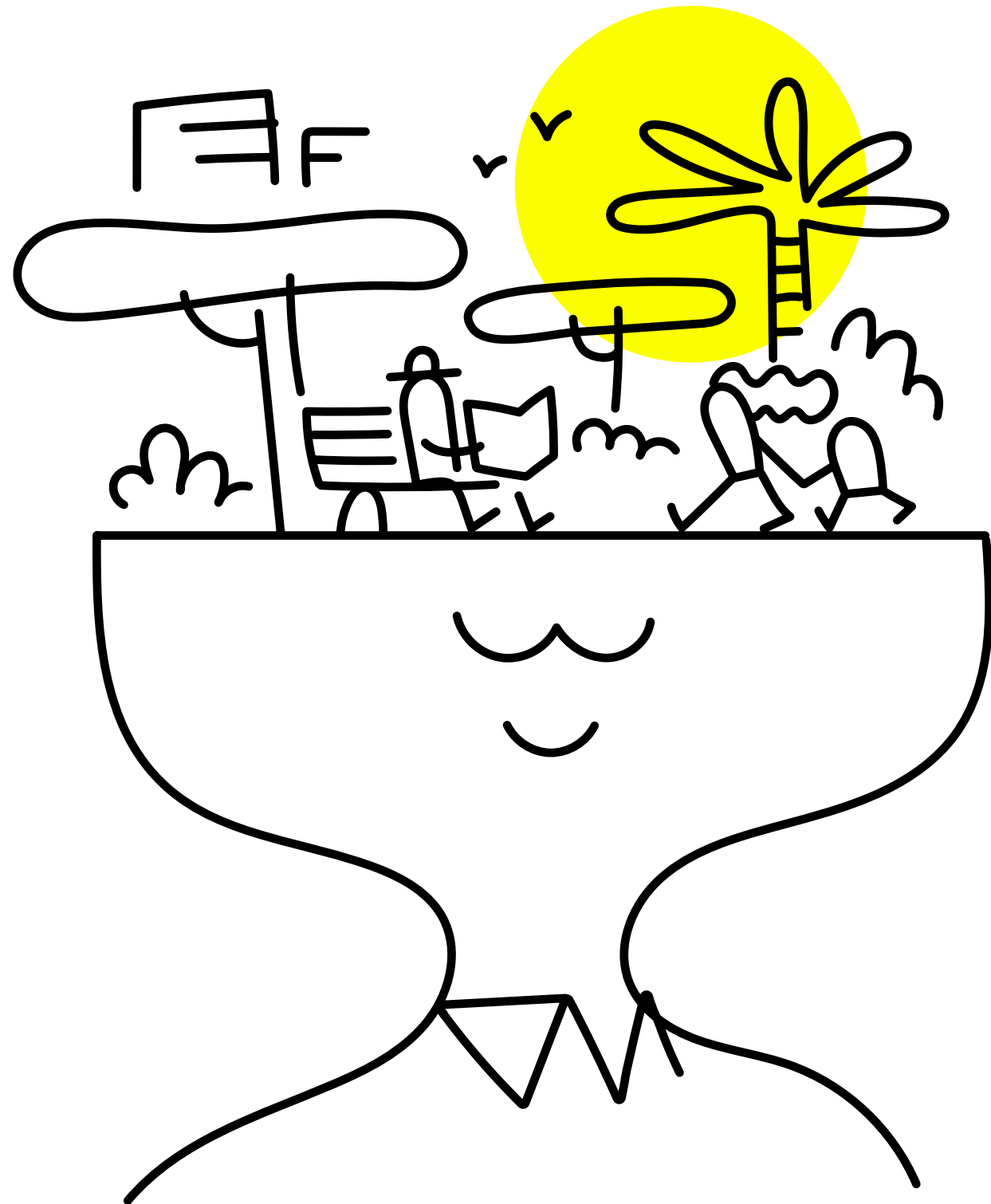


Free municipal parking in 10-15 minutes walking distance from the center – Iván Tosics

# City-wide network of calmed down places

## What is the problem?

Due to the car dominance in cities, the public spaces in cities got more and more disconnected and active mobility lost significance. More humanised and neighbourhood-based strategies are needed to reverse the earlier trends. People need places where their need for tranquility is the first priority. If such places, necessarily without car use, are created in many parts of the city, this might have an effect on the city as a whole.



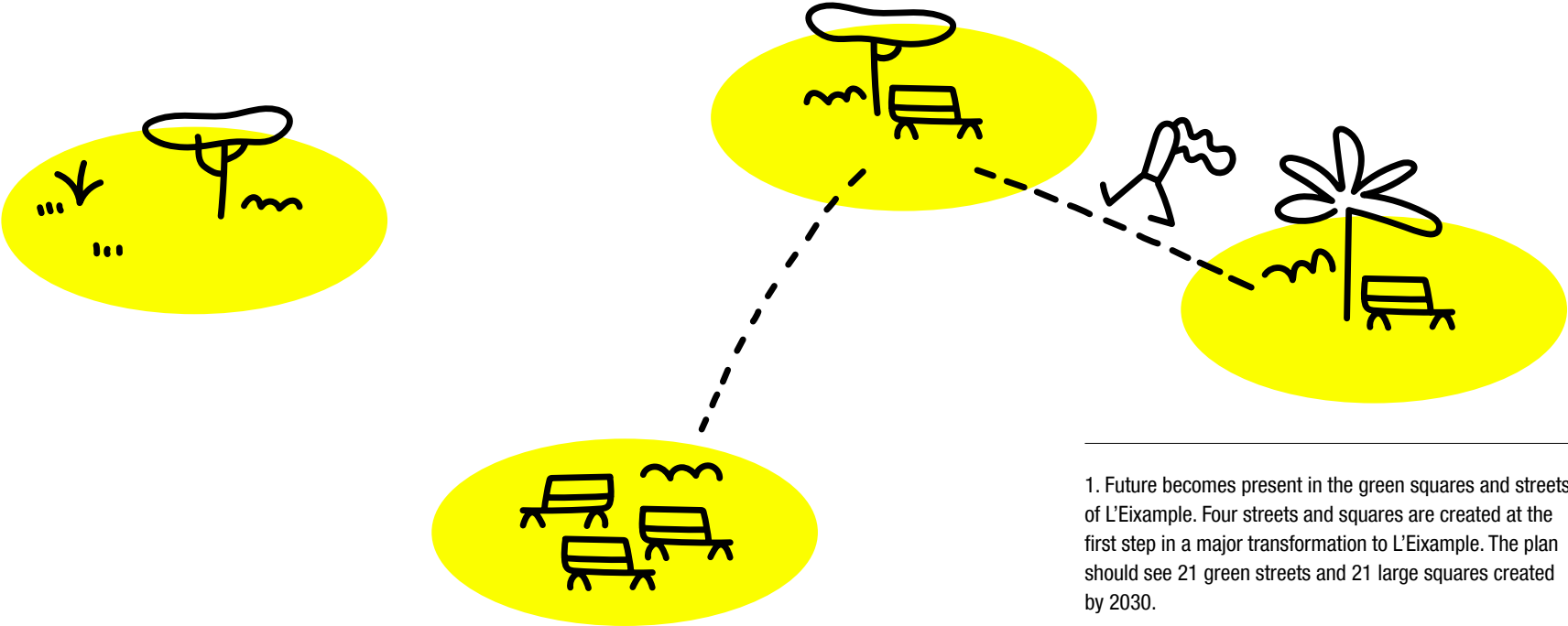


# What can cities do about it?

A network of “calmed down spaces” is a **system of pedestrian-priority squares and streets that spreads throughout the city in a coherent way**, benefiting the environment and public health. It improves connectivity and accessibility, and it can also transform the image of the city as a whole. The emphasis is put on high quality, liveable and active public spaces that give priority for pedestrians and cyclists, offering meeting places for everyone. To further promote different activities and create better accessibility, **these places have to be connected across the whole city tangibly on a human scale**: they need to be easily reachable by foot, bicycle or public transport. Calmed down spaces call for a co-creative reorganisation of the roads (see 5.4 - Cycling strategy and 5.5 - From highways to boulevards), shifting to a model towards sustainable and active mobility, well linked to public transport.

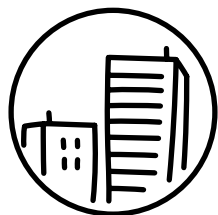
This can only be achieved - besides regenerating the selected places themselves - through investments in public transport and sustainable infrastructure, to compensate for the reduction of space for motorised traffic. High quality infrastructure and access with soft mobility need to be developed simultaneously to present acceptable alternatives – as shared-bikes, e-mobility and public transport services (see 5.6 - Mobility hubs: integrating public transport with micromobility). These spaces can be further visually enhanced if the city weaves elements like **public furniture for resting, tactical urbanism measures marking spaces as places for people or greenery and garden elements into the network**. Such interventions can improve public health physically, but also psychologically, once it promotes outdoor activities. In a nutshell, it creates a relaxed and slowed down pace within the city for local people. The city also becomes **more equal and sociable** because new, accessible places for gatherings can happen organically, away from city stress.

A network of calmed-down public spaces could be easily developed if there are public spaces already available. It’s always a **challenge to find available areas in densely populated zones, where no (public) green spaces are available**. In this case, longer distances have to be taken into account and connections with the city centre can be created. Of course, it remains a challenge to link these spaces with active mobility corridors among them. However, it is not impossible to find space even in areas, which seem to have none: the city of Barcelona (ES), for example, introduced the green street model<sup>1</sup>. This is based on superblocks, taking out cars from some roads and turning the intersections of these roads into green public spaces, while **further enhancing the effect by calming down streets, to connect the superblocks to each other**. Naturally, all this takes a lot of political willpower, commitment and cooperation between the concerned stakeholders – might they be from a public or private background. In this matter, taking an integrated participatory planning approach is the first step towards change (see 6.4 - Participative approach).



1. Future becomes present in the green squares and streets of L'Eixample. Four streets and squares are created at the first step in a major transformation to L'Eixample. The plan should see 21 green streets and 21 large squares created by 2030.





## How does city size matter?

In **small cities**, a citywide network of calmed public spaces is relatively easy to implement, as the potential places are most likely already within walking distance. However, the preference for cars in these cities tends to be higher than in bigger cities, making it harder to get people on board.

In **medium-sized cities**, there are different neighbourhoods that need to be connected with a green network. Investments in pedestrian zones and shared spaces will help push for the connection of these public spaces.

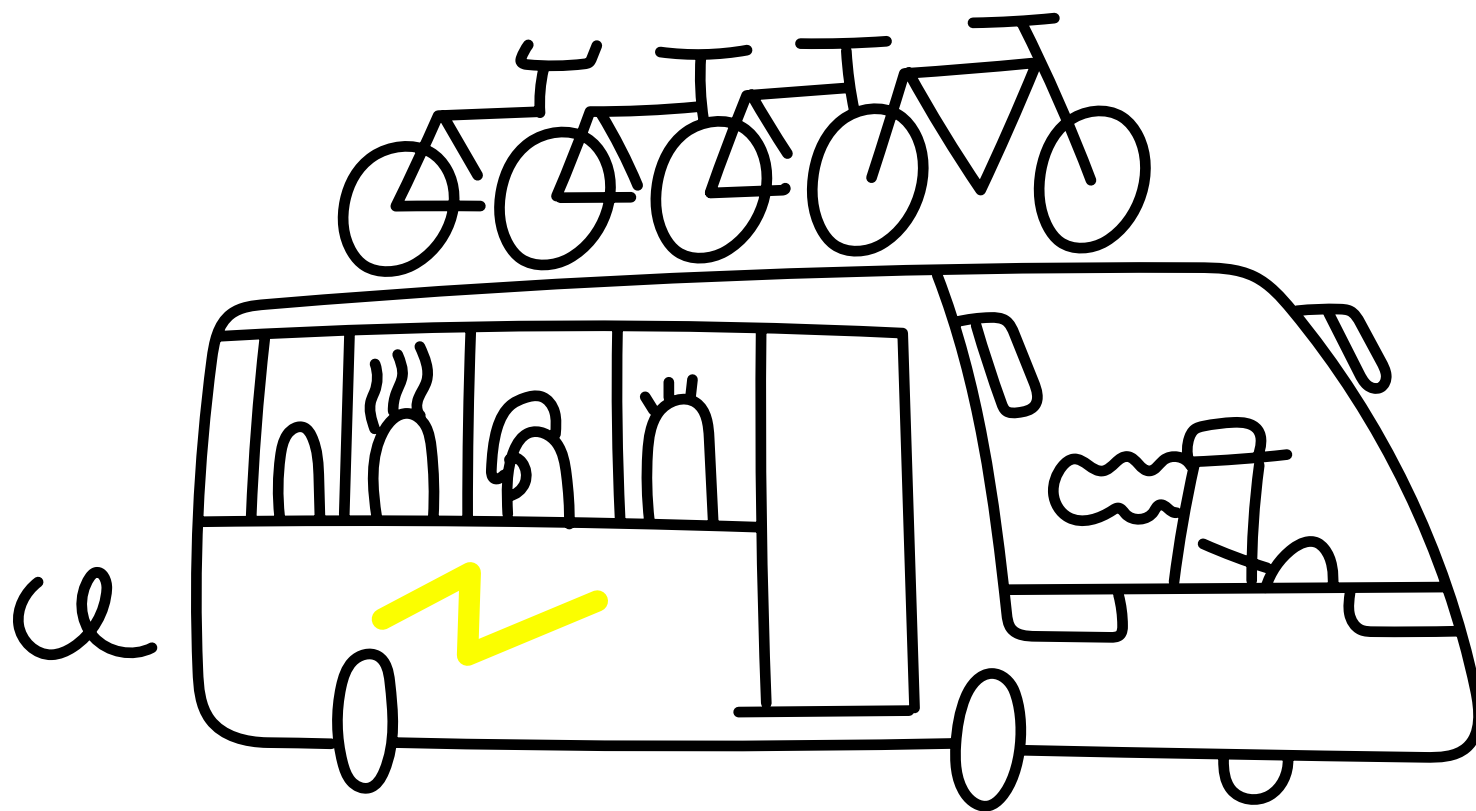
**Large cities and metropolitan areas**, in the opposite direction, have longer distances between public spaces and points of interests. It's crucial to fill those gaps, by expanding green walking and biking corridors, and connecting calmed-down places gradually in all parts of the city.

In the Lisbon program “A space in every neighborhood” key public spaces are rehabilitated in each neighbourhood of the city with the aim of getting people out of cars and turning squares/roads into public spaces to become meeting points of the local community.

## Lisbon, a space in every neighbourhood



# City agglomerational concept for mobility and public space



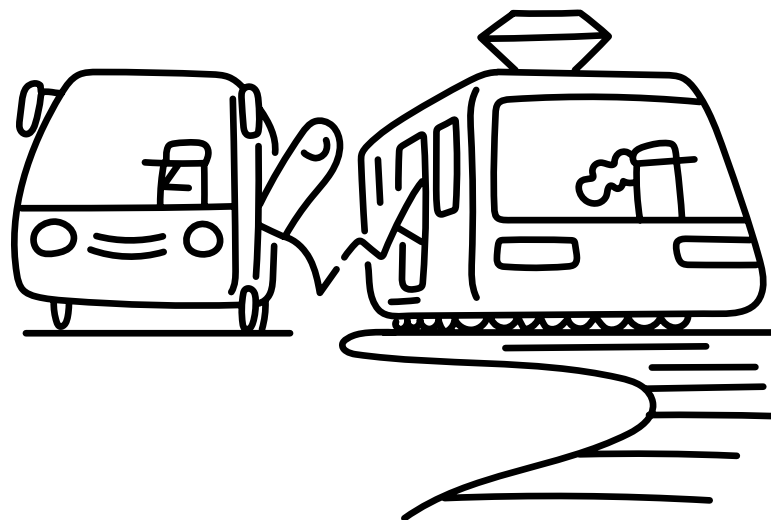
## What is the problem?

Many city regions and metropolitan areas are characterised by dispersed functions, low density patterns –also known as “sprawl”– and disconnection between those areas, due to their expansion with less attention to land consumption and use of energy to move. In such urban areas people are forced to use cars because public transport is not serving those areas well enough. Active and soft modalities of transport are a challenge, because it’s expensive to build the infrastructure to connect these places, and quality public spaces in close vicinity are missing.

## What can cities do about it?

Through establishing an affiliated network of public spaces and a tangible mobility system linked to it, a city can improve towards an active, accessible and people-friendly public conception, which is comprehensible and easy to navigate through. **Providing mobility infrastructure that uses public transport as a backbone creates a network of people-oriented and sustainable urban spaces that promote the use of sustainable modes of transport over that of private cars.** Meanwhile, the development of each sector on its own can positively impact other sectors and even facilitate them. In return, high quality mobility options and public spaces can thrive. Simultaneously, local commerce can be stimulated through cooperative measures and enhanced accessibility.

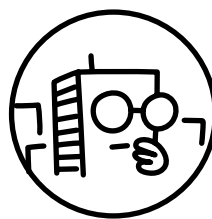




## What are the key elements?

The metropolis and city region is sustainable when people can use public transport in combination with active mobility modes efficiently and can leave their cars at home. In this sense, public transport becomes the backbone of urban development in the region and mobility terminals, such as railway stations or public transport terminals – immediately function as a public space, combining various purposes. **The mix of multimodal mobility hubs and the high-quality public spaces around them serve each other**, they add to the social value of these places.

Ideally, these hubs are made accessible with active mobility feeders, also taking micromobility measures into account (see 5.6 - Mobility Hubs). Connecting different mobility services, such as P+R (park and ride), public transport, e-scooters and taxi-providers creates **one integrated system** that can benefit the range of options and accessibility for the user, according to their individual needs and preferences, enhancing perceived liveability of the city. The city's public space policy can be transmitted into the surrounding suburbs by connecting outskirts and towns to the city and simultaneously interconnecting them. This also enhances connectivity, accessibility and proximity.



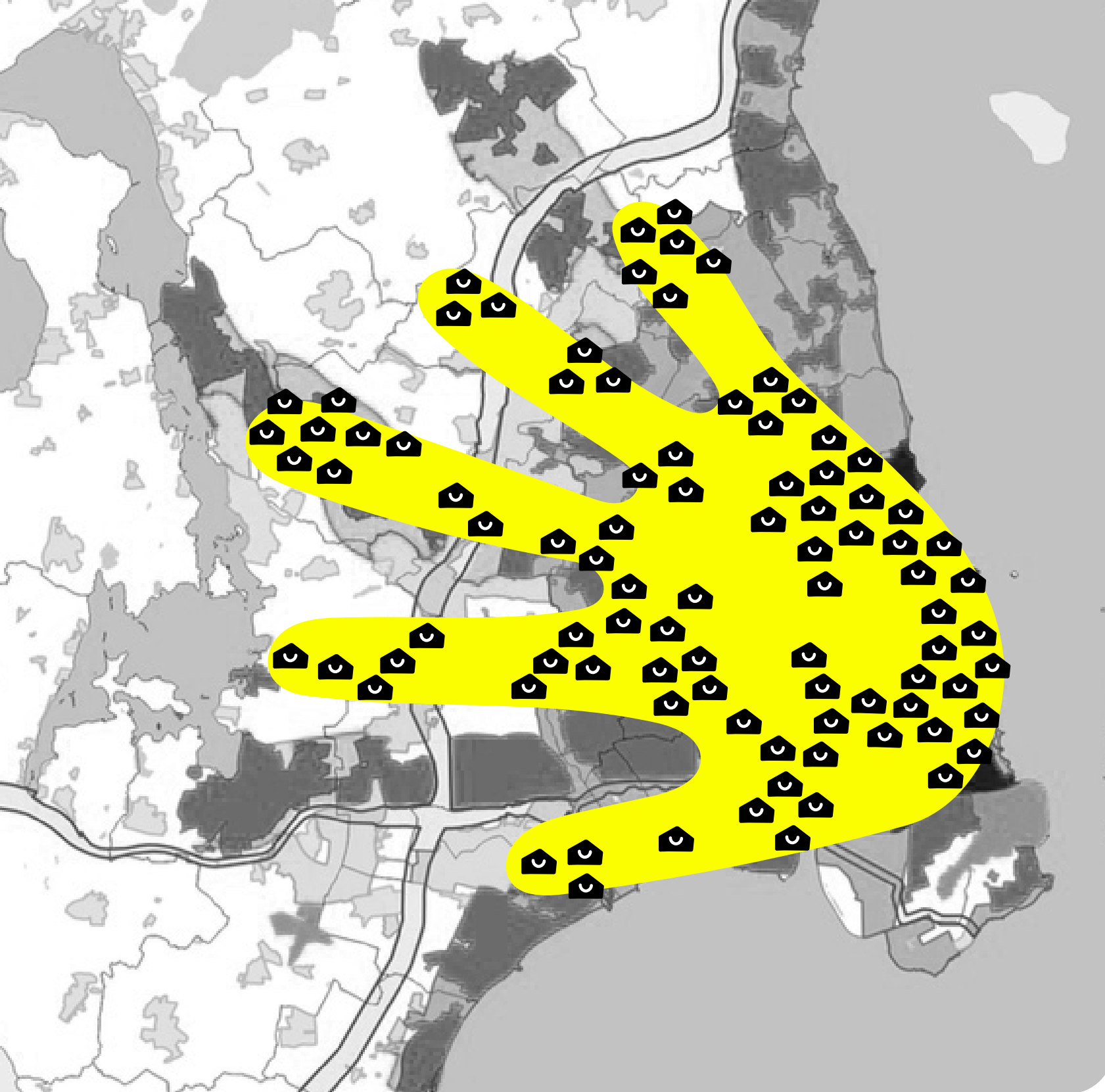
## What do cities need to have in mind?

The **complexity of its inter-regional measures and stakeholders** (e.g. different transport providers), alongside those of the public and private sector in different fields and on various scales, **is the biggest challenge in providing a comprehensive transport network**. This often implies a time-consuming process with high expenses, which requires a lot of multi-sectoral expertise from various fields and good project coordination. Participation is key in the development of such investments and the municipalities in cities' regions and metropolises must cooperate through some form of citywide or metropolitan governance framework.



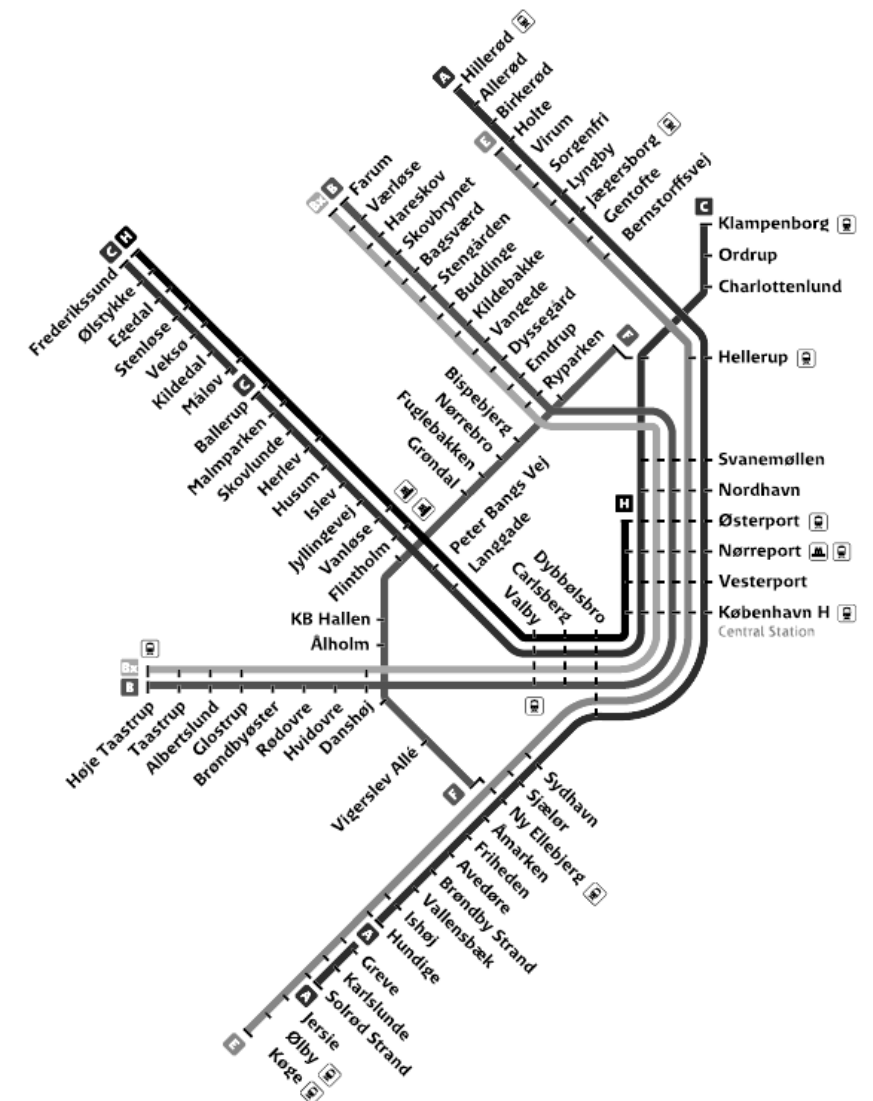
## How does city size matter?

Depending on the size and density of the city, various modes of transport will be important on a different scale. **Small towns** usually depend more on individual modes of transport and have less developed public transport systems. At the same time, the short distances allow for a higher potential of prevailing active and soft mobility. Small towns might be part of monocentric or polycentric metropolitan areas, in such cases the links to the multimodal centers and P+R premises are of prime importance. **Medium and large cities** will have to deal with this concept on multiple scales simultaneously while they also have to focus on smaller developments within districts. **Metropolitan areas** might need to establish their metropolitan governance framework, of which an important element might be the transport association. They also bear a stronger need for cooperation with suburbs and smaller neighboring cities.



## Copenhagen finger plan

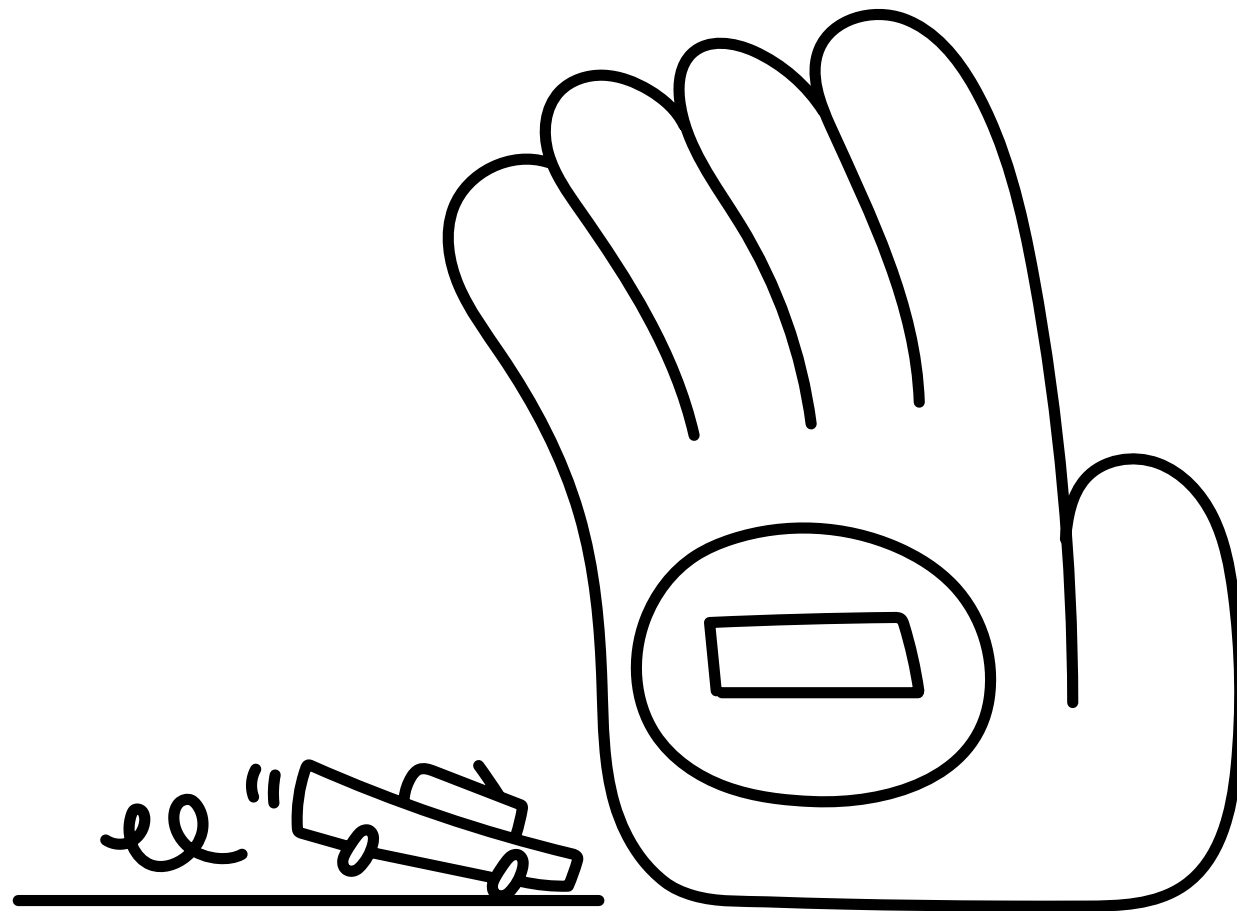
The case of the Copenhagen "finger plan" clearly illustrates how public transport can become the backbone of urban development in the built-up area of the region



# The interventions

- 5.1 Reducing car access to city centres**
- 5.2 Tempo 30**
- 5.3 Parking management**
- 5.4 Cycling strategy**
- 5.5 From highways to boulevards**
- 5.6 Mobility hubs: integrating public transport with micromobility**
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# Reducing car access to city centres



## What is the problem?

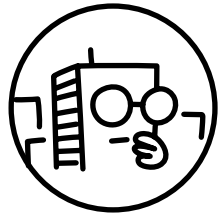
Most larger cities have some car-free areas in the very core of the urban area. In dynamic, growing cities, however, the good quality of life for residents and visitors cannot be assured by simply closing down for cars only a small inner core area. The transit traffic through the surrounding central areas also needs to be regulated and, consequently, reduced. In addition to parking management, the movement of cars also needs to be limited, making it difficult for motorised traffic to cross the central areas with other destinations in mind.

## What can cities do about it?

Making the core area of the city car-free is an important step but not enough to achieve substantial reduction of car use in the dense central areas. To achieve that, restrictions have to be introduced in a larger area around the car-free core zone. This should allow only those who have a clear destination there to enter a given part of the inner city, but not give access for those who would like just to cross it to get to another part of the city.

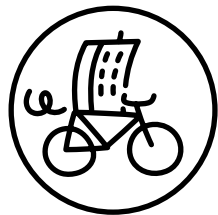
## What are the key elements?

- In the city core **car-free areas** the aim is to ban motorised traffic, with carefully defined exceptions allowing justified travels. The car-free and pedestrian areas should be designed as big as possible. Likewise, the delienation of such zones needs to be revised (and if politically possible, extended) regularly. It's possible to split this area into various parts, requiring separate permits to enter and leave each of those.
- In order to exclude transiting motorised traffic from larger central areas surrounding the car-free core area, an **extensive restricted traffic** needs to be well delineated and signposted. This can be divided into different parts (e.g. sectors), restricting the direct passage from one area to another, by changing traffic directions within streets or even prohibiting the crossing of roads which are separating the different parts.
- For those who need to move from one part or sector of the restricted traffic area to another one, **alternative routes should be offered** outside the restricted area. This might make the car journey less convenient, while it still guarantees direct access for all types of non-motorised transport. All this might discourage drivers from taking their cars and forcing them to consider other transport modes.
- The different levels of restrictions of car use must be **widely communicated**: the necessary permit procedures should be well defined, transparent, having plausible rules, while the control of the regulations should be strict (e.g. by cameras) and the fines should be preventive.



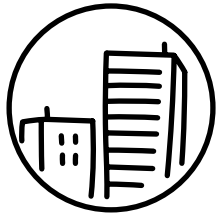
## What do cities need to have in mind?

The prohibitions and restrictions need to serve the main objective without hindering or limiting the mobility of vehicles that serve public interest or attend an emergency situation. Therefore, a carefully defined list of exceptions is necessary, including emergency services, public transport (e.g. tramways and buses), waste collection and freight vehicles, taxis, healthcare providers with permits, (electric) bikes, mopeds and even cargo bikes. A clear map with detailed explanations, as well as an easy-to-use route planner should be made available to the public with maps spread over the vicinities, information online and possibly mobility apps. The increase of motorised traffic on the escape roads needs to be frequently monitored.



## What are the impacts on the city?

With cars disappearing from the car-free zones and a substantial decrease of motorised traffic in the restricted areas, more space will become available for pedestrians, cyclists, buses and trams. There will be more space to enjoy the city and move safely, in a more healthy living environment. At the same time, it will be easier for motorised vehicles that really need to be in the city (e.g. suppliers, emergency vehicles, health care providers carrying people with mobility impairments) to reach their destination.



## How does city size matter?

In **small towns** the density and congestion problems might not be as substantial as in bigger cities, thus a small car-free central area combined with some parking restrictions around it might be enough. The restrictions of transfer traffic are much more relevant for **medium and large cities**. For the **metropolitan scale**, in particular, it might not be enough to introduce local restrictions, the key solution might be to develop intra-regional detour roads. Consistent enforcement is a central element for **all city-size categories**.



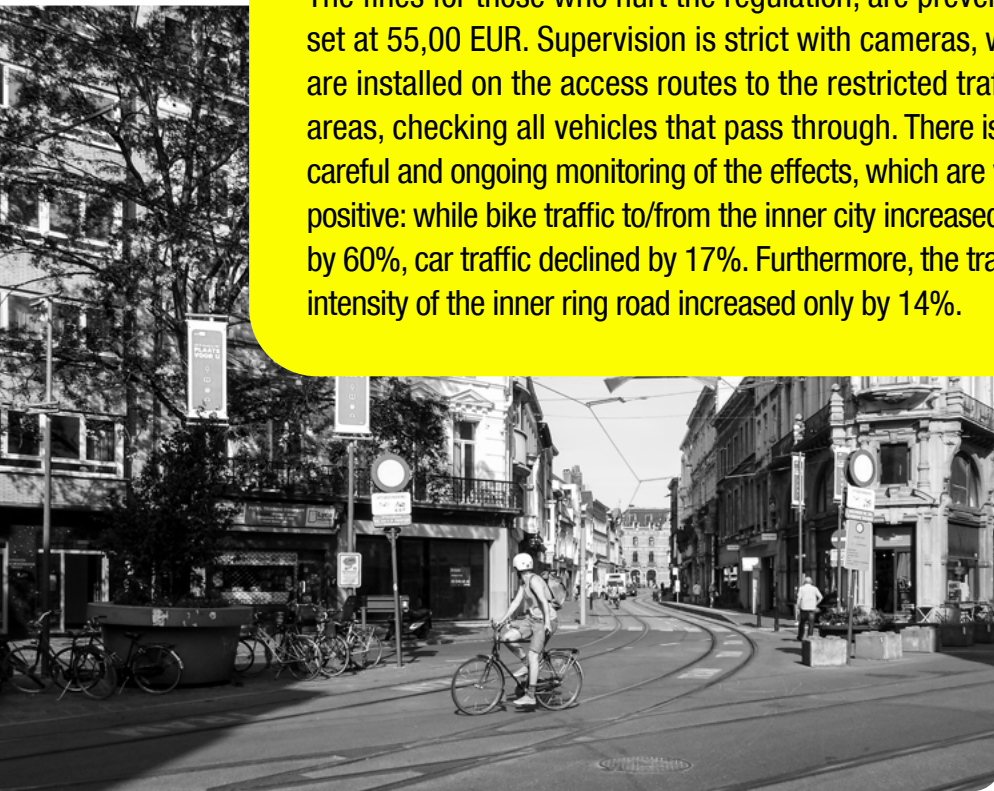


## Ghent Circulation Plan

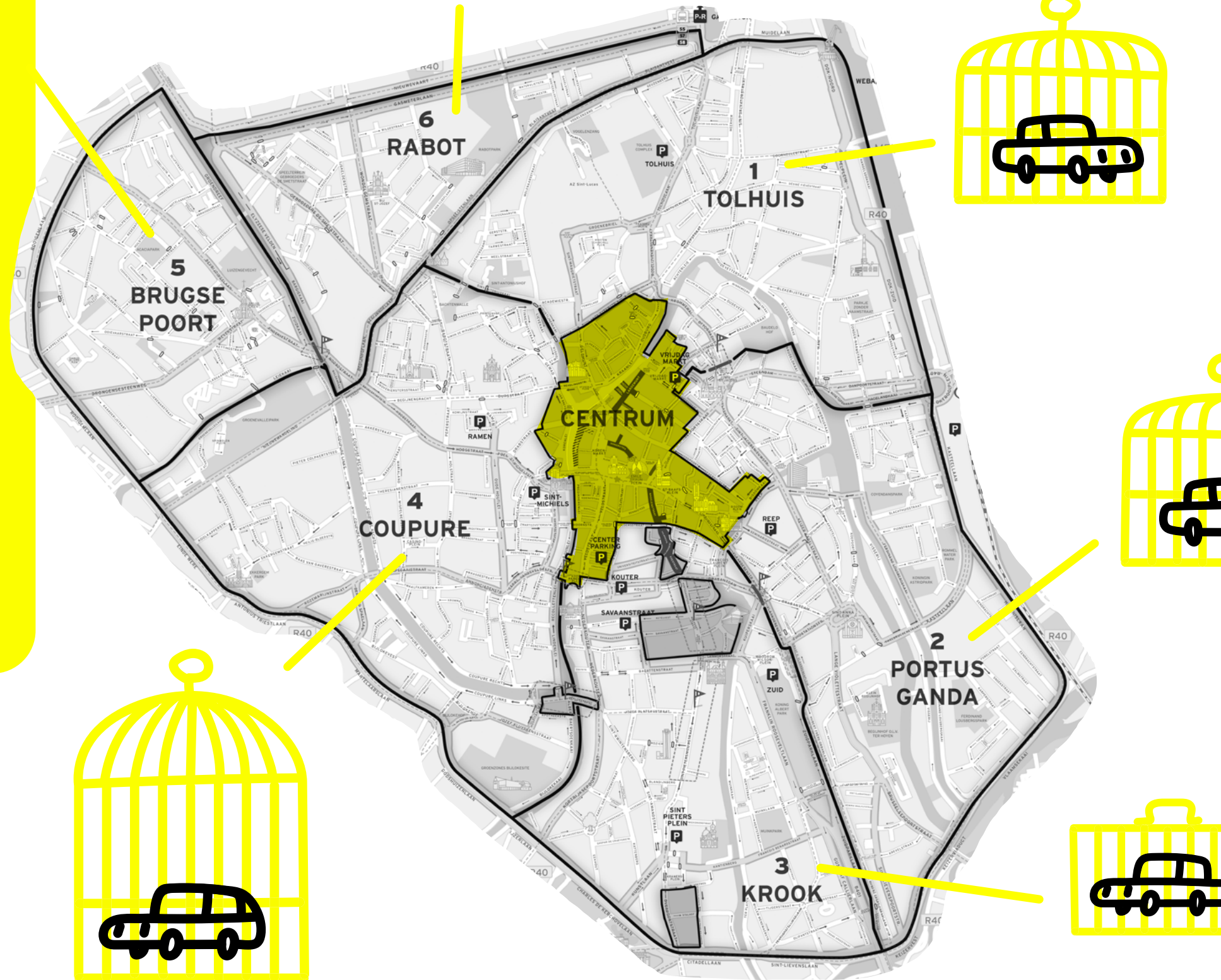
The Ghent (BE) Circulation Plan became effective on 3 April 2017, with the aim to unburden the city centre of ongoing traffic. It is remarkable that the information about the new regulation has been written in a very simple, plain language, avoiding complex explanations and always emphasising the positive effects of the restrictions.

The map shows the car-free central area and the six sectors which have been assigned around it. The new regulation made it impossible to directly cross from one sector to another by car.

The fines for those who hurt the regulation, are preventive, set at 55,00 EUR. Supervision is strict with cameras, which are installed on the access routes to the restricted traffic areas, checking all vehicles that pass through. There is a careful and ongoing monitoring of the effects, which are very positive: while bike traffic to/from the inner city increased by 60%, car traffic declined by 17%. Furthermore, the traffic intensity of the inner ring road increased only by 14%.



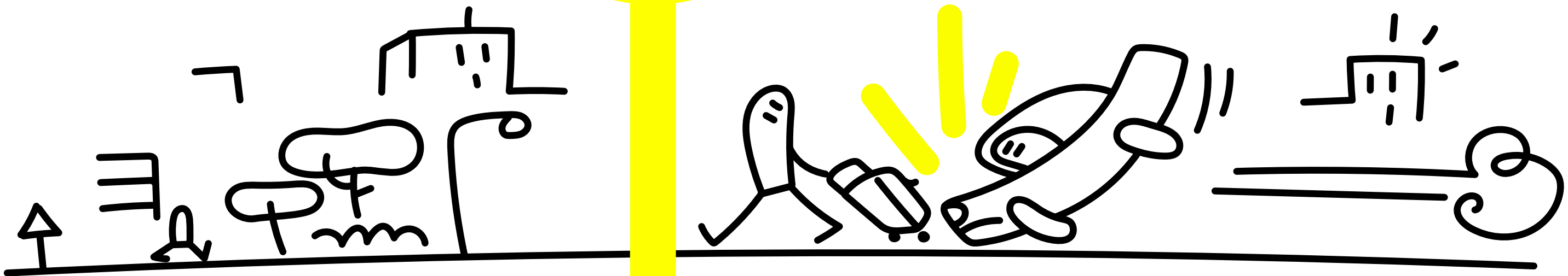
Ghent – Iván Tosics



# Tempo 30

## What's the problem?

Our city streets historically were developed to ensure safe and uninterrupted mobility of people. With the proliferation of cars, streets were redesigned to prioritise the movement of motorised vehicles, compromising the safety of vulnerable street users, as pedestrians and cyclists. Designing streets to accommodate high car traffic flows, can result in increasing pedestrian injury rates and even fatalities in cities.



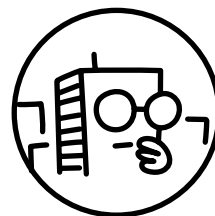
## What can cities do about it?

Reducing traffic fatalities and severe injuries requires an integrated set of measures, including changes in street design, awareness-raising actions, and even completely banning cars from certain streets. Speed has a significant impact on pedestrian safety, so **limiting the speed of motorised vehicles in streets is one of the most impactful interventions to prevent severe incidents**. There is increasing evidence that simply **reducing the speed limit from 50 km/h to 30 km/h** in most streets in a city, can almost immediately **bring about positive results**. It's an **inexpensive intervention**, but still, a very significant one.



## What are the key elements?

- **Ensure political consensus and support.** Changing speed limits is a major change, which affects most citizens, so you need a strong commitment and a clear timeline.
- **Talk to stakeholders.** Using a participative approach is crucial: from the beginning of the process involve key stakeholders. These include, but not exclusively, the police, the public transport company, the fire department and employers, unions.
- **Adapt legislation and prepare a map.** Depending on your local circumstances, you might probably need to change regulations. In addition, draw a map clearly indicating the speed limit in each city street.
- **Sell your story.** Communicate widely, reach as many citizens as possible, prepare people for the change. Use clear messages and focus on the benefits.
- **Make it visible in the streets.** Make sure that the speed limit is clear for drivers in every street. Use consistent signposting and paint visibly on the streets at the entrance of areas with different speed limits.
- **Enforce.** Use control, like speed cameras, police presence and sanctions to show drivers that you take it seriously.
- **Evaluate and adapt.** Select key metrics relevant to your city (most widely used metrics include speed, journey times, accidents, air and noise pollution) and monitor them regularly. Use results to adapt and fine-tune the system.



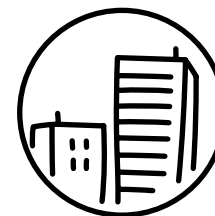
## What do cities need to have in mind?

Reducing speed limits is controversial, most drivers consider it a serious limitation of their given rights. **Expect resistance**, bad press and negative comments, which can even get personal. That's exactly why **political will and selling your vision** – improved safety, reduced traffic fatalities and more liveable streets – are so **important**. Implement measures in a consistent and transparent way, using test periods, adapting certain elements when necessary and using warnings instead of more serious sanctions at the beginning. Experience of cities like Graz show that **after seeing the positive effects the majority of citizens wouldn't want to go back**.



## What are the impacts on the city?

The results coming from cities that have already introduced Tempo30 to their urban fabric are very promising, with a range of positive impacts. Most importantly: **low-speed streets save lives**. All cities reported a significant **drop in the number of traffic accidents** resulting in fatalities or severe injuries (In Toronto, for instance, there was a 28% decrease in the number of collisions between pedestrians and motor vehicles and a 67% decline in the number of fatal and serious injuries on streets with speed limit reductions from 40 km/h to 30 km/h)<sup>1</sup>. In addition, most cities measured a noticeable decrease in noise level. One of the main arguments against Tempo30 is that it increases the travel time of motorised vehicles, but in reality, this **increase is mostly negligible** (Brussels, for instance, has only experienced modest – 3-6% – increase of travel time after introducing a citywide 30 km/h speed limit).<sup>2</sup>



## How does city size matter?

Tempo30 may be a harder sell in **smaller cities**, where congestions are rare and the average speed is higher. Even there, however, it is easy to argue for the importance of limiting speed around schools, kindergartens, residential streets or simply where pedestrian density is higher. In **medium, large and metropolitan cities** with higher absolute number and rate of serious accidents reducing speed limits is really a must, not an option. Other than those distinctions, Tempo30 is a highly relevant, relatively inexpensive and high-impact intervention for cities of all sizes.

1. [www.bmcpublihealth.biomedcentral.com/counter/pdf/10.1186/s12889-019-8139-5.pdf](http://www.bmcpublihealth.biomedcentral.com/counter/pdf/10.1186/s12889-019-8139-5.pdf)

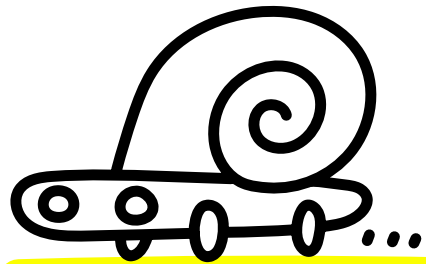
2. <http://www.youtube.com/watch?v=SjzbbwkUvv0>

## Brussels City 30

In 2019, the new city leadership of Brussels (BE) launched a new mobility plan called “Good Move” with 50 actions, one of which is the “Brussels City 30”. The implementation of the plan started in January 2021, following extensive consultation processes with a wide range of stakeholders. The city managed to change the legislation: 30 km/h became the new “default” speed limit even for many of the major corridors (see the photo to the right). Communication was a crucial element with ads running in all possible channels. While there was strong resistance at the beginning, the evaluation shows that even the early results justify the interventions, and most people are now in favour of the new system. For more information, [watch this presentation](#).



The speed control display blinks red indicating a car surpassing the 30 km speed limit – Iván Tosics



Road-markings reminding drivers of city-wide speed 30 – Claus Köllinger

## Graz Tempo 30

Graz (AT) was the first city to introduce the Tempo 30 at a citywide scale in Europe. There were tests of Tempo 30 zones dating back to 1986 and 1987 in some areas. This experience resulted in a high demand to extend the Tempo 30 zones to more city districts. Opposition against citywide Tempo 30 was high at first, opponents called for a local referendum to decide on whether it should have been taken forward. However, the local authority argued that it is not smart to vote on something you don't have the necessary expertise, or knowledge about. Instead, the city launched a 2-year test phase – combined with an extensive communication campaign. At the end of the test phase, it was clear that the measure created a better quality of life for the residents of Graz, while also improving road safety. After that, not keeping the Tempo 30 speed limit was not even considered as an option.



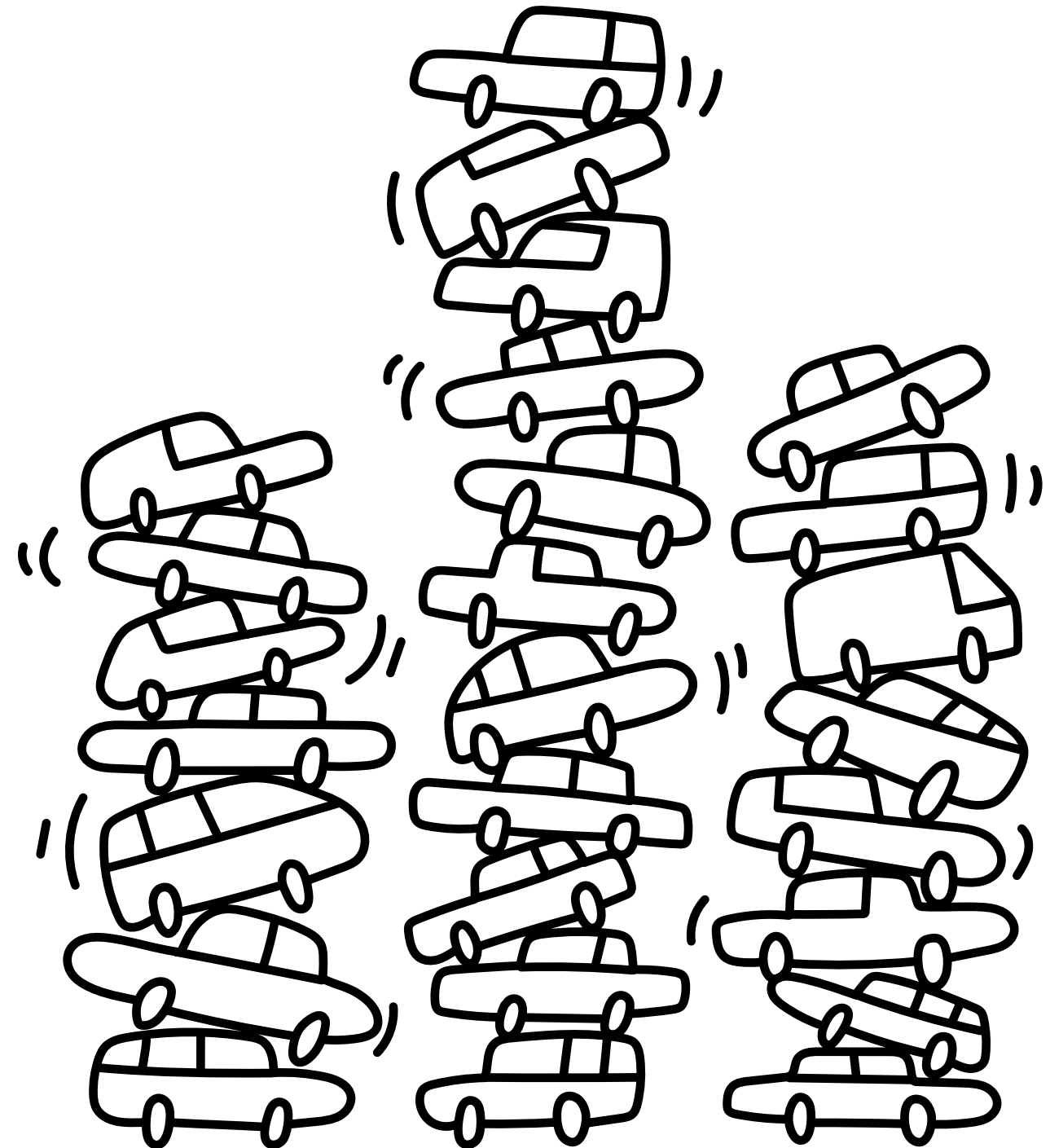
# Parking Management

## What's the problem?

On-street parking is a challenge in all cities across Europe, since favourable conditions for car access were granted through car-friendly mobility policies. Parking management addresses this as a strong tool, which influences how people move in the city and how public space is used. However, it needs to be a part of a wider integrated urban development strategy. Unsurprisingly, this is best when co-created by political decision-makers, public administration units, private stakeholders and civic organisations, who can jointly define objectives and take the related necessary actions.

## What can cities do about it?

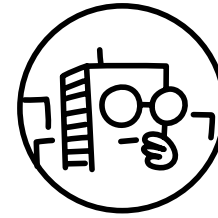
A city can use a wide range of measures for parking management. Classical ones are to point out where parking is allowed and where is not, or to put **time limits** on parking for a higher turnover of cars per parking space and even to define **paid parking zones** as stand-alone measures or in combination with time limits. Cities can as well apply **dynamic pricing** in paid parking to impact how long cars can stay in one spot, use a **workplace parking levy** as an instrument for reducing car commuting and run regional **P+R (Park and Ride) schemes** that intercept car trips as early as possible.



## What are the key elements?

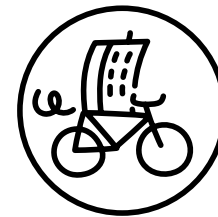
Crucial aspects of parking management include:

- **the 85% occupancy rule for metered areas**, which involves increasing parking fees to a level that ensures approximately 85% of parking spaces to be occupied. This results in lower traffic volumes to the area and less parking space search traffic. **If occupancy is lower than 85%, cities can reduce on-street parking spaces to meet this target.**
- **Shifting on-street to off-street parking** is another solution, using time limits and contractual agreements with developers, owners of parking garages and shopping centres. Pricing schemes can also be set, getting fares more expensive each hour and pushing people to use off-street facilities.
- Likewise, **constraining residential parking** is another aspect to be considered. Permits safeguarding residents' parking are necessary in high pressure areas, but they need high enough prices to reflect the value of public space – like the revenue that outdoor gastronomy would create. It is important to **change the mindset of people to accept parking solutions a bit further away from their homes** and even to consider **giving up car use totally.**
- Parking interventions depend on well-functioning **enforcement**. It shall be up to the local authority to manage it, either by doing the enforcement itself or by contracting a third party company. This needs to include the responsibility for controlling fees and fines to make enforcement efficient.
- **Parking management costs** shall be **covered by revenues** of fees, fines and permits. Any surplus coming from it, shall be invested in sustainable mobility projects or for upgrading public space.



## What do cities need to have in mind?

Parking management measures can be highly controversial in a city's society. Even the idea to eliminate a few parking spaces might result in fierce opposition from retail, commuters or residents. Therefore, it is crucial to well explain the objectives of parking policy and mobility strategies to help stakeholders understand the reasons why the measures are taken in the first place – and why they are so crucial. It is also important to show in a transparent way what parking revenues are used for - namely for visible improvements in the metered area or for improving access by sustainable mobility means.



## What are the impacts on the city?

Parking management offers a bunch of benefits, it reduces car traffic levels, especially parking space search traffic, and supports modal shift from cars to sustainable means. It also creates open spaces available for sustainable mobility modes or public space functions other than transport – like meeting or market places. Overall, it helps to create more liveable neighbourhoods: it benefits the local economy by adjusting parking to customer frequencies, fights air and noise pollution and contributes to energy efficiency and just transport.



## How does city size matter?

In small towns, people often use their cars despite the short distances that are fit for walking or cycling. Using parking spaces for multiple functions, setting time limits, and introducing paid parking creates conditions that encourage active modes of mobility. For cities of medium, large and metropolitan scale, measures like the 85% occupancy rule, shifting parking to off-street facilities and well elaborated P+R (Park and Ride) systems allow cities to reduce on-street parking alongside car traffic volumes. Consistent enforcement is a central element for all city-size categories – since it can ensure that people actually comply with parking regulations.



Sofia – Robert Pressl

## Improving public space with paid parking revenues in Sofia

The city of Sofia (BG) uses a 2-zone model for its paid parking approach. A blue zone combines fees with time limits in the central area, while a green zone surrounding the central blue zone applies paid parking without time limits. Whenever paid parking zones are installed, the city invests revenues in upgrading pedestrian spaces and sidewalks, a very tangible investment to all locals. Neighbourhoods in the outskirts of the green zone are increasingly asking for an extension of paid parking to their area, once the inhabitants can experience the visible positive effects of the parking management on traffic load and public space quality. Find out more about such measures in this video [here](#)<sup>2</sup>.



Ghent - Iván Tosics

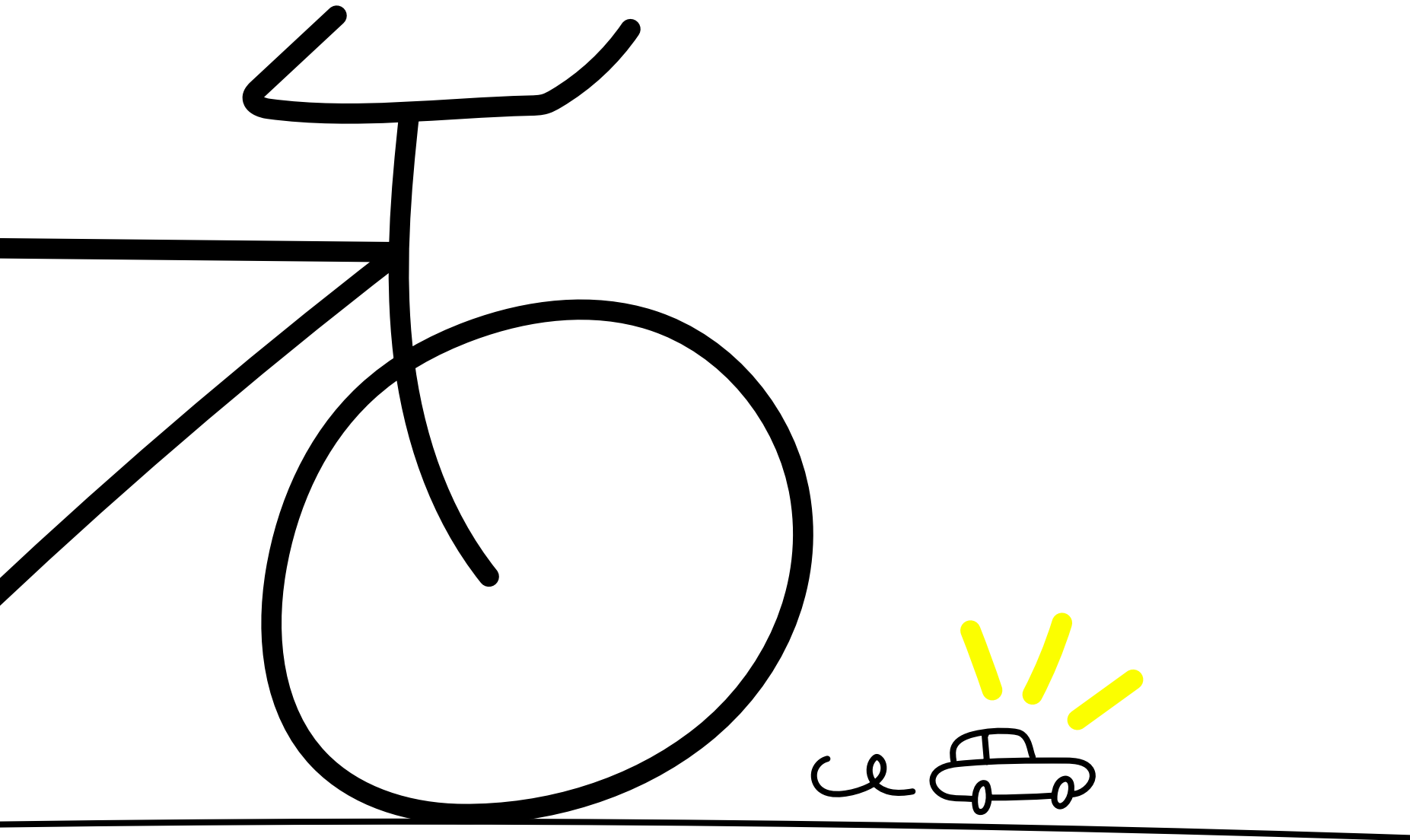
## The Mobility Company of Ghent

In Ghent (BE), the mobility department was responsible for designing and delivering mobility strategies. Parking management, however, was enforced by a city-owned parking company. Besides the lack of a common approach to roll out sustainable mobility in the city, the interests of the two parties were not always in line and assets could not be combined for a higher impact. In 2011, Ghent merged the two entities into a new Mobility Company. Today the company operates rather independently based on a mission statement defined by the city. It is in full control of all aspects of mobility and can invest revenues from paid parking in sustainable mobility projects, thus optimising the delivery of the city's mobility objectives. To get a glimpse of this project, see the [“The Ghent Mobility Company” video](#)<sup>1</sup>.

1. Horizon2020 project Park4SUMP (grant agreement no. 769072), The Ghent Mobility Company.

2. Horizon2020 project Park4SUMP (grant agreement no. 769072), Parking Management in Sofia.

# Cycling strategy



## What is the problem?

Cycling is on the rise in many European cities and beyond. It delivers solutions to a wide range of urban challenges by contributing to more efficient use of scarce public space, climate change mitigation, reducing air and noise pollution, improving public health or providing better accessibility for all. However, creating optimal conditions for cycling has not been in the forefront of urban planning agendas during the late 20th century when cities were practically (re)built for cars.

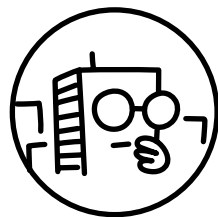
## What can cities do about it?

Cities need a holistic approach to convince a significant share of its population to consider cycling as their default mode of transport. Stand-alone measures, like the improvement of infrastructure only or motivating cycling commutes without providing good conditions to cycle would likely fail to deliver the expected results. Consequently, cities need to use a **clever mix of measures** that combine investments in infrastructure, organisation of traffic, supportive regulations and motivational activities to spark change.



## What are the key elements?

- A **cycling network** is best structured in a primary network of standalone tracks that ensures the most important and fastest connections. Also secondary networks are needed that feed the primary network, using a wide range of cycling lanes and streets with a 30km/h speed limit.
- Providing **bike parking facilities** at main destinations and transport hubs –preferably with shelter to protect bicycles from rain, good options to lock the bicycle and easy access – complement the good coverage to access the city as a cyclist. Adding bicycle parking racks at frequent portions of the city and neighbourhoods ensures short walking distances from the racks to the ultimate cyclists’ destinations.
- **Network coverage** and **direct connections** for cyclists are improved by applying contra-flow lanes and bicycle overpasses. **Services** linked to the network infrastructure, like a bike sharing system, bicycle repair stations or well visible counters encourage people to feel at ease when biking.
- An easy to understand **signposting and wayfinding** system helps cyclists to navigate in the city. The main routes should use colour coding, numbering and stops alongside the biking lane, similar to a metro map. Signs use these features, give direction, and tell distances in minutes.
- All this is part of applying a **comprehensive branding approach** with logo, colour coding and regular messages to cyclists to inform on achievements and the latest activities.
- Awareness activities are essential in this running **motivational actions** like cyclists’ breakfasts, repair services, bike to work campaigns or a bicycle festival to showcase the city’s commitment to cycling.



## What do cities need to have in mind?

When it comes to **cycling infrastructure**, the most important thing is **safety for all users** – especially for children. Besides, cyclists are sensitive to detours: routes need to **provide the shortest distance** and parking options need to be close to the destination and easily accessible while cycling. Mixing use areas for pedestrians and cyclists only works with low traffic volumes and sufficient path widths to avoid conflicts. Mixing cyclists on main roads with motorised traffic or providing insufficient lighting at dark hours discourages people from cycling, as do poorly lit parking facilities, once they create the perception of insecurity. Hilly cities can meet the concerns of people to cycling by promoting the use of e-bikes.



## What are the impacts on the city?

A successful cycling strategy offers a range of benefits for cities: **cyclists need less space than motorised vehicles**, resulting ultimately in the option to repurpose public space for better uses. **Cyclists do not emit any GHGs**, nor produce considerable **noise loads**, helping to fight climate change as well as to improve public health levels of the population. The **cyclists** themselves are **healthier** thanks to their daily dose of physical activity. In addition, **cycling addresses a larger share of the population than car drivers** and contributes to the objective of ensuring accessibility for all. More people using bikes ease the traffic conditions for captive car users, like for people with physical limitations.



## How does city size matter?

In **small cities** most destinations are accessible by a 15-min bike ride. With cycling as the main modal choice, these cities could revamp their entire public space to cater for the needs of people. Interventions to use include designation of Tempo 30 zones (see 5.2 - Tempo30), developing cycling tracks for the main connections, installing parking facilities and traffic-calming infrastructure. In **medium-sized cities**, interventions need to focus on creating main cycling routes, providing good wayfinding and signposting, large parking facilities at main destinations, as well as separating cyclists from motorised traffic and pedestrians. These recommendations apply to **large cities** and **metropolitan areas** as well, where adding interventions like cycling superhighways, overflies, Bike and Ride facilities, attractive bike sharing services and traffic priority options is also needed. Irrespective to city-size, **promotional actions are crucial to change the overall mindset**, encouraging people to start or continue cycling.

# Bici Bolzano

The city of Bolzano (IT), which has 106 000 inhabitants, used a comprehensive approach to promote cycling. The city created a cycling strategy that combines providing excellent infrastructural conditions with creative branding and promotion. For this, **Bolzano developed the brand “Bici Bolzano”** which is always present in the roll-out of their interventions. Based on an analysis of citizen’ mobility demand, the city created a main cycling network using wayfinding and signposting similar to a metro line plan, for easy understanding and use. Decisions on where to place main cycling routes considered factors like speed, quality and direct connectivity, as well as the idea **that cycling needs to be a fun and pleasant experience**. Complementing good cycling conditions, Bolzano catered for high quality (bicycle) parking facilities at frequent intervals. Their promotional activities include movie clips, game-style videos, wall covering banners, postcards and annual bicycle festivals. You can find more information [here](#)<sup>1</sup>.



Bolzano, Italy – FootToo



Barcelona – Robert Ramos

# Bicivia, the bike network of the Barcelona metropolitan area

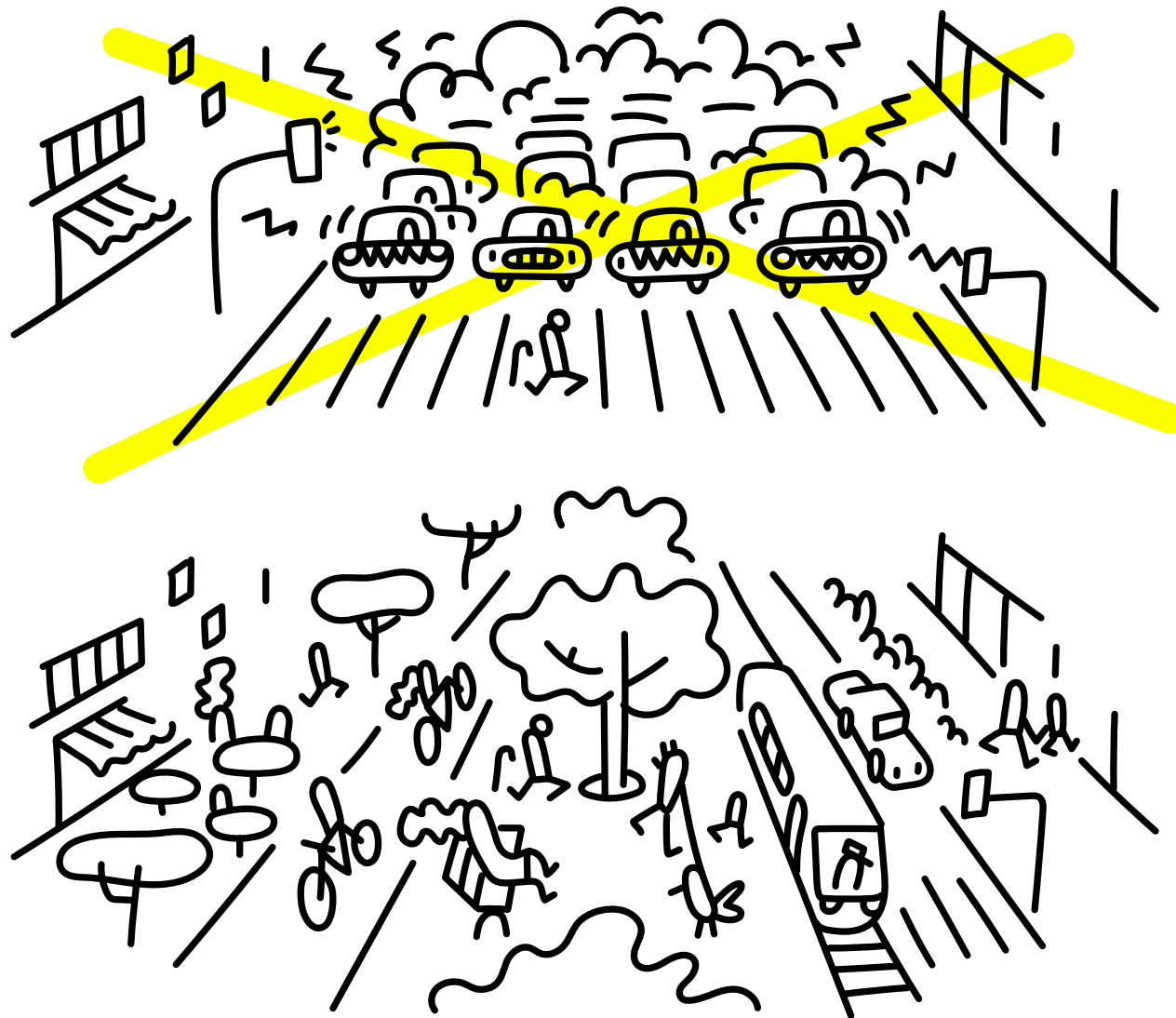
Bicivia<sup>2</sup> is a metropolitan network with the aim of connecting the entire Barcelona metropolis (ES) by bike infrastructure. The **network consists of a primary and a secondary network** covering a total of 414 km outside the city of Barcelona. It has a distinctive visual identity with clear signages that facilitate the navigation through the entire network. Linked to the Bicivia and the transit gates, the riders can find the Bicibox, a public, safe and free bikepark system to facilitate multimodality with public transport. And, a new metropolitan electric public bike sharing system, AMBici, will be implemented to further promote the use of bicycles.

1. Intelligent Energy Europe Programme, Travel Trendy Travel Resource Pack, Improvement and promotion of bike mobility: a specific marketing strategy, the example of Bolzano/Bozen

2. Area Metropolitana de Barcelona (AMB), Bicivia



# From highways to boulevards



## What is the problem?

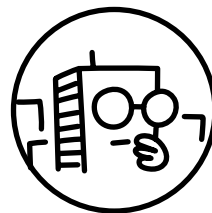
Car-oriented policies led to cities being cut through by wide roads dedicated to quick motorised commute, causing massive noise and air pollution. Not only do these highways use a lot of space and display insuperable barriers that cut through neighbourhoods, they also encourage the use of individual motorised vehicles further. Facing the climate emergency, a shift towards more humanised and sustainable planning approaches is necessary. But in order for cities to offer alternatives, radical changes need to be implemented.

## What can cities do about it?

The **transformation of highways into urban boulevards** is a radical measure towards the recovery and re-democratisation of space for citizens. The goal is not to get rid of cars, but to slow them down and make the highways more appreciable for people, both as public spaces and as a transport option for active mobility. In the mid and long term view, this intervention will lead the way towards a modal shift towards more sustainable modes of transport.

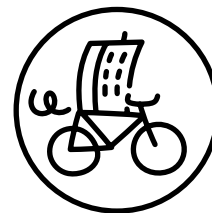
## What are the key elements?

- The first step is to **reorganise big axes** and retrofit them into urban green corridors or boulevards. The task is to distribute the space in a more equal way between different forms of use and make it suitable for multiple modes of transportation – like soft and active mobility.
- **To reorganise the space** it's necessary to cut car lanes to turn them into public transport paths, bike lanes, space for pedestrians and greenery, outside sitting or commercial places, which all result in more quality in urban space, promoting walkability and street life.
- **Improving conditions for crossing is also a key element.** Setting up traffic lights, signage, signposting and guidance systems make roads more accessible for all users of public space.
- Likewise, street life and overall livability can be further improved by installing urban infrastructure such as lighting, urban furniture, water elements and greenery, and enabling other uses. This shall also **enable children to play**, enforcing a visible focus on the needs of the most vulnerable social groups, which can result in a more cautious and aware perception of the space by all other users.



## What do cities need to have in mind?

Transforming a highway implies **downscaling the role of this particular road in the whole street network**. This might be challenging and must be accompanied with a programme that calls for a mobility shift to public transport and active mobility. A Sustainable Urban Mobility Plan (SUMP) might help to clarify the changes in traffic flow and distribution of future loads. Economic development will potentially profit from this intervention, however, the businesses that are already there might not have the same vision as the municipality, therefore it is important to launch a **participatory planning process**. Another problem might be that the highways might not be the responsibility of the municipality but of the region or state, in the case of which **wider governance collaborations** need to be explored.



## What are the impacts on the city?

Through the **reorganisation of main roads and more equal distribution of space between different modes of transportation**, accessibility is enhanced more evenly between users of various means of mobility. This helps to achieve a shift towards sustainable modalities with less traffic and, therefore, also less accidents. It also **enables the development of high quality public space in areas where it wouldn't have been imaginable formerly**. This can enhance urban quality and even build renewed identity. As spatial barriers are reduced by this measure, social cohesion is promoted as neighbourhoods can grow together and even converge, which can also reduce urban vulnerability.



## How does city size matter?

The transformation of highways to urban boulevards is suitable for **cities of all sizes**, but it might be easier to be implemented in **medium-sized and large cities**. The traffic load must be disbursed through the arterial and feeder roads. But even for **small cities** it's essential to think about how to create a more peaceful core with less traffic. If ring roads or bypasses are already there, it could be a quick win to decrease the load of cars in those cities.





## A new metropolitan avenue, Barcelona metropolitan area

The C-245 used to be a heavy traffic road that crossed five municipalities in the periphery of Barcelona: Cornellà, Sant Boi de Llobregat, Viladecans, Gavà and Castelldefels. In the 1990s this highway was built outside the cities, however, due to urban growth these municipalities constitute by today an uninterrupted urbanised area in the region. The highway, with more than 35 000 daily car users and 20 bus lines, became a large barrier, making it almost impossible to walk from one municipality to the other.

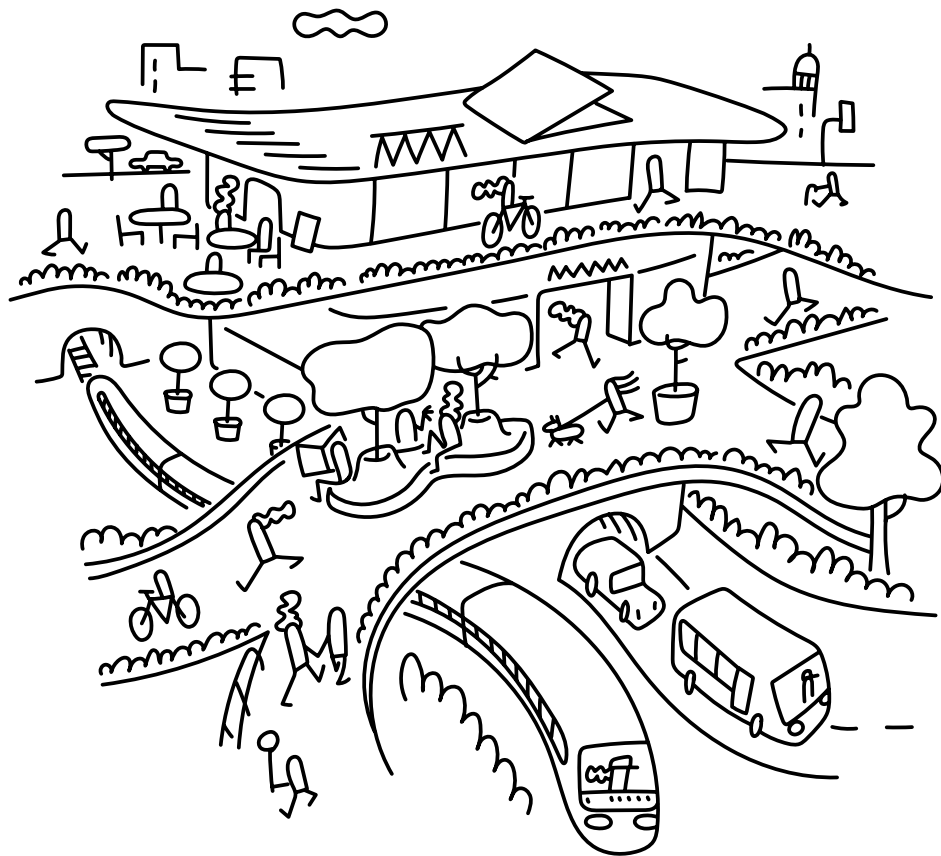
**The project transformed this busy road into a new metropolitan avenue that prioritises public transport, implementing a high-occupancy express bus line (BRT) and active mobility with a continuous pavement and bike lane.** This new avenue is part of an evolving network of metropolitan streets, avenues and green axes designed by the new metropolitan urban masterplan (PDU) that aims to shift how the metropolis is structured: from highways and roads to civic and public transport corridors.

The Barcelona Metropolitan Area (AMB), together with the municipalities and the Catalan government designed and executed the transformation. The intervention, with a total budget of around 40 million EUR, was co-financed with local and regional budgets. The same strategy will be applied to other roads, like the B-23 Diagonal to the sea and the Avinguda del Vallès, Humanizing the N-150 road, where an Integrated Action Plan was developed in the framework of the URBACT RiConnect Network.



(up) Previous C-245 Barcelona – Joan Guillamat  
(down) New bus line and bike lane, C-245 Barcelona – Simón García

# Mobility hubs: integrating public transport with micro mobility



## What is the problem?

Cities are striving to turn around the decades old transport paradigm of a town for cars to a more people-oriented vision. A central objective is a major modal shift from car use to sustainable modes like public transport, walking and cycling. These classical alternatives face some limits though: public transport is affordable and attractive in dense urban areas, where it can provide short intervals between stops, good service times and carry sufficient passenger numbers. Outside these areas, services either get less attractive, due to long intervals and short service times, or simply don't exist at all. Using walking to move in the city also requires a certain level of proximity. And it's, as cycling, still perceived by parts of the population as stressful, uncomfortable and prone to sweating.

## What can cities do about it?

Micromobility holds solutions to the challenges of the traditional transport modes. It addresses dockless and docked sharing systems of e-bikes and e-scooters, but also other forms of light mobility. Its main potential is to extend the range of public transport coverage when compared to walking. It supplies a viable alternative to car trips, especially in less dense urban areas that are not well covered by public transport. Micromobility needs careful regulations to protect vulnerable traffic users, like pedestrians but, foremost, to create favourable market conditions to micromobility companies that allow them to contribute to the objective of high accessibility at low car dependency within a city.

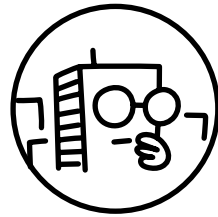


# What are the key elements?

- **Micromobility is a range extender:** e-bikes, e-scooters and other forms of light mobility strengthen the public transport network and services where it is weakest, as in less dense areas that are not covered well by service intervals and distances to the next public transport stop. Most shared vehicles can then be taken onboard and used to cover the last part of the trip.
- **Thus, micromobility can help replacing car use**, via shared mobility options that are a faster travel choice, especially for shorter trips in dense urban areas compared to car use. Approximately half of all car trips in cities are less than 5 km long<sup>1</sup> and could easily be done using shared mobility services. Furthermore, electrified features – as e-bikes and e-scooters – can help fighting negative perceptions as challenges related to comfort and sweating.
- **Mobility points and hubs are strategic for the setup of micromobility systems.** Whether in combination with a public transport stop or as a stand-alone option, shared mobility is the backbone of any mobility point to provide people with multimodal travel choices. Mobility points combine sharing services for (e-)bicycles, (e-) cargo bikes, (e-)scooters or (e-)cars with parking facilities for private use, light vehicles and further activities like for repair boxes, storage or electric charging options. A good coverage of the city by mobility points provides people with a viable alternative to private motorised vehicles.
- **All the above can only be properly achieved with corresponding regulations:** shared mobility services need to be regulated carefully to avoid unintended effects, like unsafe conditions for pedestrians. The rules need to address the mobility objective of a city before anything and then use micromobility as a support to fill the gaps. Restrictive legislation on static terms might defy existing potential, so it's very important **to use flexible performance indicators** that can dynamically steer fleet volumes, docks and present service providers in the city to help realising the benefits of micromobility.

1. [www.ikorkort.nu/en/vk\\_korkortsfraga\\_en\\_396.php](http://www.ikorkort.nu/en/vk_korkortsfraga_en_396.php)

[www.irishtimes.com/news/ireland/irish-news/more-than-half-of-travellers-use-cars-for-journeys-under-2km-1.2303451](http://www.irishtimes.com/news/ireland/irish-news/more-than-half-of-travellers-use-cars-for-journeys-under-2km-1.2303451)



## What do cities need to have in mind?

Shared mobility services need careful planning to avoid certain effects, for instance, a major risk is that only people who **already used public transportation, cycled or just walked, switch to shared mobility while car drivers do not**. This means that extra efforts have to be taken to reach out to the intended audience, people who often use cars to move in the city.

**Electric vehicles** that drive 25 km/h or even faster **need rules on equipment, use conditions like age and on where to ride**. A frequent solution for e-scooters is to treat them as bicycles which might create conflicts with bikers. Dockless sharing services need clear rules like where individuals can park, the city must also ensure that these rules are enforced. The local authority should also consider giving incentives to service providers to cover less attractive (and less dense) urban areas, where the potential of micromobility is the largest.



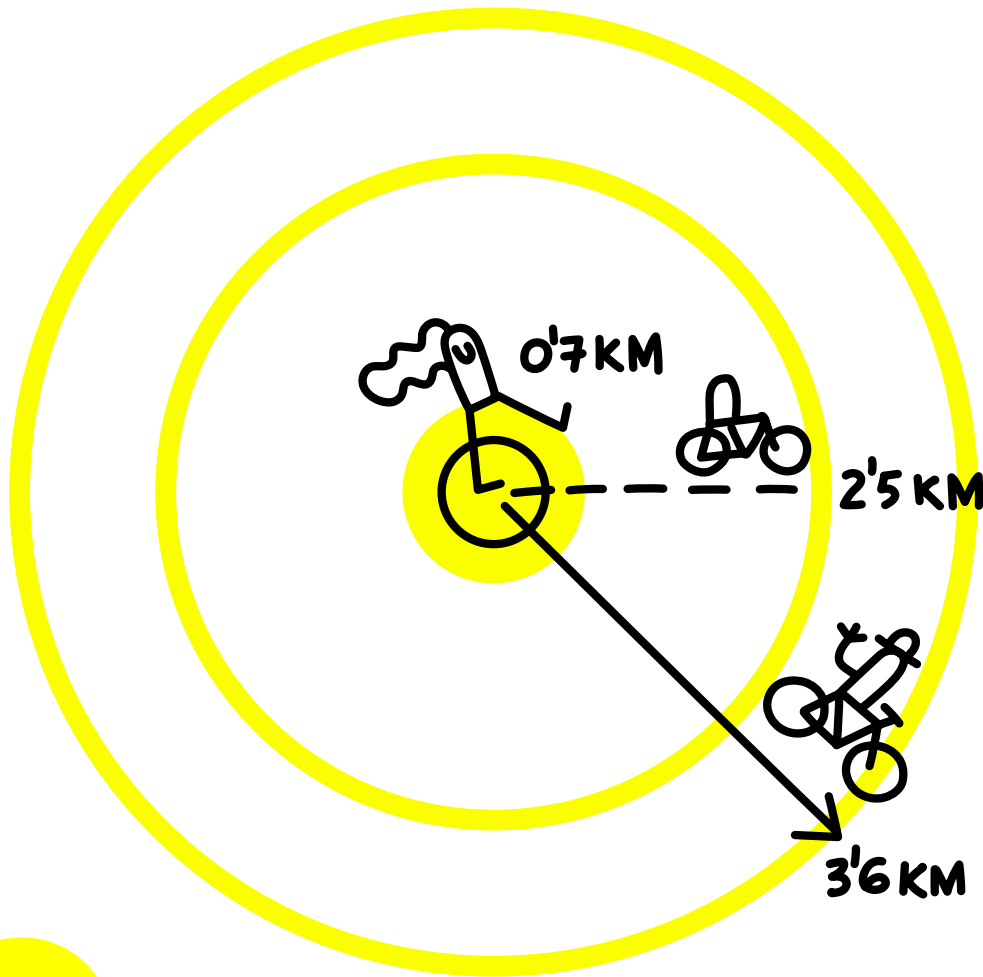
## What are the impacts on the city?

Micromobility supports replacing car use by either standalone shared-use devices or in combination with public transport. Specifically for the latter **micromobility holds the advantage of a drastic extension of fast public transport services like metro, light rail or regional train**. Sharing services at mobility points and hubs foster multimodality in travel choices, once different vehicles in the range of micromobility are close at hand for people to use instead of their own car.



## How does city size matter?

In **small cities**, micromobility can add to a modal shift from car use to active mobility. To do so, it needs to strategically address people that are not prone to walk or cycle. It increases the attractiveness of public transportation, more specifically, regional public transport services for commuting as well. This is also reflected in **metropolitan areas**, where regional connections are particularly crucial. **For medium-sized, large cities and at metropolitan scale**, sharing services and their combination with corresponding local public transport hubs can bring further benefits to all inhabitants – provided that regulations and parking conditions are clearly set in place. **A close cooperation between public transport providers** is fundamental to connect and use micromobility at all city levels.



### Showcasing the potential of e-scooters as first/last mile access to public transport stations in Munich

The city of Munich (DE) compared the coverage of public transport access by a 5-min walk with a 5-min e-scooter ride for: high-frequency public transport stops; and all high-frequency rail stations – with more than 288 departures per day. Looking at all public transport stops, 80% of the population live within a 5-min walk to a station and 99% within a 5-min ride by e-scooter. **For the rail stations, the potential of e-scooters to extend the geographic coverage is significantly higher: a 5-min walk covers about 21% of the population, while 68% of the population live within a 5-min ride to the next high-frequency rail station.**



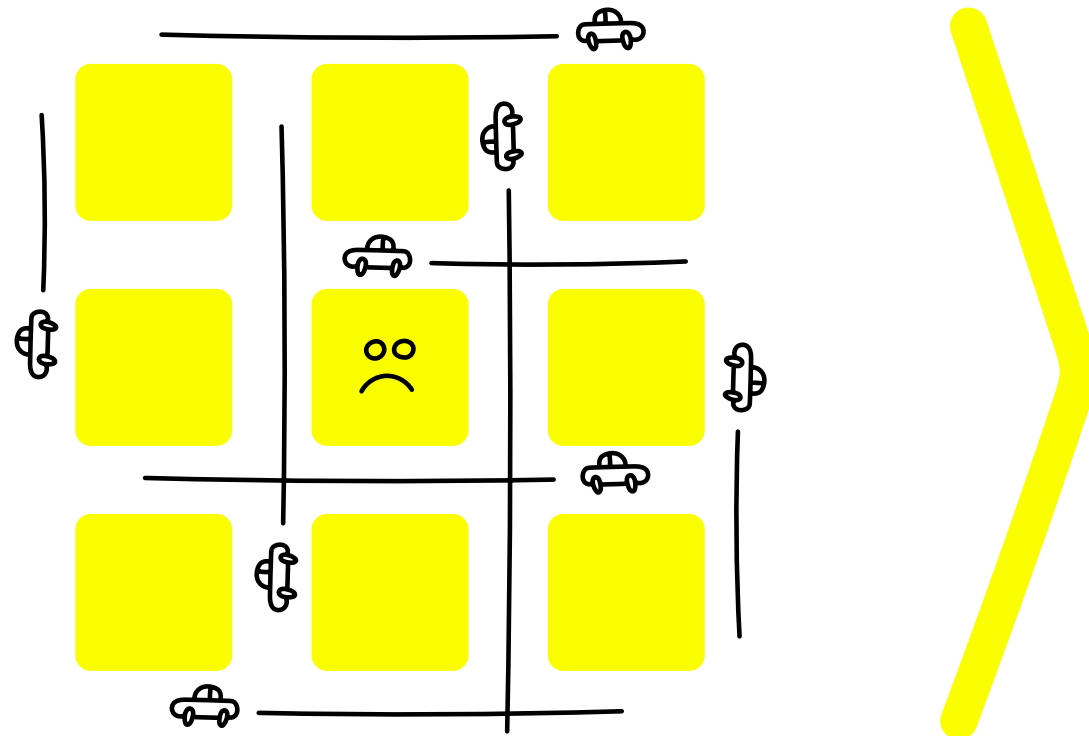
Bike parking in front of train station, Molins de Rei, Barcelona – María José Reyes

### Metropolitan bike sharing in Gdansk and Barcelona Metropolises

In large metropolitan areas like the Gdańsk, Gdynia and Sopot Metropolis (PL) or Barcelona Metropolis (ES), there are areas outside the city core that are not sufficiently covered by public transportation. **Public e-bike sharing systems** with good bike infrastructure could help to make public transport more competitive, **reducing the time and effort from non-well-connected neighbourhoods to the transit gates**. Following this idea, both metropolises are currently working to launch in the following months a public e-bike system. Mevo, with 3 099 e-bikes and 1 000 bikes in the Polish area, and AMBici with 2 600 and 236 stations. The idea for both cases is to expand the reach of the projects in the following years while covering more municipalities.

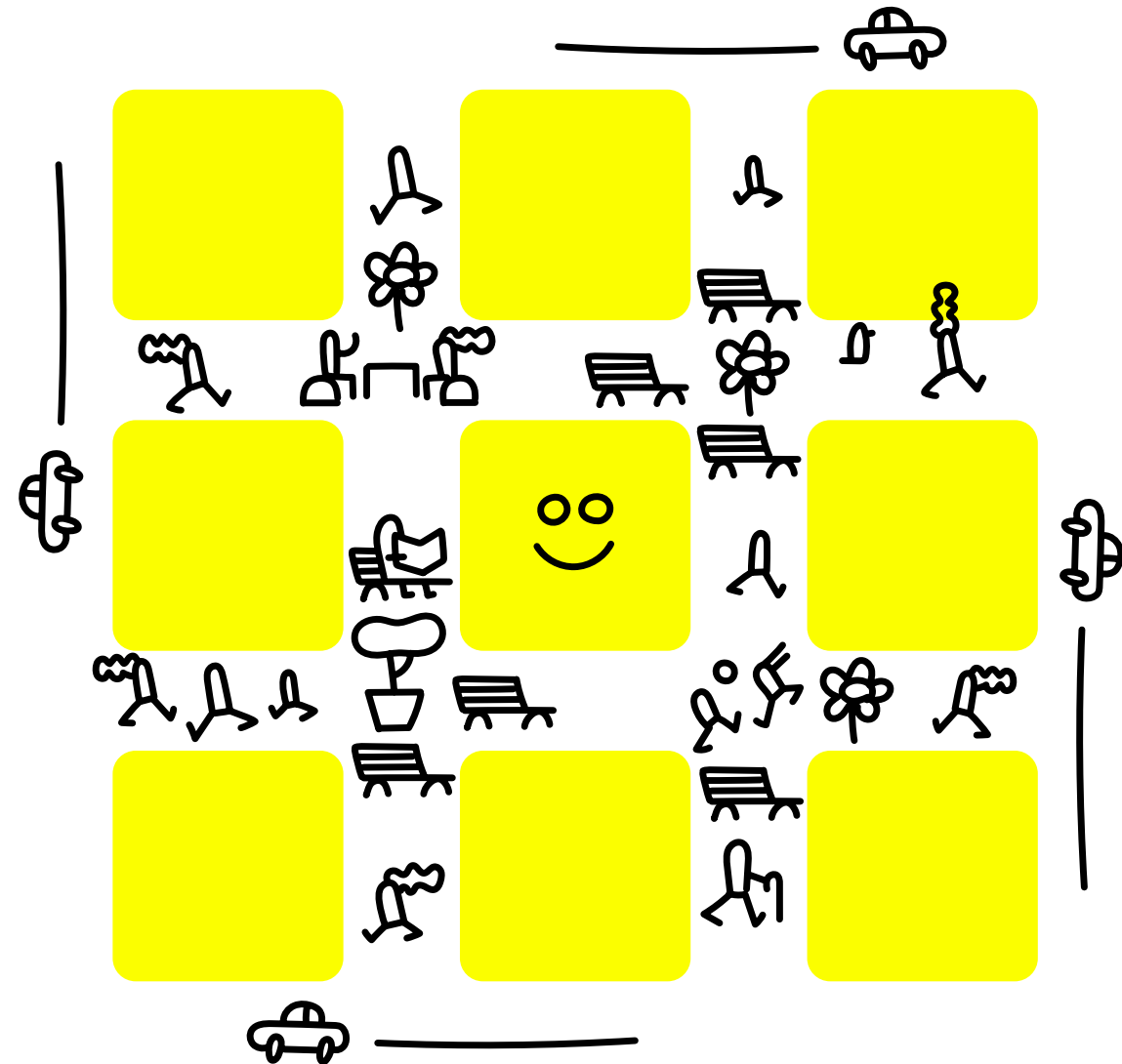


# Superblock



## What is the problem?

The vast majority of dense European cities suffer from negative externalities of car use, like noise, air pollution, high temperatures, traffic jams, subsequent accidents and the lack of green spaces. In order to handle this situation radical interventions into the use of public spaces are needed.

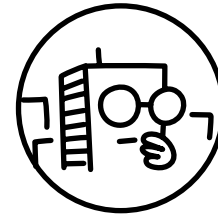


## What can cities do about it?

In response to this challenge, Barcelona (ES) has developed the Superblock concept, which affects all aspects of traffic around a certain area of the city, prioritizing soft and sustainable means of transportation and public urban life in inner streets, ousting cars from the inner parts of specific blocks. The creation of a Superblock can be, at first, a temporary solution that aspires to stay flexible and adjustable. In essence, these places can be shaped and resized in terms of design, but they can also react to different local needs from a social perspective. The Superblocks are developed at a local scale as a strategic intervention, with the subsequent aim to gradually transforming the streets in all neighbourhoods and districts of the city.

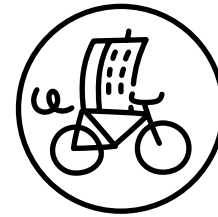
## What are the key elements?

- The ideal Superblock model envisions a healthier, greener, liveable, safer and equitable city. The basic idea is to delineate a shared-use space for walking, sitting, playing, among other activities, **where parking and non-resident car traffic are forbidden** except delivery and emergency vehicles.
- **Tactical urbanism and placemaking** experiments offer an opportunity to upgrade a place quickly and at minimum cost, where resources are limited. These interventions can also enable bottom-up processes and create a sense of ownership for the local community.
- By **testing exemplary superblock** models on a smaller scale, a city can learn from the process and upscale these lessons to other parts of the city. **Experimentation, the use of temporary, tactical interventions first, allows city practitioners to minimise mistakes and to be better prepared to overcome certain challenges.** The Superblock model is a systematic vision, which is adaptable to the local contexts. It's an approach that is flexible enough to recognise and incorporate the specificities of different places. The ultimate goal should be to apply the Superblock model citywide to achieve measurable results and support the modal shift with evidence-based experience.
- **Collaborative participatory design** is a key element to integrate local stakeholders, especially the local community. This will promote a stronger sense of ownership towards the changes and, usually, it generates a higher acceptance of the project within the neighbourhood.



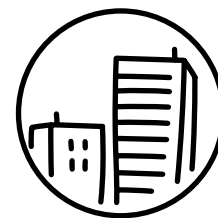
## What do cities need to have in mind?

The Superblock looks like an intervention that is easy to implement, however in **reality it's a complex measure**, because solutions for parking spots for residents, visitors and local businesses have to be found. It requires an integrated view, including the improvement of public transport to enable a sustainable mobility shift. If executed poorly, the Superblock model can be at risk of being perceived as a pure marketing strategy, with few tangible results. To avoid this, **political decisions need to be taken gradually, with a strong and coherent agenda that involves the local people.**



## What are the impacts on the city?

The implementation of Superblocks in neighbourhoods imply **radical changes on social, ecological and economical levels**. Air and noise pollution can be reduced drastically, which has a positive impact on public health. Once space is put in favour of pedestrians, street life will consequently thrive, creating a sense of belonging within the local community. This can help to discover new uses and activities in public spaces, as well as stimulating local retail. **To prevent gentrification effects, further public interventions are needed from the side of the municipality, notably in the housing market and in the regulation of the use of street level commercial functions.**



## How does city size matter?

Superblocks **can be implemented** in cities of all scales, as the concept is designed to be flexible and adjustable to local needs. In **small cities** it can be an option to create one superblock in the city core – like in the historical city centre. The larger the city gets, the more superblocks it needs, in terms of numbers but also variety in typology and types of activities. **Metropolitan areas** can organise a network of overlaying superblocks, a structure to enable a coherent model all over the city ([see 4.3 - City-wide calmed down places](#)). This also calls for integrated urban development with a tight cooperation vertically (with upper levels of government), horizontally (collaboration between city departments) and in territorial sense (with neighbouring municipalities).



## Barcelona Superblock – The city we want

Barcelona (ES) is one of the densest cities in Europe. Unsurprisingly, the need for public space has become even more visible after the pandemic. For this reason, the city is committed to adapt public space and mobility to become a more liveable city. The Superblock Programme, launched with the 2013 Urban Mobility Plan, provides a vision and a citywide transformative capacity.

The initial idea was to set an area of roughly three-by-three blocks as shared-use space. Non-resident car traffic was excluded. Now, it has evolved to a more integrated approach, where its application defines a new map of Barcelona. It highlights the spaces and streets that have become greener and that give priority to pedestrians, bikes, playgrounds, sitting areas and much more.

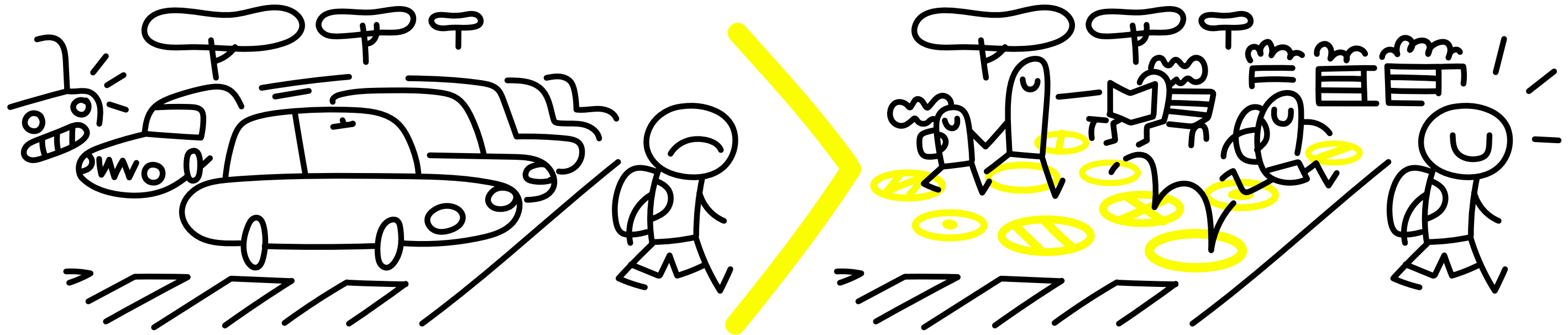
The Barcelona Superblock Programme has shown that it’s possible to move towards a healthier, more equitable and safer public space that favours local social and economic relations. As of today, the programme has presented very positive indicators in relation to the reduction of pollution, noise and accidents. In the long run, it aims in the Eixample district of the city by 2030 to create 21 green axes (33 km); 21 squares (3.9 ha); increase of 33.4 ha of space for pedestrians; 6.6 ha of urban green, ensuring access within 200 m to the entire population. The first four green axis (4.8 km in total) and 4 new squares will be completed in mid-2023.

The superblock model is widely discussed in the realm of urban development. For example, it has inspired other cities like Vitoria-Gasteiz in Spain and Vienna in Austria to elaborate similar mobility and public space solutions that favor public space over car-oriented mobility.



Barcelona – Edu Bayer

# School area



## What is the problem?

Schools are among the most important public facilities. Throughout different hours of the day, they concentrate a large number of people even after school hours – in most cases, youth groups from vulnerable social groups. At other times, however, the school areas' stay empty. The local context and urban design play a large role on how these spaces are used, for instance, sometimes the entrances are located in busy streets with narrow pavements. Lack of safety, pollution and space for children to play and socialise are the main problems.

## What can cities do about it?

School areas offer great opportunities for sustainable urban development (see 4.1 - on The 15 min city). Schoolyards can be extended to public space, thus, they can create areas to socialise and being active. They support the creation of livable streets around the schools' premises. These streets and the schoolyards hold lots of potential in terms of use, like for pupils during schooltime and for the local residents for the rest of the day. The most important ingredient to unlock this potential is enough safe public space for pedestrians. Cities of all sizes should focus on transforming the school's surroundings, in order to provide safe and healthy neighbourhoods, with places for gathering and leisure as a consequence.

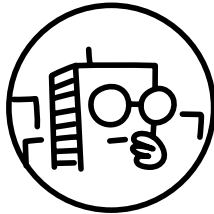


## What are the key elements?

- **Traffic-calming measures** work as a way to reduce traffic and set speed limits (see 5.2 - Tempo 30). The closure of a school street to traffic is of utmost importance, either in a time-limited way (e.g. at school start and finish hours) or as a permanent intervention. This requires rethinking how people can move around the school or even the entire city. At the same time, sustainable mobility infrastructure, like bike lanes and bike parking nearby, must be improved.
- Likewise, **the expansion of areas for people has to be ensured**. It increases the space that people can use and enjoy. For example, the city can allocate part or all of the space around the school to be used by children, parents, teachers or any other visitors, instead of being used for cars and parking. These spaces should be safe enough and comfortable to allow families and locals to spend time there socialising, resting, playing or simply eating a snack. The redesign of the road space is fundamental, as is the construction of urban furniture – benches, greenery, children's play elements, stands or parking facilities for bikes.
- **The installation of safety elements is also a key element**. Safety against car traffic is, perhaps, one of the most important elements to improve the urbanity and spontaneous use of these places. It works with designing safe places that reduce accident risks and increase motorists' awareness, notably on the presence of children in the area. Use of fences, plant stands, benches can also be taken into consideration to create a safer environment.
- **Organisational improvements** have also to be considered by cities. The introduction of school districts, a regulation that assigns young children to the primary school that is closest to their home address, might lead to substantial reduction in traffic. Traffic jams across the entire city can be eased once parents don't need to drive their children to far away schools.

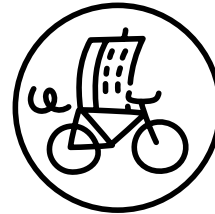


Barcelona – Ajuntament de Barcelona



## What do cities need to have in mind?

**School surroundings are sensitive areas.** Transforming them, even if the objective is to improve their safety and health with spaces for gatherings and exchange, can awake huge opposition, specifically from parents who represent the largest part of traffic around schools, dropping off and picking up their children by car. Transforming school premises requires a **co-creation process with families, teachers, retailers, local police and other stakeholders.** The cost of these interventions is not necessarily high, and tactical urbanism could be a good solution to achieve cheap and quick transformations.



## What are the impacts on the city?

**Healthier and safer school areas improve social interactions, sustainable mobility, a culture of public space and air quality improvement at local level.** The calmed down school areas reduce traffic accidents with all their consequences, and contribute to a network of public spaces to stay, relax and meet, not only for the school community, but for all people within the neighbourhood. Schoolyards can offer new public spaces, **if opened up after school time for the general public in a regulated way.**



## How does city size matter?

Schools are present in cities of all sizes. **How safe and healthy they can be does not depend on whether the city is smaller or larger, but rather on the relative location of the school,** how kids get to school and how close it is to hazard elements – like busy roads. In denser cities or metropolises with heavy traffic, it might be more difficult to implement the traffic calming strategies, especially in main roads. In less dense urban areas, pupils face longer distances and their school commute is often done via their parents' cars. This might result in higher resistance to reduce access to schools by car and redesign the area to a people's space at the cost of parking spaces.



## Protegim les escoles (Let's protect the schools), Barcelona

In 2020, the Barcelona City Council (ES) launched the “Protegim les escoles” programme (Let’s protect the schools), with the objective of making these spaces healthier and safer as areas for gatherings and occasions to play. In total, taking into account also earlier pacification projects, 216 schools will be impacted by the programme until 2023. The main idea is **to put schools as the priority axis of all actions to transform public space, to pacify the city, improve air quality, reduce environmental noise and accidents, and ultimately to prevent high temperatures.** The benefits of these actions will have a positive ripple effect beyond the school’s staff, students and their parents. This programme also includes other initiatives, such as making schools into climate shelters, add more public space to school. Until now, almost all interventions have been developed using tactical urbanism, furthermore, they have involved different stakeholders during the design process.



Barcelona – Àlex Losada

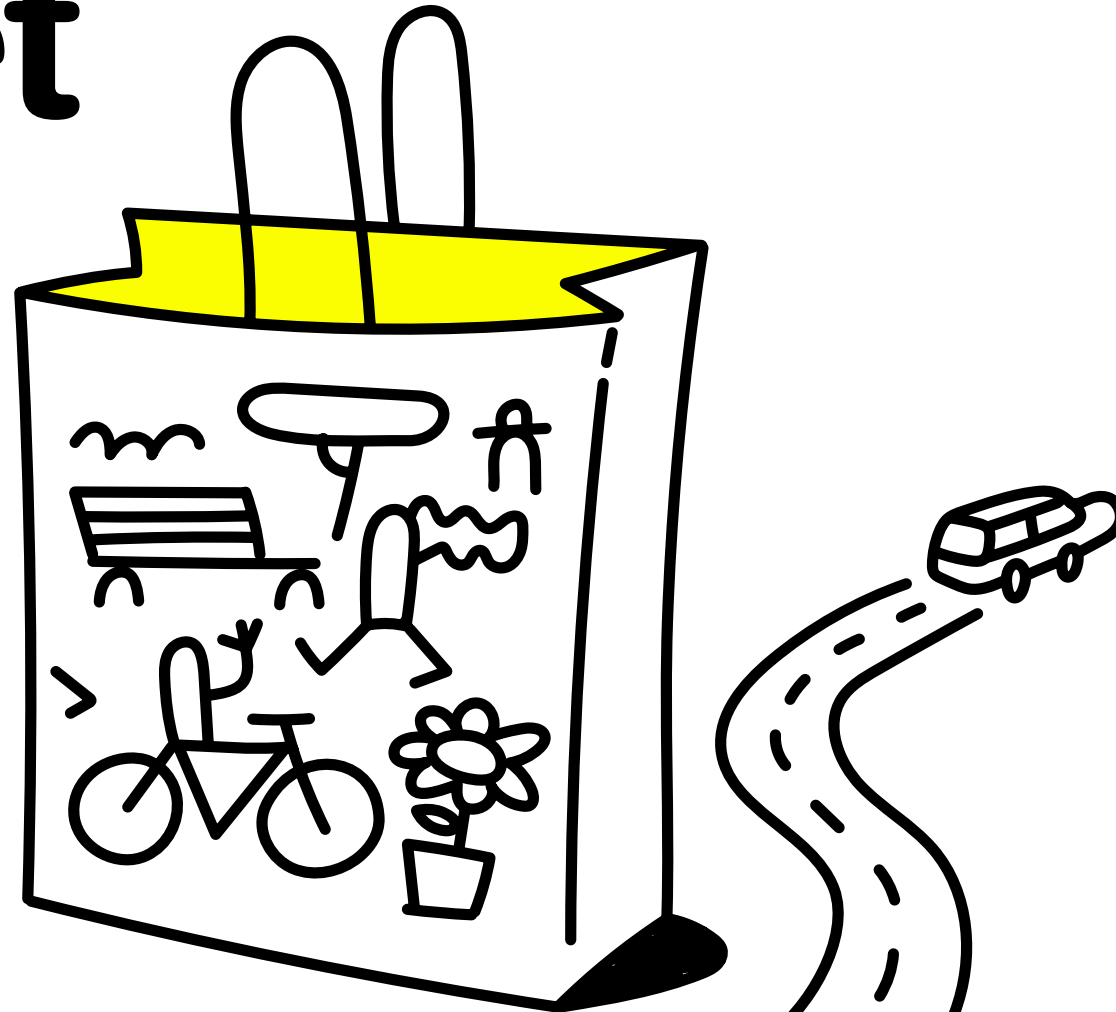


Vereinsgasse in Vienna is closing twice a day to ease pedestrian flow for pupils and parents – Roland Krebs

## School streets of Vienna

In 2019, the city of Vienna (AT) started to pilot a project called “Schulstraße” (school streets). The idea was to cut out car traffic near schools 30-minutes before and after the school hours (thus closing the school streets for cars between 8 and 9 in the morning, and respectively around school closing hours), to create safe conditions for pupils to circulate. Measures were taken in schools’ streets with signposts and removable barriers. This pilot was a successful experiment, as it drastically reduced car traffic at specific parts of the day. It increased the number of students who came to school walking, cycling or using public transport. Today, the pilot was transformed into a long-term project, a standard solution. It’s present in many schools in Vienna. In the summer of 2022, schools’ streets have officially become regulated under the Austrian Traffic Code. Henceforth, local authorities can create school streets that exclude motorised vehicles with some exceptions, like public transport of services either permanently or focused at school drop off and pick up hours.

# Shopping street



## What is the problem?

As people increasingly choose to shop on the internet and in shopping malls located in the outskirts of cities, many commerces in the city centres lose their customers and are eventually forced out of business. Undoubtedly, this has severe negative effects on the local economy. In addition, as city centres gradually lose their traditional shopping function, they become less attractive destinations. This in turn further reduces the number of visitors, resulting in unused public spaces, empty streets and squares.

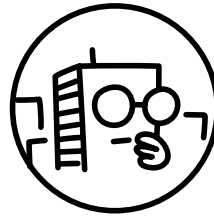
## What can cities do about it?

Shopping streets represent an important backbone of daily urban life, not only for grocery shopping and running errands, but also for a wide range of other urban activities –like strolling, meeting friends and so on. Therefore, commercial and non-commercial functions are equally important, both on public spaces and at shop fronts. To revive declining city centres and shopping streets, cities require integrated approach. This, notably involves engaging the local community, businesses to organize activities, limiting car access and reallocating spaces previously dedicated to cars, retrofitting and shifting new facilities as attractions– for instance public institutions, cultural centres.



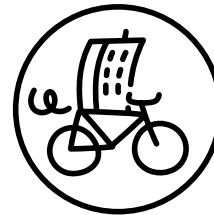
# What are the key elements?

- **Eliminating, or at least significantly limiting, car traffic** by transforming streets into pedestrian areas ([see 5.1 - Reducing car access to city centres](#)) or shared mobility hubs is a necessary step. Parking and transition spaces for cars can then be shifted towards more active mobility. It is also important to develop further accessibility by public transport simultaneously.
- **Establishing new functions and attractor elements** can particularly benefit places suffering from low visitors' frequency. Establishing major public or civic institutions in their proximity is a suitable option to bring new life to these areas.
- **Temporary use** is another way to encourage the temporary use of empty shops. It can contribute to locating non-profit and cultural associations, pop-up-shops at ground floor level, which in turn act as additional public hubs, boosting the diversity and the quality of urban experiences.
- **Bottom-up initiatives can arise with soft measures to activate possible uses.** Engaging the local community and business owners, as well as potential new users to organise activities, events, can strengthen identity and the sense of community, and also integrate multiple new forms of usage.
- **Active neighbourhood management** of the ground level zone can provide a centralised contact point, which eases communication between all stakeholders. It helps to ensure the diversity and quality of shopping experience. It can offer services to current and future shop owners, support the image and sense of community in the area. A more structured approach to managing shopping streets can be resolved through Business Improvement Districts (BIDs).



# What do cities need to have in mind?

It is crucial to use a participatory approach – **integrating stakeholders, especially the local community** who will promote a stronger sense of ownership and generate a higher acceptance towards change. While major physical transformation of shopping streets requires significant investments and time, **places can be upgraded quickly and at minimum costs using tactical urbanism and placemaking initiatives** that facilitate the involvement of the local community. It's also important to think of **what's beyond the ground level zone**, as this can distinguish undiscovered target groups and help to reduce displacement of those groups, preventing unfortunate gentrification processes.



# What are the impacts on the city?

Supporting the improvement of shopping streets can rehabilitate a city's centre or create new centrality and spaces with identity, high quality urban life, while stimulating local commerce. **By limiting or prohibiting car access, shopping in these streets can be rendered a high quality urban experience.** A decrease of vacancy at the ground floor zone will be quickly visible, so strong and diverse business structures and a growing local economy can thrive. At the same time, non-commercial areas have to be programmed to satisfy the needs of all residents.



# How does city size matter?

In **small and medium-sized cities** there might only be one or a few streets that can fit the bill, acting as hotspots of urban quality, attracting people towards the city centre. The ReGrowCities URBACT network provides examples of pop-up shops, reviving central areas of declining cities. **Larger cities**, on the other hand, usually already have a structure of different centres and shopping streets. Carefully analysing the network of different centre points can bring to light the particular qualities of each street. By handling these accordingly, defining and strengthening characteristics and unique selling points, the city will thrive based on a diversity of public urban spaces without competing among the shopping streets.



## Vienna's Mariahilferstraße: transition into a quality street for all

The Mariahilferstraße is a central street in Vienna (AT), connecting the Museum Quarter with the Westbahnhof, an important regional train station. With the development of the metro line U3 in 1993, following the existing Mariahilferstraße underground station, the street already experienced an increase of pedestrians. In 2010 the process for a complete redesign of the street began. The construction work finished in 2015, transforming the whole street into a shared mobility zone, while giving priority to those who choose to walk. Greenery such as planters and high trees, urban furniture and opportunities for childrens to play enhanced the quality of this place even further. These days the “MaHü” – as the locals fondly call this place – is a vibrant and flourishing shopping street, which offers a colorful mix of businesses, services and also a diversity of gastronomy options. Even though voices opposing the plans forecasted a negative impact on local commerce, with the undoubtedly higher frequency of pedestrians strolling by, most of the shop owners are enjoying growing revenues. Today, the MaHü is the only street in Vienna where shop vacancies are decreasing.



Mariahilferstrasse used to be a highly congested bottleneck in the 6th district of Vienna – Hans Porochelt



Mariahilferstrasse after the transformation into a pedestrian and biker friendly street – Christian Fürthner, MA28



Herrengasse Shared Space – Roland Krebs

## Herrengasse in the city center of Vienna as a follow up - using a private business model

With the learnings from Mariahilferstraße as a fully publicly funded project, Herrengasse followed as the second renewed shopping street. The project was planned and implemented between 2014 and 2016 with a completely different business model. Unlike Mariahilferstraße, the process was initiated by the private owners of shops located there. The goal of the project was to remove all parking spots in the street, while driving was still allowed, but quite limited with fewer lanes and lower speed limits. The rather short Herrengasse street has only 14 shop owners, numerous public governmental buildings and a number of palaces. The investment was 100% financed by these private owners. The project has prioritised walking, cycling and creating a lot of new public space with benches, as well as some trees providing shade to residents and visitors.

# Action Planning Network's partners

## RiConnect

Àrea Metropolitana de Barcelona (ES)  
Stowarzyszenie Metropolia Krakowska (PL)  
Anaptyxiaki Meizonos Astikis Thessalonikis (EL)  
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## Thriving Streets

Parma (IT)  
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## Space4People

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# Walk'n'Roll community

## People who took active part at any of our W'n'R webinars and seminars.

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