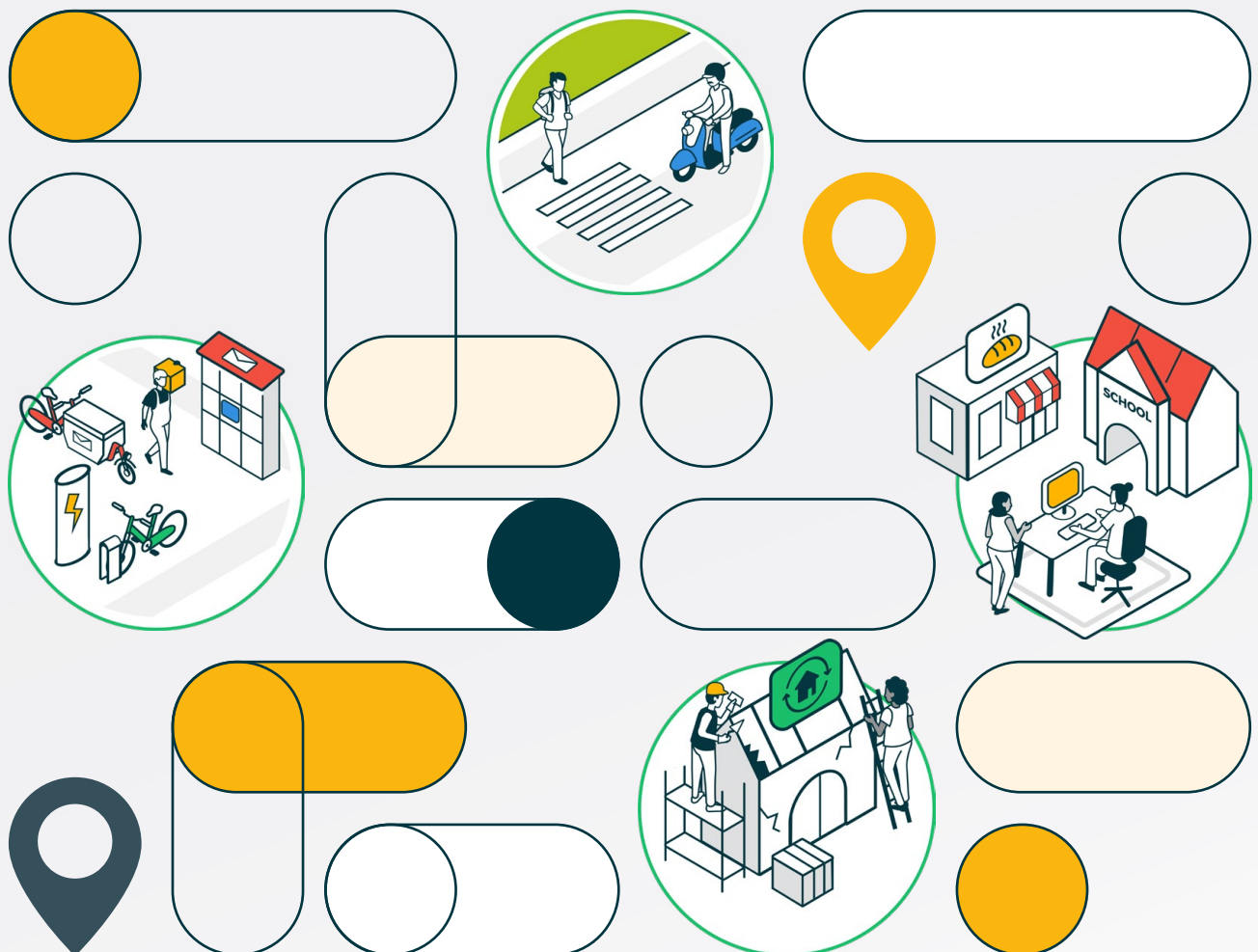


# Mapping of 15-minute City Practices

Overview on strategies, policies and implementation in Europe and beyond

Report from DUT's 15-minute City Transition Pathway



## Imprint

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# 1. Introduction

In 2020, Paris' mayor Anne Hidalgo embarked on a visionary campaign, promising to transform Paris into a 15-minute City. Far from fading, interest in this transformative concept has only intensified. Numerous cities have since joined the mission, aspiring to achieve sustainable mobility, inclusive transportation, and the creation of climate-neutral urban landscapes. The number of 15-minute Cities is continuously growing, making existing overview studies quickly outdated. Consequently, there remains a notable gap in understanding the intricate global landscape of practical definitions, strategies, instruments, implementation experiences, as well as the needs and challenges in research and innovation associated with the 15-minute city concept and its related policy domains.

With its 15-minute City Transition Pathway, the European partnership Driving Urban Transitions to a Sustainable Future (DUT) aims to address this knowledge gap. One of the main goals is the creation of a 15-minute City Innovation Portfolio, which will pool knowledge on strategies, policies, and other aspects of implementing the 15-minute City concept. The portfolio is to be expanded by more than 10 examples each year from 2025 onwards.

The 15-minute City mapping activity, which results we present here, is an important starting point that provides an initial overview for the Innovation Portfolio and analytical methods for collecting international experiences, tools, and practices in the following phases of the roadmap for the 15-minute City Transition Pathway. With the results of this project, we will lay the foundation for the development of the Innovation Portfolio and thus move the discussion of the 15-minute City more towards concrete aspects of practical implementation.

This report is structured into two main sections. Chapter 2 presents the outcomes of the extensive international study of 15-minute City practices. We showcase cities that have already implemented or are currently in the process of adopting 15mC policies, illustrating the diversity of approaches taken in Europe and worldwide. Following this, Chapter 3 offers six in-depth case studies of European cities, offering a detailed analysis of practical implementations of the 15mC paradigm. These 'Deep Dives' will not only provide a nuanced overview of the policies but also critically evaluate the strengths and weaknesses of their implementation, drawing from the firsthand experiences of the respective local planning practitioners. Finally, we present our findings into a summary of key learnings and offer policy recommendations for consideration in Chapter 4.

## **2. Mapping of 15mC practices**



## 2. Mapping of 15mC practices



“15mC practice” refers to the application, strategies, policies, and concrete actions taken by cities to implement the principles of the 15-minute City.

The 15-minute City (15mC) concept has been implemented in different contexts and with diverse interpretations. The goal of this study is to map and understand how this concept has been put in practice, with a particular focus in European Cities. Accordingly, in this study “**15mC practice**” refers to the application, strategies, policies, and concrete actions taken by cities to implement the principles of the 15-minute City. This encompasses the practical steps and methodologies used to reorganize urban spaces and governance to achieve the objectives of making cities more accessible, sustainable, and liveable for all residents.

15mC practices could involve a combination of urban planning, transport planning, logistics, policymaking, and community engagement to reconfigure urban spaces to prioritize accessibility by proximity, active mobility, and sustainability. 15mC practices include, but are not limited to, the following DUT’s **Key Areas of Action (KAs)**:

- 1. Sustainable Urban Mobility (KA1):** developing eco-friendly, efficient transportation alternatives to decrease dependency on private vehicles, including enhancing public transport, cycling, and walking infrastructures.
- 2. People-Centered Urban Spaces and Planning (KA2):** organizing urban environments to prioritize residents’ well-being and needs, integrating mixed-use developments, and fostering community-oriented public spaces.
- 3. Smart Urban Logistics, Production, and Service Sites (KA3):** improving the efficiency and sustainability of urban logistics and production through technology, optimizing supply chains, and supporting local production to reduce transportation demands.
- 4. Urban Governance for Mobility Transition (KA4):** establishing policies and governance frameworks that facilitate sustainable urban mobility and planning, involving various stakeholders in collaborative decision-making and policy implementation.

In this chapter, we selected and organized a variety of practices and cities to give a detailed overview of the 15-minute City concept’s evolution and dissemination in the World and Europe, starting with an explanation of our method for gathering these practices, followed by a discussion of the findings and illustrative examples.

### 2.1 The 15mC practices mapping method

#### 2.1.1 Collecting 15mC practices

The collection of 15mC practices involved a three-phase process:

- 1. A comprehensive literature review** was conducted, utilizing academic literature databases such as Scopus, Web of Science, Google Scholar, and the Transport Research International Documentation, alongside

grey literature sources from public agencies and intergovernmental organizations. The review employed search word combinations related to the 15-minute City concept and similar initiatives (e.g., “20-Minute Neighbourhoods”, “Superblocks”, etc.).

2. An **expert survey**, aimed at collecting information on policies and practices implemented in European cities directly from practitioners and experts in the field, was launched in June 2023. It garnered 610 responses from 51 countries. The survey was distributed through relevant networks, including EIT Urban Mobility, AESOP, POLIS, Eltis, and the DUT City Panel.
3. A **web search** was conducted to identify cities that self-advertise as 15-minute cities, exploring their online presentations and claims.

## 2.1.2 Data collected and selection criteria

The process of identifying and classifying 15-minute City practices for our study involved the definition and use of specific databases and a set of 24<sup>1</sup> selection criteria divided across two categories:

- For **15-minute City practices selection** (Table 1), the study used 12 criteria to sort and understand the range of 15-minute City practices found. This was essential for understanding the diversity and scale of initiatives implemented in various urban environments.
- For **city analysis** (Table 2), the study included gathering key data about the cities implementing these practices. This involved collecting details on elements like population density, the city’s demand and supply transport system (e.g., modal split), and accessibility levels, also guided by a distinct set of 12 criteria.

**Table 1:** Classification criteria and attributes for 15-minute City practices

| Classification Criteria            | Subgroup(s)              | Attribute   |
|------------------------------------|--------------------------|---|
| <b>1. Location</b>                 |                          | Name of the city / region / country of the practice |
| <b>2. Policy</b>                   |                          | Description of the practice                         |
| <b>3. Source</b>                   | Source type              | Literature Review, Web search, Survey               |
|                                    | Author                   | Name of the author                                  |
|                                    | Year                     | Year of publication                                 |
| <b>4. 15mC concept</b>             |                          | List of concepts                                    |
| <b>5. 15mC definition</b>          |                          | Definition  |
| <b>6. Implementation context</b>   | Urban   suburban   rural | Yes / No  |
| <b>7. Status of implementation</b> | Implemented   planned    | Yes / No  |

<sup>1</sup>Note that data to all 24 criteria was not available to all 98 case studies.

|                                    |   |   |
|------------------------------------|---|---|
| <b>8. Scale of implementation</b>  | Citywide   Neighbourhood                                  | Yes / No  |
| <b>9. Key Areas of Action (KA)</b> | KA 1: Sustainable urban mobility                          | KA 1.1: Prioritise active mobility and reorganise public space   KA 1.2: Provide sustainable solutions for longer trips   KA 1.3: Integrate new technologies in transport   KA 1.4: Strengthen access to sustainable mobility optionsv  |
|                                    | KA 2: People-centered urban spaces and planning           | KA 2.1: Support sustainable lifestyles   KA 2.2: Focus on people-centred public space   KA 2.3: Deploy traffic management for people centred policies   KA 2.4: Follow planning principles focusing on sustainability and diversity KA 2.4: Follow planning principles focusing on sustainability and diversity |
|                                    | KA 3: Smart urban logistics, production and service sites | KA 3.1: Support striving neighbourhood economies   KA 3.2: Promote sustainable supply chains and last-mile logistics   KA 3.3: Test and diffuse innovative approaches to logistics and delivery   KA 3.3: Test and diffuse innovative approaches to logistics and delivery                                      |
|                                    | KA 4: Urban Governance for mobility transition            | KA 4.1: Promote innovative urban governance and create evidence through experiments   KA 4.2: Build on participation and empowerment of civil society   KA 4.3: Foster partnerships that last and engage with stakeholders  |
| <b>10. Goal / Target</b>           |   | Yes/No  |
| <b>11. Radical</b>                 |   | Yes/No  |
| <b>12. 15mC practice diversity</b> | Transportation  | 36 keywords <sup>2</sup> (see lines below)  |
|                                    | Car   | Car restrictions   Traffic calming (except road space reallocation)   Reduction of car use   Parking charges   Road space reallocation  |
|                                    | Walking   | Walkability improvements   Prioritization of walking<br>Prioritization of walking   |
|                                    | Cycling   | Improvement of cycling   Prioritization of cycling   Construction of cycling lanes/paths  |
|                                    | Public transport  | Improvement of public transport   Prioritization of public transport  |
|                                    | Others  | Multimodal strategy   Other transport improvements   Human-scale streets   Reduction of transport costs   Green fleets   Road safety hierarchy  |
|                                    | Logistics   | Sustainable urban logistics   |
|                                    | Land use  | Service/activities allocation   Mixed land use promotion   Urban densification   Compact city   Affordable housing/ Gentrification prevention   Urban greening   Promotion of Transport-Oriented Development (TOD)   Improvement of public spaces   Support local economy   Multipurpose buildings/spaces       |

<sup>2</sup>36 distinct keywords pertaining to significant measures and policies associated with transportation, land utilization, and the planning procedure were identified. These keywords were derived from prominent databases, including KonSULT, the Victoria Transport Institute, and the EU's Urban Roadmaps tool, in addition to our own expertise.



|  |                  |   |
|--|------------------|---|
|  | Planning process | Evaluation framework   Participatory planning   Concept embedded as a planning principle   Pilot projects   Specific funding streams   Information and communication measures   Tactical urbanism |
|--|------------------|---|

**Table 2:** Classification criteria and attributes for the City Level Analysis

| Classification Criteria  | Attribute   |
|--|---|
| <b>1. City</b>   | Name of the city  |
| <b>2. Country</b>  | Country of the city   |
| <b>3. Region</b>   | Africa   Asia   Europe   North America   South America   Oceania  |
| <b>4. Area (km<sup>2</sup>)</b>  | City area in km <sup>2</sup>  |
| <b>5. Population density (inhab./km<sup>2</sup>)</b>   | Population density in inhabitants per square kilometre  |
| <b>6. Population (total)</b>   | Total population of the city  |
| <b>7. Population (classification)</b>  | Megacity (> 10.000.000 inhabitants)   Very Large City (500.000 – 10.000.000 inhabitants)   Large City (250.000 – 500.000 inhabitants)   Medium City (100.000 – 250.000 inhabitants)   Small City (<100.000 inhabitants) |
| <b>8. Modal split</b>  |   |
| Walking   Cycling   Public transport   Private car   | %   |
| <b>9. Size of cycling network</b>  | Cycling infrastructure kilometres per 1.000 inhabitants   |
| <b>10. Ration of cycle infrastructure and main roads</b>   | Cycling infrastructure kilometres per kilometre of main roads ratio   |
| <b>11. Public transport availability</b>   |   |
| Rail-based public transport   Bus-based public transport   | Yes / No  |
| <b>12. Accessibility to facilities and services in 15 min by walking / cycling / public transport / driving</b>  |   |
| Other people (population)   Schools (pre-university education)   Hospitals   Food shops   Restaurants   Recreation (tourist and cultural attractions)   Green spaces | number  |

### 2.1.3 Developing the 15mC practices typology

In our study, we've developed a classification system for the 15-minute City concept using the data collected at the practice level. Due to the sizeable number of criteria (24 in total), we have selected a more restricted number based on the following rules:

- how much the practice was aligned with the 15-minute City concept
- ensuring broad city coverage despite data limitations covered in our sample
- inclusion of only the criteria identified in the statistical cluster analysis<sup>3</sup> as being statistically significant

The 15mC typology was developed using five dimensions derived from three criteria (Table 3). These were chosen based on a high level of data availability and their ability to make meaningful distinctions between cities. The first dimension distinguishes cities based on their use of radical practices. The second dimension categorizes cities by the number of key areas covered by their practices. The remaining three dimensions capture different aspects of the practice diversity criterion (see Table 1):

- the first identifies the cities that have practices connected to walking and/or cycling
- the second dimension assesses the practices connected to the three major groups of keywords (transportation, land use and planning process)
- the last dimension evaluates the diversity of practices

**Table 3:** Dimensions used to build the 15mC practices typology

| Five dimensions          |  | Range |
|--------------------------|--|-------|
| Radical practices        |  | 0/1   |
| Key Areas of Action (KA) |  | 0-4   |
| Practice diversity       | Practices connected to either walking or cycling                       | 0/1   |
|                          | Practices connected to transport, land use and/or the planning process | 0-3   |
|                          | Diversity of practices   | 0-36  |

<sup>3</sup>We used hierarchical and K-means cluster analyses to, respectively, provide a range on the number of possible typologies and identify the criteria that significantly (statistically) contribute to the clusters' solution (i.e., the typologies).

## 2.2 Definitions of the 15mC

Before delving into the practices and cities outlined in the study, it's essential to highlight the numerous adaptations of the 15mC concept and related concepts identified during our investigation. The most prevalent concept among our cities is the 15-minute City, followed by the 15-minute Neighbourhoods and the 20-minute Neighbourhoods, which collectively represent over half of all cases (see Table 4). Variations like the 10-minute City, 20-minute City, the 10-minute Neighbourhood and other similar combinations are observed globally. Additionally, China has long embraced the idea through its 15-minute Community Life Circles/Cycles. Related concepts like Superblocks and Complete Neighbourhoods/Communities were also included in this study but are less spread globally, aside from a few local adaptations like the Nordic Superblocks in Finland.



Many terminologies and interpretations exist for strategies in line with the 15-minute City, most of them focusing on access to essential destinations within short travel times.

**Table 4:** Collected concepts and related number of cities

| Name of the concept                   | Number of cases |
|---------------------------------------|-----------------|
| 15-minute City                        | 27              |
| 15-minute Neighbourhoods              | 11              |
| 20-minute Neighbourhoods              | 10              |
| 10-minute City                        | 6               |
| 10-minute Neighbourhoods              | 4               |
| 20-minute City                        | 4               |
| Complete Neighbourhoods               | 4               |
| Superblock                            | 4               |
| 1-minute City                         | 3               |
| 10-minute Town                        | 2               |
| 15-minute Community Life Circle/Cycle | 2               |
| Complete Communities                  | 2               |
| Liveable Neighbourhoods               | 2               |
| Proximity City                        | 2               |
| 15-minute Region                      | 1               |
| 20-minute Town                        | 1               |
| 45-minute City                        | 1               |
| Community of Communities              | 1               |
| Healthy Neighbourhoods                | 1               |
| Walkable Neighbourhoods               | 1               |
| Walking City                          | 1               |
| Other                                 | 2               |



Of the 94 cities identified by this study, the majority were European, highlighting the continent's commitment to sustainable transportation.

Given this multitude of concepts, the question arises whether they are used in the same manner by the different administrations and share common lines of thinking. In most cases, definitions are used that emphasize the access to essential destinations within a given travel time by walking, cycling, rolling and sometimes also public transport. An illustrative example is Melbourne's definition of its 20-minute Neighbourhoods as "giving people the ability to meet most of their everyday needs within a 20-minute walk, cycle or local public transport trip of their home" (The State of Victoria Department of Environment Land Water and Planning, 2017, p. 98). Sometimes, this type of definition is extended by adding comfort criteria to the trip such as in Charlotte where all inhabitants "should have access to essential amenities, goods, and services within a comfortable and tree-shaded 10-minute walk, bike, or transit trip by 2040" (City of Charlotte, 2021, p. 34).

Complete Neighbourhoods/Communities share similarities with the 15mC but often prioritize social aspects, aiming for equity and community cohesion, as seen in Houston and Edmonton. While Superblocks also focus on improved community life, they differ from the 15mC by placing an emphasize on actively restricting car access within the block. Nevertheless, we identified shared principles among all these concepts, affirming that our compilation of cities and associated practices addresses a cluster of interconnected ideas that can be examined from a standpoint of shared understanding.

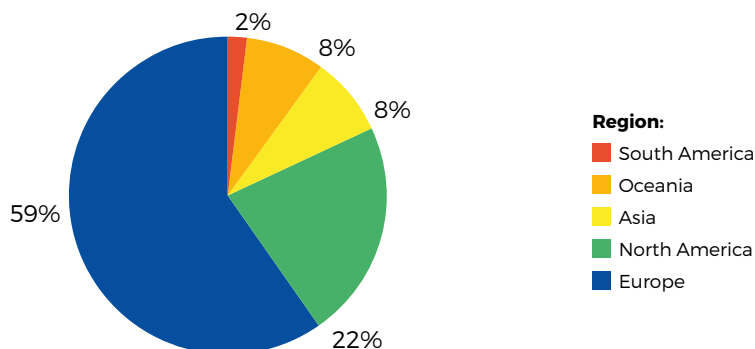
## 2.3 Overview of practices around the world and in Europe

In this section we will provide an overview of the main findings from the mapping activity, detailing the cities and practices connected to the 15mC concept, with a special focus on the dimensions used for the development of the 15mC typology (previously mentioned Table 3).

### 2.3.1 Cities overview

A total of 98 cities<sup>4</sup> were identified as having 15mC practices. Chart 1 provides an overview of cities per region. The majority of cities (58) were identified in Europe. North America follows with 22, Asia and Oceania with 8, and South America with 2 cities.

**Chart 1:** Cities with 15mC practices identified by continent



<sup>4</sup>Four cases do not refer to cities, but for the sake of simplicity they are still grouped together. Specifically, two are national strategies (China and Scotland), and two pertain to regional plans (the Southern Region of Ireland and the Punjab Province in Pakistan).

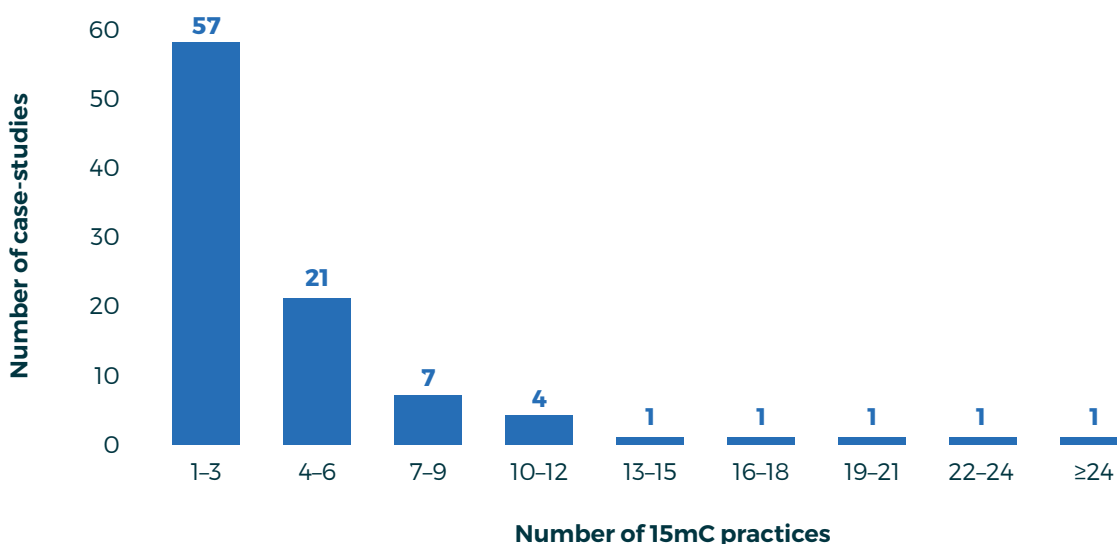
In terms of the scale of implementation, 9 cities have 15mC practices at both the city and neighbourhood levels. 40 cases have implemented 15mC practices exclusively at the city level, and 18 have practices in place in a limited number of neighbourhoods. Details on the implementation scale of 15mC practices are not available for the remaining 31 cities.

### 2.3.2 15mC practices overview

In our review, we found a total of 414 practices associated with the 98 cities (Chart 2). For most of the cities (57), we found one to three 15mC practices, with only a few having 10 or more practices (9). The cities with the largest number of identified practices are Barcelona (34), followed by Melbourne (24), and Paris (19).

Implemented 15mC practices were identified for 13 of the cities, with an additional 50 having practices in the planning stage. Information on the implementation status of 15mC practices was not found for 35 cities.

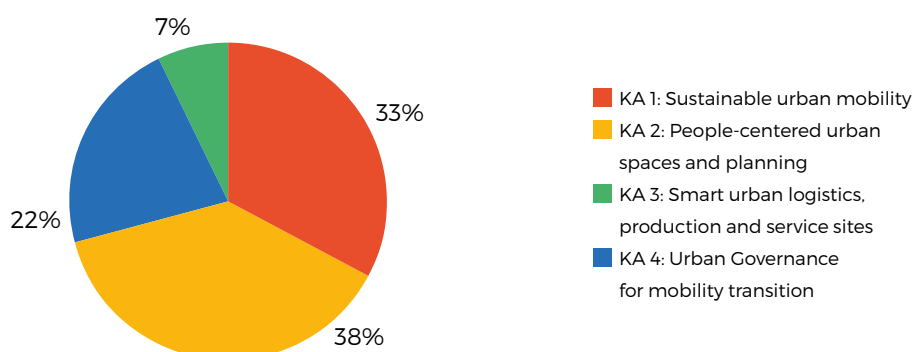
Chart 2: Number of 15mC practices per city



### 2.3.3 15mC practices: classification by Key Areas of Action

The classification of the practices according to the four Key Areas of Action (KA) of DUT is provided in Chart 3.

Chart 3: 15mC practices classified according to DUT's 4 Key Areas of Action (KA)



Most practices (38%) are associated with the second key area of action (KA 2), focused on people-centred urban spaces and planning. These practices include the reallocation of road space from the car to green areas and public spaces, the development of multi-purpose buildings/spaces (see [Practice Showcase 01](#)) and neighbourhoods with mixed land use.

#### **Practice Showcase 01: Paris, France**

One of the plans of Paris' Ville de quart d'heure (15-Minute City) is to convert buildings that traditionally have only one purpose into multi-purpose buildings. Examples include housing mixed with local businesses (e.g., apartment blocks with retail on the ground floor), entertainment facilities containing medical centres, and offices with educational buildings. The most emblematic example of the city's multi-purpose building strategy is the Les course Oasis initiative, through which school buildings and playgrounds are open to the public out of school times. As a result, the utility of existing facilities is increased, in this case providing the community with new green and cool places as well as sports facilities.

The second largest share of practices (33%) is associated with the first key area (KA 1). These are linked to the promotion of sustainable urban mobility, encompassing initiatives like implementing dedicated pedestrian infrastructure (e.g., sidewalks) and cycling facilities (e.g., bike lanes, bike parking), enhancing public transport (e.g., free public transport for specific demographics or the entire population) or the establishment of mobility hubs that integrate various sustainable transport modes at a single location (see [Practice Showcase 02](#)).

#### **Practice Showcase 02: Portland, USA**

Under the Complete Neighborhood (CN) strategy, the city of Portland is heavily investing in sustainable modes of transport including the development of mobility hubs with frequent PT services, connected to safe walking and cycling routes, linking the neighbourhood centres to employment areas and the city centre. These safe walking and cycling routes are part of the "neighborhood greenways", a network of walking and cycling routes (sidewalks, bike lanes, greenway trails and bike-friendly green streets) that connect the essential activities in the neighbourhoods. The new routes are mainly built by reallocating road space, with, for example, during the COVID-19 pandemic more than 90 miles of car lanes being transformed in greenways (which also includes tree planting).

Practices associated with the KA 4, urban governance for mobility transition, represent the third largest share (22%). In here, we find examples of practices connected to public engagement such as participatory planning processes, street experiments using tactical urbanism, and the implementation of pilot projects (see [Practice Showcase 03](#)).

### Practice Showcase 03: Melbourne, Australia

The implementation of Melbourne's 20-Minute Neighbourhoods strategy commenced with three pilot programs in 2018 in three suburbs: Croydon South, Sunshine West, and Strathmore. The city's initial steps involved conducting on-site walkability assessments within these pilot areas to pinpoint walking infrastructure needs. This process prompted the city to update its plans, specifically addressing safer road designs for older pedestrians. Melbourne also adopted a participatory planning approach by actively involving local councils. During this engagement, residents' suggestions were gathered to better understand their concerns. Subsequently, based on this feedback, the city developed "activation plans" for the three pilots, incorporating initiatives driven by the local community.



KA 3 represents the smallest share of practices with only 7%. These include practices connected to promoting local businesses at the neighbourhood level, decentralization of employment, and development of sustainable urban logistics, for instance, using cargo-bikes or electric vehicles for last mile deliveries (see **Practice Showcase 04**).

The issues of urban logistics and production sites are often overlooked in 15-minute City strategies.

### Practice Showcase 04: Grasbrook neighbourhood (Hamburg), Germany

As part of its 10-Minuten-Quartier/Stadtteil (10-Minute Neighbourhood) strategy, the City of Hamburg plans to implement a unique approach to manage delivery traffic in the newly planned neighbourhood of Grasbrook. The policy mandates that all deliveries within the neighbourhood be conducted through cargo bikes or via underground tunnels located in designated loading zones on the terp floors.

Lastly, Figure 1 provides a map representation of the number of practices divided according to the DUT's 4 KA for the European cities. Six cities stand out: Barcelona, Paris, Hamburg, Valencia, Edinburgh and Milan as all have 10 or more identified 15mC practices. Except for Hamburg, which only has 15mC practices identified for 3 KA, these are the only European cities to have examples of practices connected to all 4 KA.

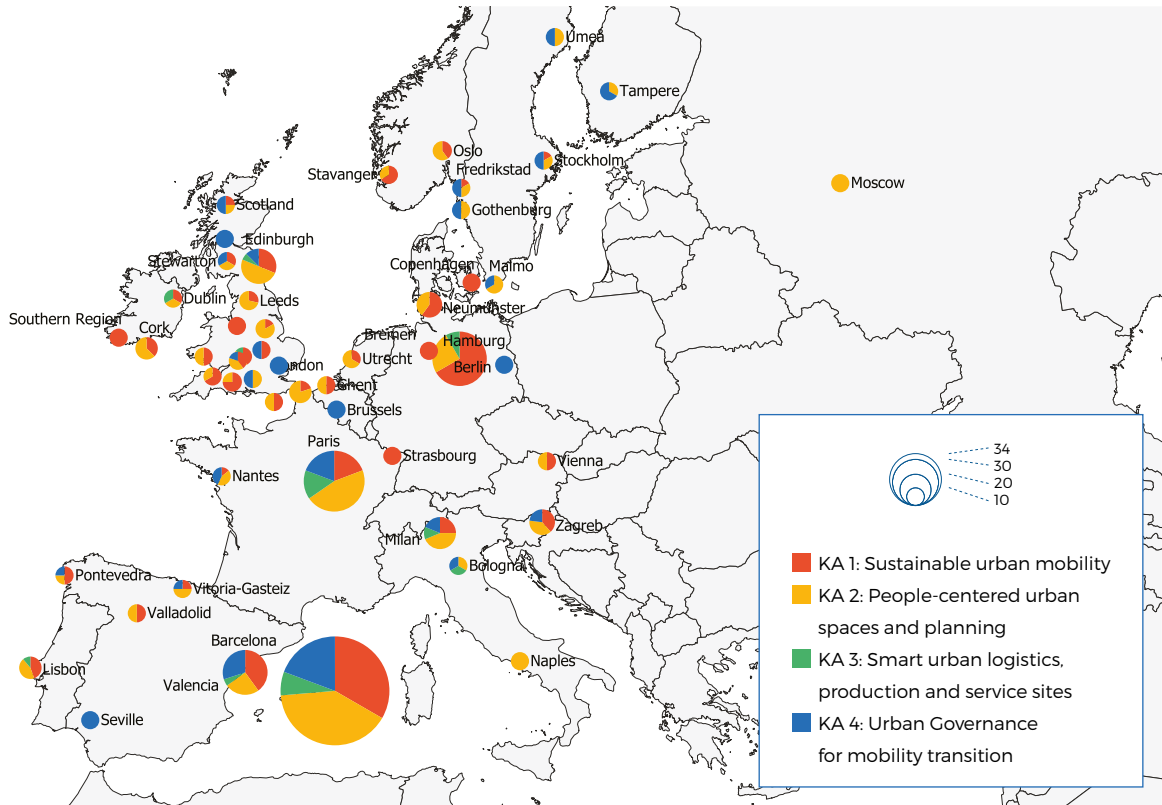


Fig. 1: Classification of the 15mC practices in each European city according to the DUT's 4 KA.  
 Note: The bigger the circle the bigger the number of practices associated to the city

### 2.3.4 15mC Practices: Classification by Radical Innovation

The 15mC practices were categorized as radical when they differed significantly from conventional practices, reflecting a fundamental shift in line with systemic change theory. This indicates that these practices not only deviate from the norm but also have the potential to catalyse transformative changes within the system. We have identified 46 practices connected to 23 cities as radical, with 15 of them located in Europe (Figure 2). These include extensive road space reallocations such as Barcelona's Superblocks (**Practice Showcase 05**) and Pontevedra's car free city centre, the multipurpose buildings strategy of Paris, involvement of citizens in the planning process (**Practice Showcase 06**) as well as the use of innovative indicators and tools for assessing the progress of the strategies (**Practice Showcase 07**).





Fig. 2: Cities (red) identified as having radical 15mC practices (Europe)

### Practice Showcase 05: Barcelona's Superblocks, Spain

Superblocks (Supermanzanas / Superillas) consist of merging nine city blocks (3X3), inside of which car traffic is heavily restricted (only for local residential access) and walking and cycling have priority through shared spaces. Through traffic is confined to the outer edges of the superblock. Consequently, a significant share (60-70%) of car road space within the superblock can be repurposed for alternative public uses, including the creation of new squares, green spaces, and the development of walking and cycling infrastructure. This urban model is notable for its scalability, applicable to both new urban developments as well as the revitalization of suburbs and city centres.

### Practice Showcase 06: Neighbourhood audit committees of Brampton, Canada

The city of Brampton (Canada) will conduct audits of its neighbourhoods to determine the requirements for achieving a complete neighbourhood. The audits involve neighbourhood audit committees of residents and business owners working closely with city officials. The neighbourhood audit committees will remain active after plans are adopted to monitor the plan's implementation.

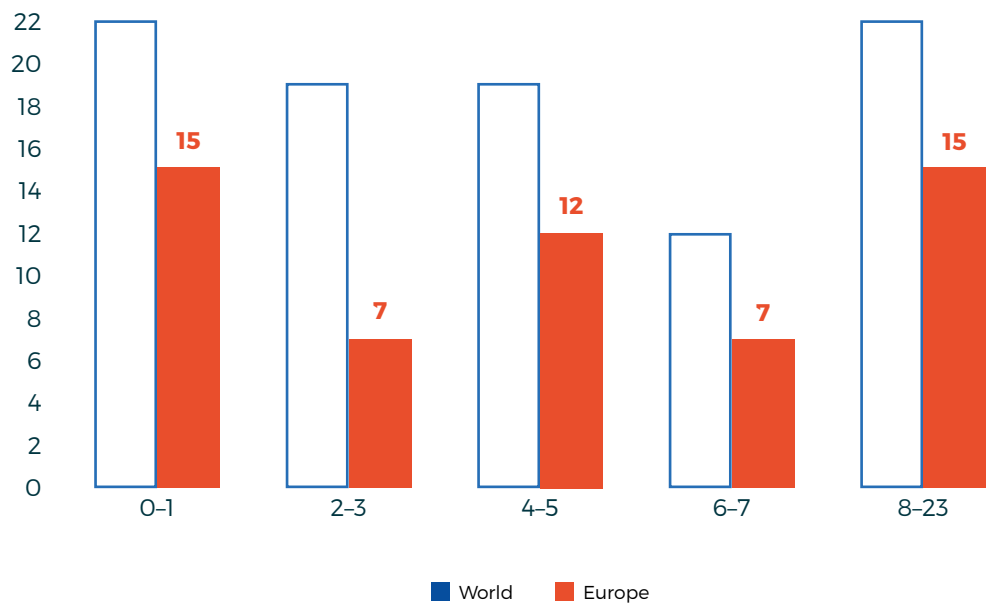
**Practice Showcase 07: Evaluation framework of Edinburgh, Scotland**

Edinburgh uses the Scottish Index of Multiple Deprivation (SIMD) to measure the level of deprivation of the city’s neighbourhoods with respect to seven categories: Income, Employment, Education, Health, Access to services, Crime, and Housing. The scores are used to guide the strategy of implementing the 20-Minute Neighbourhoods.

**2.3.5 15mC practices: Classification by range of diversity**

Our analysis led to the categorization of 414 practices linked to the 15mC concept, utilizing 36 keywords covering transport, land use, and planning processes. This categorization has the aim to show the diversity of the practices collected. In this context, “diversity” refers to the variety and breadth of different practices related to the 15-minute City concept being implemented in various cities around the world. It measures how many distinct aspects of transport, land use, and planning processes are addressed by the practices within each city. Chart 4 represents the diversity of 15mC practices per city worldwide and in Europe.

**Chart 4:** Diversity of 15mC practices per city in the world and in Europe



15mC strategies are quite diverse from highly complex and diversified practice sets to rather limited singular practices.

The figure reveals a wide range of diversity of practices. When a city’s practices cover only one or two keywords, it suggests a narrower focus on specific areas of the 15mC concept. In contrast, cities covering more than a dozen keywords indicate a broader, more comprehensive approach to implementing the 15mC concept, incorporating a wide array of initiatives. The top five cities are Barcelona (23), Melbourne (21), Paris (19), Valencia (17 – see **Practice Showcase 08**) and Zagreb (14). They represent the highest diversity of practices, showcasing their extensive commitment to the 15mC concept through a wide range of actions and policies.

### Practice Showcase 08: Valencia, Spain

The 15-minute City strategy of Valencia presents a comprehensive range of practices associated to 17 distinct keywords<sup>5</sup>. These include, among others:

- Prioritization of walking and cycling in their planning documents
- Improvement of public spaces, walkability, and cycling through the pedestrianization of historic centres and neighbourhood cores
- Urban densification, mixed land use promotion and service/activities allocation by mitigating urban sprawl and providing public services and facilities throughout the city
- Participatory planning involving different civil stakeholders such as neighbours and shopkeepers, namely through participation workshops
- Implementation of pilot projects such as the Natzaret neighbourhood
- Evaluation framework to assess the progress of the strategy, consisting of measuring the share of population with 5-minute or less access time to 11 activities (green space, public transport, elderly care services, education facilities, sports facilities, healthcare facilities, banks and ATMs, cultural facilities, entertainment facilities, and commercial services)

## 2.4 15mC typology through the lens of innovation adoption

Based on the previously mentioned criteria we have classified our cities<sup>6</sup> into different types of 15-minute cities. The number of obtained 15mC types, their characteristics as well as the sizes of each type regarding the number of cities suggest a possible connection to the Diffusion of Innovations Theory (DOI). Specifically, we have found that our sample of 94 cities can be divided into five distinct clusters that vary in size and in characteristics, strongly resembling the five adopter groups of the Diffusion of Innovations Theory (Rogers, 2010)<sup>7</sup>. The 15MC concept, while rooted in longstanding urban planning principles, has evolved into what might be seen as a renewed urban strategy. As such, variations in the rate of its adoption across different cities are to be expected.

To allow the addition of new cities to our 15mC typology in the future we have developed a conceptual clustering framework built based on the minimum values for each one of the 5 dimensions (Table 5).

<sup>5</sup>The specific 17 keywords associated with Valencia are: Transportation (Car restrictions, Construction of cycling lanes/paths, Improvement of cycling, Multimodal strategy, Prioritization of cycling, Prioritization of PT, Prioritization of walking, Sustainable urban logistics, Walkability Improvements); Land use (Affordable housing / Gentrification prevention, Improvement of public spaces, Mixed land use promotion, Service/activities allocation, Urban densification); Planning Process (Evaluation framework, Participatory planning, Pilot projects).

<sup>6</sup>As the 15mC typology was developed for cities, the following cases were excluded: the national strategies of China and Scotland as well as the regional plans of Ireland's Southern Region and Pakistan's Punjab Province.

<sup>7</sup>We have slightly changed the original names of the groups in our report.

**Table 5:** Conceptual clustering framework of the 15mC typology

| Criteria   | C1 – Innovators | C2 – Early Adopters | C3 – Early Majority | C4 – Late Majority | C5 – Aspiring Newcomers |
|--|-----------------|---------------------|---------------------|--------------------|-------------------------|
| Radical / Original practices (0/1)                               | 1               | -                   | -                   | -                  | Remaining cases         |
| Key Areas of Action (0-4)  | 4               | 3                   | 2                   | 1                  |                         |
| Walking & Cycling practices (0/1)                                | 1               | 1                   | 1                   | -                  |                         |
| Transportation, Land use and/or Planning Process practices (0-3) | 3               | 3                   | 1                   | 1                  |                         |
| Walking & Cycling practices (0/1)                                | 18              | 9                   | 3                   | 1                  |                         |

The classification of a city in one of the five 15mC typology is conducted through considering the minimum value of the 5 dimensions in each typology, as follows:

- **C1 – Innovators:** to be an innovator a city needs to have practices 1) considered as radical / original; 2) connected to all 4 DUT’s Key Areas of Action; 3) to either walking or cycling; 4) to the three major groups of keywords (i.e., transportation, land use and planning process); and 5) to at least 18 different keywords
- **C2 – Early Adopters:** a city to be classified as an early adopter needs to at least have practices 1) connected to 3 of the 4 DUT’s Key Areas of Action; 2) to either walking or cycling; 3) to the three major groups of keywords (i.e., transportation, land use and planning process); and 4) to at least 9 different keywords
- **C3 – Early Majority:** the restrictions associated with an early majority city are lower than the first two types, with cities in this typology needing to have practices 1) connected to 2 out of the 4 DUT’s Key Areas of Action; 2) to either walking or cycling; 3) to one of the three major groups of keywords (i.e., transportation, land use and planning process); and 4) to at least 3 different keywords
- **C4 – Late Majority:** the restrictions associated with a late majority city are even lower than the previous types, with cities only needing to have practices 1) connected to 1 of the 4 DUT’s Key Areas of Action; 2) to one of the three major groups of keywords (i.e., transportation, land use and planning process) and 3) to one of the 36 classification keywords
- **C5 – Aspiring Newcomers:** the remaining cities are classified in this typology. In here, we include the cities that even though demonstrated interest in the 15mC concept we were not able to identify virtually no practice being planned or implemented connected to the 15mC.

Chart 5 presents the size of each one of the five 15mC typologies in our sample of 94 cities, while Figure 3 and Figure 4 provide the classification of each city according to the 15mC typologies, respectively, in the world and in Europe. Please note that our proposed 15mC typology is a dynamic classification system, meaning that the classifications assigned to cities represents the status at the time of writing the report. We expect cities to climb the DOI adoption speed ladder as more plans and practices connected to the 15mC are implemented in the cities. Additionally, it's worth noting that the boundaries between categories may be blurred, reflecting the complex and evolving nature of urban development and innovation adoption. Furthermore, it's important to clarify that our 15mC typology isn't intended as an assessment system to evaluate the level of innovation in cities. Instead, it serves as a framework to provide inspiration and learning opportunities from both successful practices and potential pitfalls experienced by cities at different stages of the innovation adoption ladder.



Cities worldwide are at various stages in adopting the 15-minute City, with a few pioneers showcasing comprehensive and innovative strategies.

Chart 5: Classification of the 94 cities according to the five typologies of 15mC (aggregated)

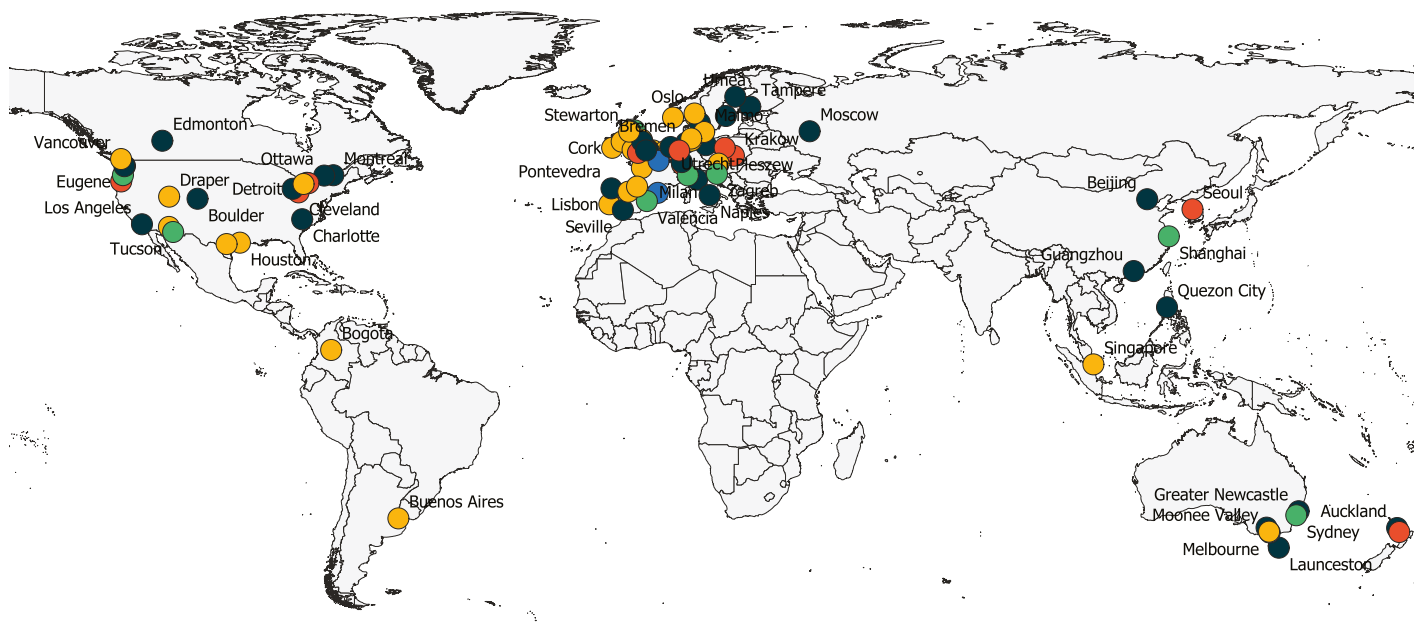
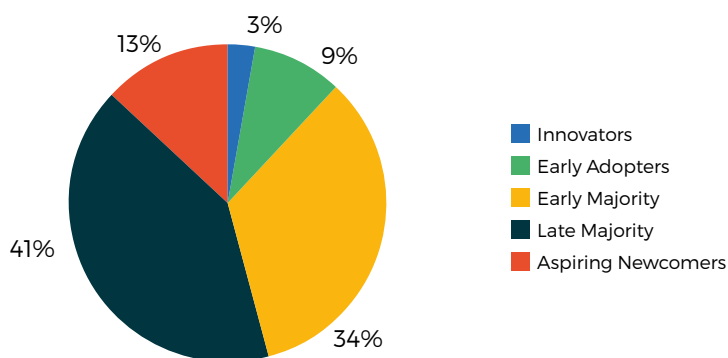


Fig. 3: Classification of the cities according to the five types of 15mC (Worldwide)

## 2. Mapping of 15mC practices

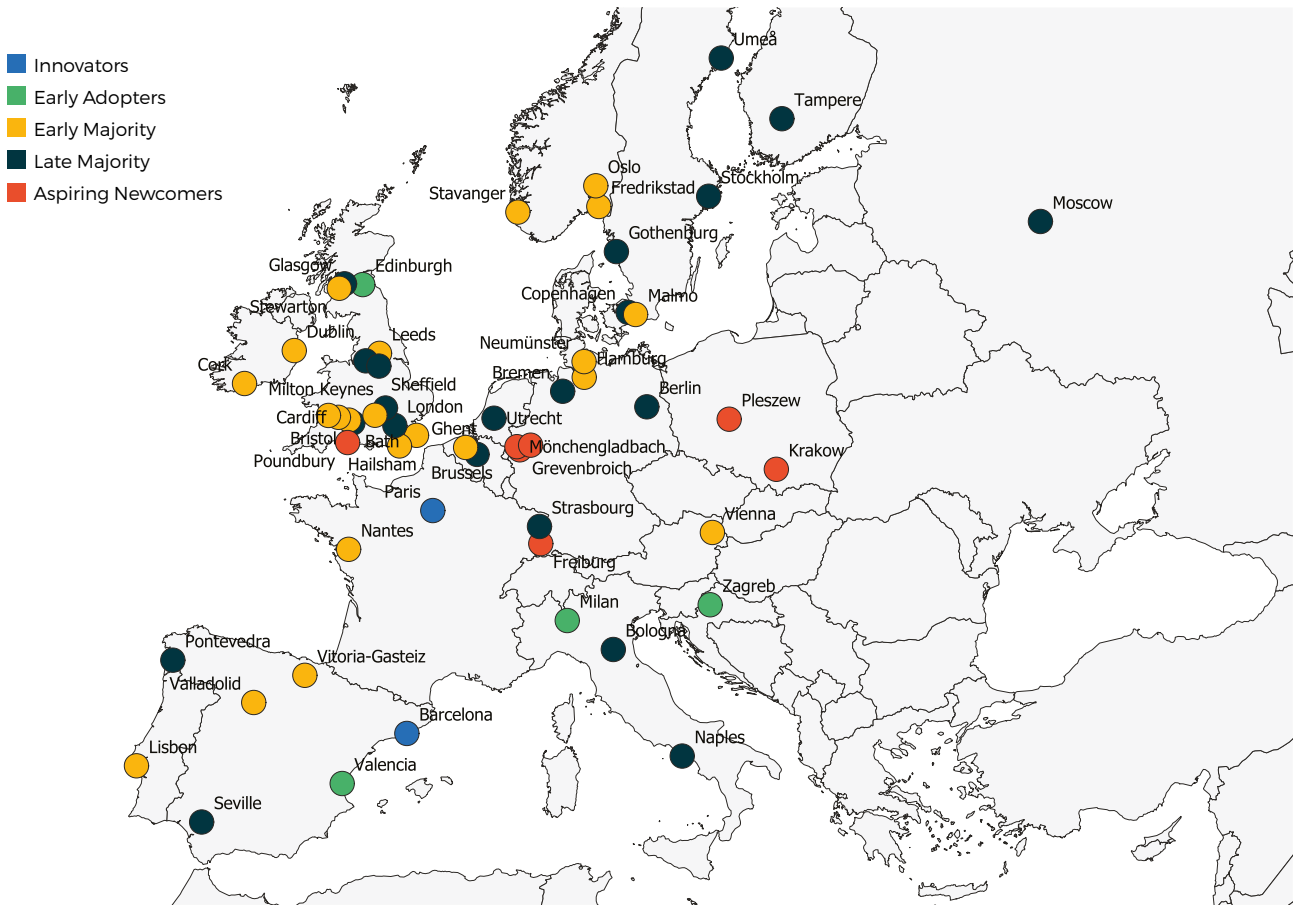


Fig. 4: Classification of the cities according to the five types of 15mC (Europe)

Currently, three cities were classified as **innovators**, specifically Barcelona, Melbourne and Paris (see **Practice Showcase 09**). These were the cities where the 15mC or similar concepts (Barcelona’s Superblocks and Melbourne’s 20-Minute Neighbourhoods) emerged. Each of these cities has developed extensive 15mC strategies, characterized by a wide and varied array of practices that fundamentally differ from prevailing norms. They serve as influential models, inspiring other cities in their urban planning practices.

### Practice Showcase 09: Paris, France

To achieve its Ville de quart d’heure (15-Minute City) vision, Paris has envisioned a comprehensive strategy, focusing on 4 pillars:

1. **Development of mixed-use neighbourhoods** through multipurpose buildings such as the “Les course Oasis” initiative (see **Practice Showcase 01**), converting office space into housing, promoting co-living to reduce housing costs (“creating social links between generations”), and providing a decentralised financing tool to foster the development of a mix of local amenities such as schools, squares, streets, places for culture and sports, commerce, and medical centres.

2. **Redistribution of public space**, by converting car lanes and parking into walking and cycling streets as well as new public and green spaces. This includes the implementation of “children’s roads” next to schools, where motor traffic is prohibited during the school opening and closing hours.
3. **Support of the local economy**, to foster the self-sufficiency of the neighbourhood (and the households). This includes initiatives such as “eat and buy local”, promoting the consumption of products produced in the “basin” of Paris by establishing cooperatives, and “Agri-Paris”, which acquires products from local producers and distributes them directly to residents and neighbourhood markets. Another initiative “Made in Paris” is aimed at helping small businesses. Paris has also implemented several programs for improving literacy and employment rates (e.g., second chance schools and flexible facilities such as babysitting) aimed at low-income residents to prepare for local jobs in the circular economy (e.g., reuse and item repair, accounting, etc.).
4. **Citizen engagement**, namely through allocating 5% of the city’s total budget to a “participatory budget” (Budget participatif de la ville de Paris), on which citizens propose measures to be implemented in their neighbourhoods. Since 2014, 2428 projects have been implemented through the program.

As **early adopters** we have 8 cities, specifically Edinburgh, Milan (see **Practice Showcase 10**), Valencia (see **Practice Showcase 08**), Portland, Shanghai, Sydney, Tucson, and Zagreb. These cities boast extensive and well-developed 15mC strategies, although not as all-encompassing as those of the innovators. Their strategies encompass practices related to both sustainable transport, where walking and cycling take precedence, and land use. Additionally, these cities typically possess effective evaluation frameworks to gauge the advancement of their 15mC strategies.

### Practice Showcase 10: Milan, Italy

Milan’s 15mC strategy is based on two main pillars:

1. **Reorganization of its neighbourhoods** by promoting decentralized services. This includes providing more space for local shops instead of shopping districts and large malls; developing local medical services; and the “Milan School Oasis” initiative. Through the initiative, schools are open to the public as green spaces, and supplementary educational activities are organized.
2. **Redistribution of public space** through the “Open Piazza in Every Neighbourhood” initiative, which aims to construct new open public spaces – piazzas – using tactical urbanism designs. Another initiative is “Open Streets”, which consists of a series of measures aimed at repurposing car space for cycling, walking, and outdoor dining. Notably, this involved the construction of 22 km of temporary cycling lanes and the introduction of a 30 km/h city speed limit on 60% of the road network. Both initiatives were implemented through a participatory planning approach, with citizens able to suggest locations for the interventions.

32 cities fall into the category of the **early majority**, representing a broad spectrum of contexts ranging from capitals such as Lisbon to small cities such as Fredrikstad in Norway (see **Practice Showcase 11**). These cities have 15mC practices, but their strategies currently lack the comprehensive coverage of all essential elements of a 15-minute City. For instance, some strategies concentrate solely on the transportation system, neglecting the significance of practices associated with land use or the planning process.

#### Practice Showcase 11: Fredrikstad, Norway

This small city, with a population of less than 100 000 inhabitants, aims to develop a compact urban structure, where all residents have access to their everyday activities within a walking distance of about 1 km. To achieve this vision, the city has defined the following four main objectives:

1. Strengthen and prioritise the general and specific qualities in urban life accounting
2. Improve walking and cycling infrastructure
3. Establish methods for participatory planning in the urban space development
4. Use urban life accounting as a strategic tool in the continuing work of public space development

Among others, the city aims at creating an “urban laboratory” in the city centre to function as a meeting point for dialogue and exchange of ideas between the city and its residents.

The largest share of cities belongs to the **late majority** category with 39 cities. Like in the early majority, this typology has a wide diversity of contexts, with their 15mC strategies being even less developed than their early majority counterparts, in some cases constituted by only one or two practices.

Lastly, we have the **aspiring newcomers** category constituted by 12 cities. These cities have indicated their interest in the 15-minute city concept but have not yet formulated their strategies and practices.

## 2.5 References

City of Charlotte (2021) Charlotte Future 2040 Comprehensive Plan. [Link](#)

Rogers, E. M. (2010) Diffusion of Innovations. 4th edn. Simon and Schuster.

The State of Victoria Department of Environment Land Water and Planning (2017) Metropolitan planning strategy. [Link](#)



## 3. Deep Dives



## 3. Deep Dives

### 3.1 Goal and methodology of the deep dives

The goal of the deep dives is to address the nuanced nature of the 15mC's implementation in different contexts as well as a better understanding of the practices pursued. While the mapping exercise provided quantitative insights, the complexity of urban development and the interplay of various factors necessitates a more profound understanding. The deep dives should offer inspiration and lessons for other cities looking to implement the 15-minute City in their own contexts. For this, the 15mC practices of six European cities were analysed and are presented below.

Our methodology integrated an in-depth study of local plans and laws with semi-structured interviews. This approach was designed to capture the complexities of urban development and the varied factors influencing the 15mC's adoption. Local regulations and policy documents were analysed based on a set of criteria, including their definition of the 15mC, adoption year, vision, strategies, policies/actions, implementation timelines, funding mechanisms, and monitoring processes.

A total of 10 semi-structured interviews were conducted to gather insights from experts actively engaged in practical implementation. The interviews were conducted between November 2023 and March 2024 and spanned an average duration of 45 to 90 minutes. The interviewees, comprising policymakers, urban planners, and practitioners, played pivotal roles in either designing or implementing the 15mC strategy in practical terms. The interviews covered six main areas:

- 1. Initial Scoping:** insights into the respondent's role and the objectives of the 15mC concept. This sets the context for understanding the expert's perspective on the concept's goals and the ideation process.
- 2. Details of the Intervention:** the specifics of the 15mC practices being implemented, covering DUT's four key areas: sustainable urban mobility, people-centred urban spaces, smart urban logistics, and governance for mobility transitions. This section seeks detailed explanations of the strategies and interventions to implement the 15mC concept.
- 3. Implementation:** details on the implementation and relative barriers faced while executing the 15mC measures that may impede the success of these initiatives.
- 4. Monitoring and Assessment:** methodologies used to evaluate the effectiveness of the 15mC measures, including tools and metrics for measuring impact.

5. **Systemic Change:** the transformative potential of the 15mC practices, exploring whether they represent a radical change, their feasibility, strategic implications, and their role in addressing societal challenges for long-term change.
6. **Final Questions:** unresolved issues or research needs for implementing the 15mC concept and advice for other cities considering its adoption.

## 3.2 Overview of selected case studies of the deep dives

Six European cities were selected from those identified during the mapping phase with the goal of ensuring a diverse range of experiences in the deep dives. The selection criteria included the population, implementation phase, and geographical distribution.

**Table 6:** Overview of selected case studies analysed in the deep dives

| Title            | 15mC concept            | Population<br>(Source: Eurostat 2023) |
|------------------|-------------------------|---------------------------------------|
| <b>Bologna</b>   | Proximity Ecosystems    | 390,518                               |
| <b>Edinburgh</b> | 20-minute neighbourhood | 526,470                               |
| <b>Chent</b>     | no dedicated concept    | 265,086                               |
| <b>Lisbon</b>    | “Há Vida No Meu Bairro” | 548,703                               |
| <b>Paris</b>     | 15-minute City          | 2,102,650                             |
| <b>Vienna</b>    | 15-minute City          | 2,002,821                             |

## 3.3 Results of the Deep Dives

The presentation of the Deep Dive results follows a systematic and thematic approach. This structure is designed to offer a comprehensive overview of each case study unique adaptation of the 15mC concept, focusing on conceptual foundations, practical applications, evaluation frameworks, successes, and challenges. For each city analysed, we reported:

- **Concept and goals:** This section establishes the city’s interpretation and goals within the 15mC framework, detailing how the concept has been interpreted and aligned with local historical, cultural, and legal contexts.

- **Overview of practices:** It provides examples of the 15mC practices implemented or planned with the aim of showcasing concrete examples of how the city applies 15mC principles, from mobility solutions to the creation of communal spaces. For each practice, we identified the specific Key Area (KA) to which the intervention corresponds.
- **Implementation and monitoring:** This section focuses on the methods used to evaluate the impact of 15mC interventions. This might include using surveys, observational studies, interviews, workshops, and technological tools for data collection.
- **Key Lessons – strengths:** This section highlights the strengths and successful outcomes of the city's 15mC implementation. The aim is to underscore what works well, offering insights into the city's achievements and inspiring future applications in different contexts.
- **Key lessons – challenges:** This part outlines the main challenges, including issues related to innovation and resource allocation, interdisciplinary action, financial and technical constraints, administrative structures, and public awareness. This assessment helps identify areas for improvement and provides lessons for other cities considering similar initiatives.
- **Main references:** Lastly, important policy documents are listed to make it easier for the reader to find further material on the presented concepts and practices.

### 3.3.1 Bologna

#### 15mC concept and goals



Bologna's "proximity ecosystem" model transforms neighborhoods into networks of communities with essential services and spaces, ensuring walkable access for all residents.

Bologna's approach to creating a city where essential services and needs are within a short distance from residents is rooted in its historical and cultural context. Bologna's cultural fabric is characterized by a strong civic sense and a rich tradition of participation in the commons. This cultural backdrop has been pivotal in shaping the city's implementation of the 15mC concept, enabling a participatory governance model that leverages the community's inherent desire to contribute to the common good. Unlike the typical 15mC model focused on quantifiable metrics of distance and time, Bologna's strategy emphasizes service decentralization and community engagement, which resonate with the local strategies identified in the Municipal General Plan (PUG) on meeting the needs of the territory through decentralization.

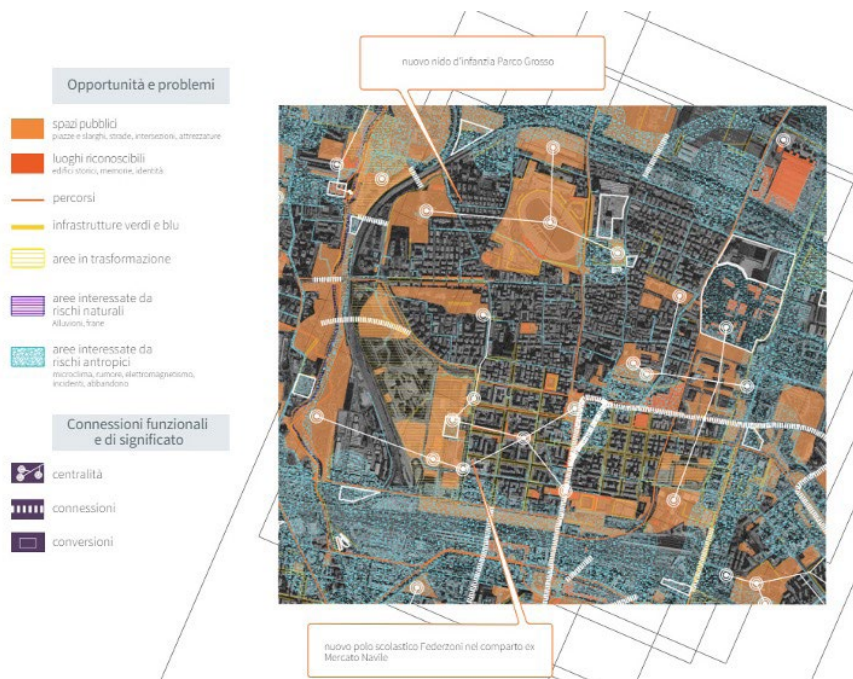


Fig. 5: The Bolognina Local Strategy: an example of proximity interventions embedded in the PUG municipal plan across 24 identified local City Areas (Source: Comune di Bologna, 2021)

This strategy is informed by the city’s governance developments since 2014, with the introduction of the first “Common Goods Regulation” in Italy and the birth of the “Collaboration pacts”. This was later supplemented by the preparation of the “Neighbourhoods Plan”: a tool that will allow the Municipality and citizens to manage and interpret policies, projects, and construction sites by considering citizens’ needs and proposals, informing and involving citizens area by area. Informed by the Emilia Romagna Urban Planning Regional Laws focused on territorial needs, Bologna’s legal and cultural backdrop brings up a deep sense of ownership and participation among its citizens. This process has facilitated the emergence of social infrastructures like schools, and neighbourhood houses as spaces for active citizen engagement, the development of new professional roles and the establishment of bottom-up governance processes.

Many interventions were implemented already long before the term “15-Minute City” was coined. This explains why the city does not explicitly use this term to describe practices already in place.

**Overview on 15mC practices implemented/planned**

Bologna’s application of the 15mC principles includes several concrete examples that showcase the city’s commitment to sustainability, community engagement, and service decentralisation and cover the four Key Areas of intervention, with a prevalence on the governance and participation aspects.

**KAI: Bologna Città 30**

As the first major Italian city to embrace the ‘City 30’ initiative, Bologna encapsulates the 15-minute City concept by fostering a safer, more sustainable urban environment. This initiative reduces speed limits to 30 km/h throughout the city, enhancing safety and comfort for all residents. It complements the 15-Minute City’s vision by prioritising pedestrian-friendly spaces, cycling infrastructure, and

green areas, ensuring essential services and daily needs are accessible within a short, safe walk or bike ride, and promoting a healthier, more connected urban life.

#### **KA2: New local public spaces**

Since 2020, the local government has been supporting a program for the widespread creation of pedestrian, safe, habitable, and playable areas in front of schools. This initiative transforms the areas surrounding schools into car-free zones, prioritising the safety and well-being of children. Therefore, it contributes to the increase and dissemination of nearby public spaces, putting people, children, and the environment at the centre. The program aims to implement temporary urban transformations through tactical urban planning as well as permanent transformations and new infrastructure works.

#### **KA2: Le Case die Quartiere (The Neighbourhood Houses)**

In the 1970s, 33 centres dedicated to the elderly were established throughout the municipal area, leading to the creation of Neighbourhood Houses. The purpose of these centres was reevaluated in 2019 when the local government decided to transform them into community-focused hubs that offer supplementary services beyond what the municipality provides. This revitalisation emphasised community-led management, the development of mutual aid networks, and support targeted at various demographic groups, including families, young people, and seniors. By 2022, with a substantial investment of 500 thousand euros, these centres had been rebranded and enhanced to function as modern, inclusive civic platforms. They now facilitate a range of activities aimed at fostering well-being and encouraging connections across different generations and cultural backgrounds (Comune di Bologna, 2022).

#### **KA3: Consegne etiche (Ethical Deliveries)**

Ethical Deliveries is a home delivery cooperative platform for local merchants, delivery people, citizens, and the environment. The project was born in 2020, during the toughest phase of the pandemic. Following the principles of cooperation through a co-design process with merchants, delivery people, trade associations, entrepreneurs, and researchers, it has clear pillars: a fair salary for riders, vehicles that minimise environmental impact, and a more direct relationship with small traders.

#### **KA4: Agenti di Prossimità (Proximity Agents)**

Recognising the importance of direct engagement with citizens, Bologna, through the Foundation for Urban Innovation (FIU), has introduced the role of Proximity Agents. These individuals work closely with local communities, facilitating dialogue and cooperation between the city administration and its residents. This initiative exemplifies Bologna's innovative approach to governance, ensuring that urban planning and services reflect the actual needs and desires of the community. The six Proximity agents, one per each neighbourhood, work in coordination with the Networks and Community Work Offices of the neighbourhoods, organising meetings, workshops, and focus groups, establishing relationships with communities and citizens, and enhancing existing civic networks and civic spaces, starting from libraries and the Neighbourhood Houses. The activities concern places in transformation (e.g., the use of buildings or projects on public space) and issues of citizen interest (e.g., mobility, air quality, management of public spaces, etc.).

#### KA4: Participatory Budget

Since 2017, the Participatory Budget has been a tool of direct democracy that empowers citizens to report, design, and vote on proposals for their neighbourhood. The most voted ideas and projects are then financed and implemented. The goal of the Participatory Budget is to test new democratic practices by using digital tools, understanding the territorial needs, bringing out bottom-up proposals. Citizens are involved in the co-design of public policy actions and in the direct vote on proposals to be financed and implemented in the municipal territory (including non-resident citizens and people over 16 years of age). Since 2017, 53,179 votes have been collected for 422 proposals concerning projects dedicated to public space and priority actions in the neighbourhoods.

#### KA4: Week of the Mayor and of the Council in the Neighbourhood

Since 2022, the Mayor and the City Council have decided to test a new work practice by moving the Mayor's Office to one of the six Bologna Neighbourhoods for one week per month. The objective of this initiative is to practice a neighbourhood approach, meeting communities, companies, operators, and citizens of all age in the places where they live and work daily.

#### Implementation and monitoring

The monitoring phase includes some technical tools but, more importantly, is part of the ongoing dialogue with communities and various levels of administrative governance. The more 'technical' evaluation framework includes the following key components:

- **Surveys and Questionnaires:** Deployed before and after implementing the School Squares, these tools gauge public perception, usage patterns, and satisfaction levels concerning urban interventions. By comparing pre- and post-intervention data, the city can assess shifts in resident attitudes and behaviours.
- **Observational Studies:** This approach involves detailed monitoring of urban spaces to understand how changes in the physical environment affect human activity and mobility. It includes counting pedestrian and cyclist traffic, observing the utilisation of newly developed or renovated public spaces, and tracking the frequency and type of activities occurring in these areas.
- **Interviews and Workshops:** Engaging directly with the community through structured interviews and participatory workshops allows for collecting qualitative insights. These interactions offer a deeper understanding of the community's needs, aspirations, and responses to urban transformations.
- **Technological Monitoring Tools:** The use of technology, such as interactive models and possibly sensor data, helps in collecting real-time information about urban dynamics. This could include traffic flow data, environmental quality indicators, and other relevant metrics.



*Fig. 6: A public debate in Bologna as part of the continuous participation process at the local scale in the Neighborhood Labs - Laboratori di Quartiere (Source: Comune di Bologna, 2022)*

**Key lessons: strengths**

Bologna's approach showed numerous strengths, particularly regarding governance and citizen participation:

- **The proximity ecosystem:** Bologna's approach sees the neighbourhood as "proximity ecosystem", a network of communities and closely interconnected services and spaces designed to ensure that essential needs and services are within a short, walkable distance for all residents. This ecosystem emphasises sustainable mobility, access to green spaces, and the availability of cultural, educational, and healthcare services close to home. The goal is to create a city where the daily necessities of life are accessible to everyone, and everyone has a key role in contributing to the change.
- **Listening to citizens' needs:** Central to Bologna's urban strategy is a deep commitment to listening to the needs of its citizens. The city employs a variety of tools and forums for public consultation, from town hall meetings and online surveys to participatory budgeting processes. This open dialogue ensures that urban development projects are responsive to the community's desires and concerns, creating spaces that reflect the collective aspirations of Bologna's residents. By prioritising citizen feedback, Bologna builds a more inclusive and dynamic urban environment.
- **The participatory budget and the proximity agents:** Innovative to Bologna's model is the implementation of a "proximity budget", a dedicated fund for projects that directly enhance the local quality of life within neighbourhoods. This budget supports initiatives proposed and voted on by residents, ensuring that funding is allocated to projects with strong community backing. Complementing this budget are "proximity agents", individuals who work closely with communities to identify needs, develop projects, and foster a collaborative relationship between the municipality and its citizens.

**Key lessons: challenges and criticalities**

However, we also identified several challenges that need to be considered:

- **Innovation and Resource Allocation:** The introduction of innovative roles such as "agents of proximity" represent new endeavours that require resources not typically allocated within the standard structure of city administration. These efforts involve multidisciplinary teams working closely with local communities, necessitating additional financial and human resources.
- **Interdisciplinary and Synergistic Action:** The necessity for interdisciplinary technical structures that facilitate synergistic actions is emphasized. This approach is critical for successfully implementing the 15mC concept but demands significant coordination and resource investment.
- **Financial and Technical Resource Constraints:** A lack of budget and technical resources that can work across various sectors is a major hurdle. This constraint hampers the ability to effectively respond to the ambitions and needs arising from close engagement with local communities.
- **Public Works Orientation of Administrative Actions:** The administrative tendency to focus on public works poses challenges to participatory budgeting processes and the realisation of community expectations. Often, citizens' expectations clash with budget realities, leading to disillusionment regarding what can be achieved with available funds.



- Civic Awareness of Costs: There is a widespread lack of awareness about the cost and, thus, the value of communal goods. This disconnect results in unrealistic expectations about what can be accomplished with a specific budget, leading to disappointment when projects are scoped to realistic proportions.
- Time Constraints and Administrative Structure: The administrative process is perceived as a significant limitation by citizens, with projects taking an average of four years from inception to completion. This slow pace frustrates residents eager to see improvements in their community and may be a particular characteristic of the Italian administrative context.

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Città Metropolitana di Bologna (2019) Piano Urbano della Mobilità Sostenibile. [Link](#)

**3.3.2 Edinburgh**

**15mC concept and goals**

The city of Edinburgh embraces the 15mC idea by implementing a strategy called '20-Minute Neighbourhoods: Living well locally' (The City of Edinburgh Council, 2022). This strategy addresses poverty, health inequalities, climate change, and economic recovery. It is aligned with various city plans, including the 2030 Climate Strategy, Council Business Plan, City Plan 2030, City Mobility Plan, Community Plan 2022-2028, and End Poverty in Edinburgh Delivery Plan 2020-30. The strategy is also in line with the Fourth Scottish National Planning Framework Position Statement which sets out the ambitions to deliver 20-minute neighbourhoods across Scotland. Based on the Scottish National Planning Framework, the City of Edinburgh Council defines them as "liveable, accessible places, with thriving local economies, where people can meet most of their daily needs within a 20-minute round trip" (The City of Edinburgh Council, 2022, p.4).

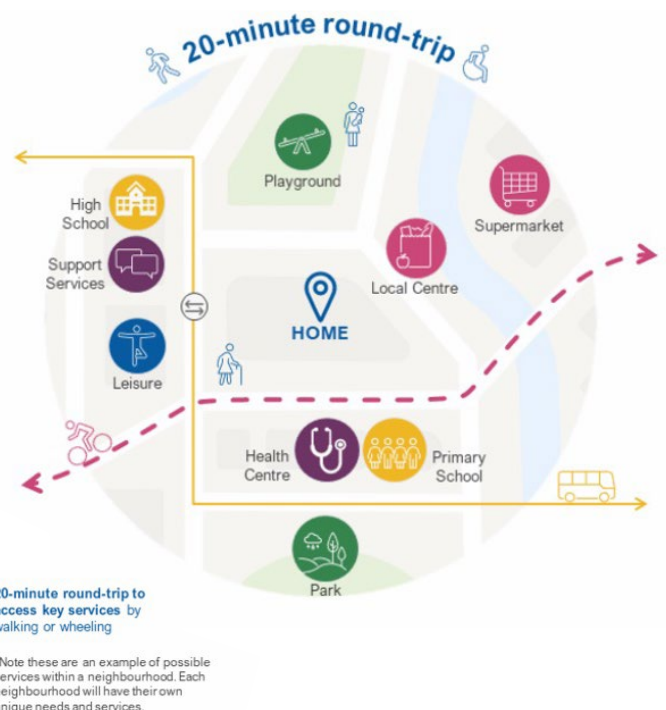


Fig. 7: The 20-minute neighbourhood concept in Edinburgh (Source: City of Edinburgh Council, 2023, p.6)



Tackling social challenges in Edinburgh enhances community well-being and inclusivity, making urban spaces more equitable for all residents.

The impact of a 20-Minute Neighbourhood, however, goes much wider with the higher aspiration of solving poverty in the city depending on residents being able to build trusted relationships with services located in their communities. The strategy's goal is to create good places to live and work, end poverty, and achieve a net-zero city by 2030. It promotes mixed land use, regeneration, and sustainable travel and ensures meaningful community involvement through community planning networks. Additionally, the plan incorporates the place-based approach (The City of Edinburgh Council, 2021). This approach refers specifically to strategies and initiatives designed and implemented with the characteristics, needs, and aspirations of a place and its community in mind. It recognises the unique socio-economic, cultural, environmental, and historical context of each place. The definition and implementation of this strategy reflect a 30-year evolution, emphasising access over mobility and developing a high quality of life through an urban village concept, considering each part of the city as its own village.

### Overview on 15mC practices implemented/planned

#### KA1: Mobility Hubs

The introduction of mobility hubs, as outlined in the City Mobility Plan (CMP, 2021), plays a key role in implementing the 20-Minute Neighbourhood. These hubs are designed to support the community by providing a centralised location where various transport modes, including public transport, bike-share systems, car-share services, and electric vehicle charging stations, converge. Mobility hubs are intended to enhance accessibility and connectivity within the community, making it easier for residents to access goods, services, and employment without needing personal vehicles.

#### KA1: Streets for people

The City Mobility Plan list a series of measures and interventions to create more liveable places by reducing the level of on-street parking in areas well-served by public transport whilst enabling parking for residents and people with mobility difficulties. The measure also includes managing motorised vehicle access and traffic in the city centre, town centres, and residential areas, with the introduction of Low Traffic Neighbourhoods (LTNs). In an LTN, through traffic or 'rat running' is removed from a group of residential streets to create a safer environment for all. This is usually done by reducing the ability of vehicles to travel through certain streets whilst maintaining local access for residents and deliveries. LTNs will support the creation of 20-minute neighbourhoods.

#### KA4: Place Based Investment Fund

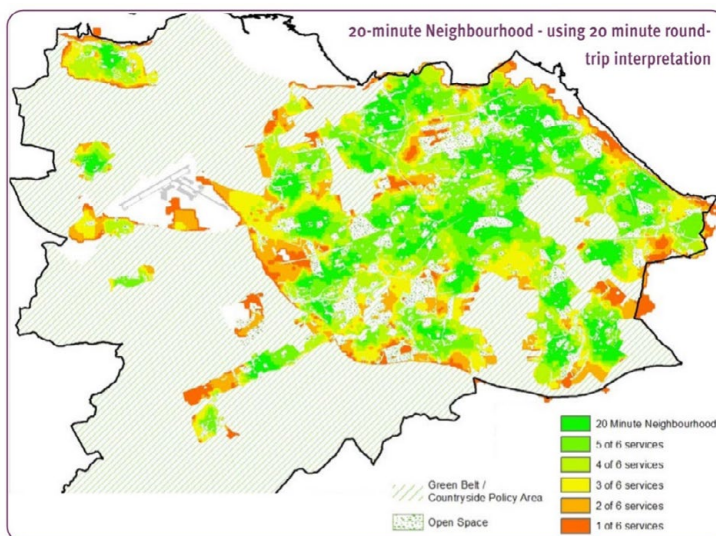
The Scottish Place-Based Investment Program is designed to ensure that investments are tailored to the unique needs of each community, benefiting everyone within. It aims to facilitate the creation of "20-Minute Neighbourhoods" where essential goods and services are within a short walk or bike ride. The program seeks to standardise the process of evaluating investments in communities, encouraging greater collaboration to enhance people's lives. It supports the goals of existing local plans and strategies, such as the Infrastructure Investment Plan and the forthcoming National Planning Framework 4, ensuring investments yield the maximum communal benefit. Furthermore, it aims to fast-track community wealth building, community-led regeneration, and initiatives for improving city and town centres. The program also establishes a unified local framework for achieving goals related to inclusion, climate change, and well-being across urban and rural settings.

**KA4: The Place Standard**

The use of community engagement tools like the Place Standard is well-established in Edinburgh. This tool empowers communities to influence the design of new developments and their integration with existing ones. It facilitates consideration of both the physical and social dimensions of places, highlighting the critical interplay between them. Comprising 14 themes, the Place Standard poses a primary question for each, accompanied by additional prompts. These are designed to spark dialogue, guide evaluations, and pinpoint areas for enhancement.

**Implementation and monitoring**

The implementation and monitoring of the strategy are conceived as an ongoing process. Initiatives begin in areas identified as having the greatest need, employing a detailed plan based on the model of informing, engaging, reflecting, and delivering. Funding support from the Scottish Government plays a crucial role alongside continuous community and partner engagement to ensure that the strategy's execution aligns with local needs and expectations. The ongoing progress and implementation of the 15mC concept are monitored through the 20-minute neighbourhood mapping tool, derived from network analysis, integral to assessing the success of the 15mC in Edinburgh. A 20-minute neighbourhood mapping tool (aligned with 14 different themes, such as public transport, traffic and parking, streets and spaces, work and local economy, social contact, etc.) is used to assess and determine the extent to which different areas of Edinburgh currently adhere to the principles of the 20-minute neighbourhood concept.



**Fig. 8:** The Edinburgh Municipality classified based on the number of services reachable in 20 minutes round-trip (Source: The City of Edinburgh Council, 2021)

**Key lessons: strengths**

The strengths derived from the Edinburgh case study encompass several key aspects:

- Cooperation between land use and transport planning: A shift towards intensified collaboration between the traditionally siloed domains of transport and land use, dismantling historical barriers that impeded coordination.

- **Emphasis on social challenges:** Edinburgh places focuses not just on crafting vibrant physical spaces but also on tackling social challenges within neighbourhoods. In practice this means the creation of social infrastructure, supporting vulnerable populations, and establishing safe spaces for both children and older adults. The goal is to implement policies that consider the whole diverse community.
- **Embedding in different levels and scopes of planning:** Edinburgh's 20-minute neighbourhood strategy is embedded in a long-term, regional, and strategic vision, rather than focusing exclusively on the neighbourhood scale.
- **Putting emphasis on local well-being and the social dynamics:** This approach underscores the crucial role that communities play. This community-centric focus ensures that the development and implementation of the 15mC concept are grounded in the real needs and aspirations of the people who live and work in these areas, fostering a sense of ownership, belonging, and mutual support among community members.
- **A commitment to continuous community involvement:** The utilization of community planning networks provides a robust means of ensuring engagement with groups traditionally excluded from community shaping, including children and older adults, allowing them to access necessary services and facilities. Thus, residents are empowered to actively shape proposals and participate in decision-making processes.
- **Targeting areas marked by higher deprivation indices, showcasing a focus to fair and equitable urban development:** Uniquely, in Edinburgh, the 20-Minute Neighbourhood concept is used as a proactive measure to combat poverty and transport poverty, distinguishing its application from cases where such initiatives primarily enhance liveability in already affluent areas. By prioritising areas with greater needs, Edinburgh's implementation of the 20-minute neighbourhood concept demonstrates a commitment to reducing socioeconomic disparities and promoting a more inclusive urban environment where equitable access to services plays a central role in enhancing the quality of life for all residents, regardless of their economic status.

### **Key lessons: challenges and criticalities**

However, challenges persist within the framework of the Edinburgh case study, including:

- The implementation of 20-minute Neighbourhood Guidance in smaller towns and rural areas remains a challenge, especially concerning the establishment of cycling routes and walking infrastructure.
- The call for a more coordinated approach, emphasising the need for a consistent translation of policies into practice. This underlines the necessity for effective dialogue between different departments, including Health and Education, with collaborative decision-making involving various stakeholders seen as crucial to reinforcing local services. Existing barriers include a lack of effective dialogue between departments such as Transport and Health, manifesting in decisions that impact local services, as evident in political and policy issues like school closures.

- The critique that the 15-minute City concept, in some instances, might be overly simplistic, placing undue emphasis on the goal of having most necessities within a 10 or 15-minute walk.
- Frustrations have been voiced regarding the apparent gap between policy rhetoric, such as the promotion of 20-minute neighbourhoods, and the tangible on-the-ground implementation. The acknowledgement of fears, opposition, and practical issues, including concerns regarding commercial viability. Significantly, the importance of addressing social support in addition to physical aspects is underscored as crucial for the concept's success (AlWaer and Cooper, 2023).
- Infrastructure condition and investment needs: Some existing buildings within the city are in a state of disrepair and require substantial investments to make them net-zero and fit for the intended purposes.
- Monitoring process: A recognition that the monitoring process is currently aggregated. There is a pronounced need for observing changes in walking and cycling patterns and conducting subjective research on liveability and community opinions to provide a more nuanced understanding of the impact of urban planning initiatives.
- A call for moving beyond numerical measures based solely on distance. There is a recognised need for incorporating softer metrics in evaluating the success of urban planning initiatives. This involves considering cultural connection points, public art, community performances, and street food, which collectively contribute to the overall liveability of a place.
- Diligent efforts should ensure that the 15-minute City concept remains inclusive and accessible to all socio-economic groups.

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### 3.3.3 Ghent

#### 15mC concept and goals

Ghent does not have a dedicated 15mC strategy. However, it was frequently mentioned as a good practice example in our survey and, hence, included within the mapping. Even though it formally has not adopted a 15mC strategy, many of its planning principles align well with the concept, such as the focus on active modes of transport, the provision of local services, and the reduction of car traffic. These goals have been pursued by the city for many years and are strengthened further in future policies. The main concepts that inform current planning policies are the “Structuurvisie 2023 – Ruimte voor Gent” (Structural Vision 2030 – Space for Ghent) (Stad Gent, 2018) and the “Mobiliteitsplan Gent” (Mobility Plan Ghent) (Stad Gent, 2015), which were introduced in 2018 and 2015 respectively. A particular focus of these plans lies on the improvement of urban space, creating social cohesion and reducing carbon emissions. Because it is smaller in size than many other cities which pursue a 15mC strategy, Ghent provides an interesting case study on how to implement 15mC practices in different contexts.

#### Overview on 15mC practices implemented/planned

Ghent has a variety of 15mC practices implemented, focusing largely on improving public transport and active modes as well as the quality of urban space. Logistics has not yet been integrated to the same degree of maturity, but there are plans to utilise the city’s many canals (blue infrastructure) to move goods. In the following, the key practices identified in interviews and document analyses are discussed.

#### KA 1: Groenklimateassen (Green climate axes)

A central cornerstone of Ghent’s mobility transition is the green climate axes (Stad Gent, 2020). This is a network of eight car-free connections that connect the city centre to the rest of the city. Because Ghent is a relatively small city in size and relatively flat, most parts of the city have access to the city centre within 15 minutes by bike along these routes. However, they also provide comfortable paths to walk, roll, or jog along watercourses, green structures, or historical axes.

To improve the connectivity of the cycling network, the green climate axes are being supported by a finer network of cycling paths in the neighbourhoods and a ring between the 19th-century and 20th-century developments connecting the eight axes. Aside from the mobility aspect, the green climate axes aim to better connect fragmented pieces of nature and provide green space and fresh air corridors to improve the climate adaptation of the city.



Ghent’s strength lies in its sustained commitment to green policies and continual enhancements to its cycling network for over 20 years.

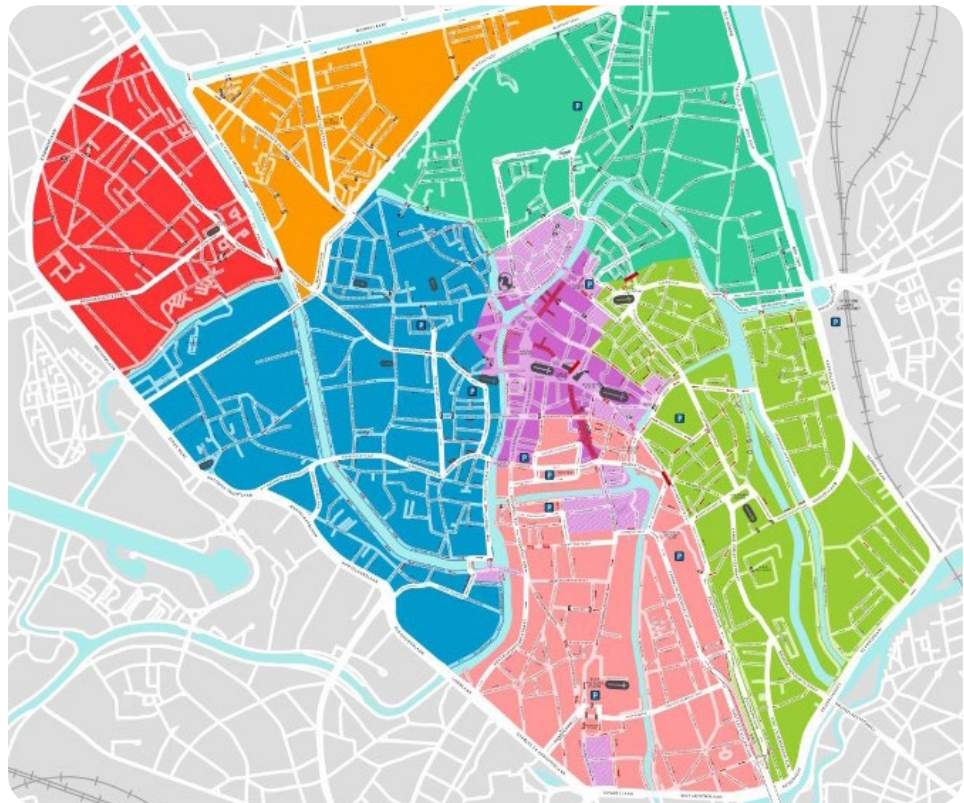


**Fig. 9:** Ghent's green climate axes, the green ring, and the inner-city network (Source: Stad Gent, 2020, p. 11)

### KA 1: Circulatieplan (Circulation Plan)

The green climate axes are supported by a circulation plan (Stad Gent, 2016) introduced in 2017. The aim is to reduce traffic in the city centre by prohibiting through traffic within the inner ring road. To achieve this goal, the area within the inner ring road is divided into sectors from which cars cannot cross to another. If drivers want to go from one sector to another, they need to move to the inner ring road and drive around the city centre. Thus, cars can still access the city centre, but through traffic and inter-zonal traffic is heavily restricted. On some roads, this 'clipping' is done by physical barriers, while on others, camera controls are installed, which allow driving through subject to special permits (e.g., police vehicles, fire brigades, taxis, delivery vehicles, and public transport). The city centre is also partially car-free and designated as a pedestrian zone, where also cycling is possible, with parking garages being provided on the edges of the car-free zone.

The circulation plan also included improvements for walking and cycling such as the 'cycling gates'. These enable cyclists to safely cross the inner ring road by providing wider cycling lanes at intersections, creating underpasses for cyclists at certain intersections, and turning streets into bicycle streets. Thus, the circulation plan also ties in well with the green climate axes.



**Fig. 10:** Ghent's circulation plan with the car-free zone (violet) and the six sectors (Source: Stad Gent, 2016, p. 10)

#### **KA 2: Stadsgebouw 2.0 (City Building 2.0)**

In 2020, the city also approved a policy which aims at the improvement of the accessibility to public services. Currently, many services are dispersed over the neighbourhoods which places a burden on public budgets for the maintenance of multiple buildings, but also hinders the creation of third places which foster community interaction. For these reasons, the city decided to foster the co-location of services in the so-called 'City Buildings 2.0' (Stadsbouwmeester Gent, 2020). Exemplary services that shall be provided are schools, libraries, sports halls or cultural venues. Due to the different utilisation times of the various facilities, the City Buildings and their surroundings should be lively at different times of day, which supports Moreno's concept of chronotopia, i.e. the use of places at different times. This de-central centralization of services should also make sustainable travel behaviour easier by reducing complex trip chains and locating buildings at urban nodes with good access to the cycling and public transport network.

#### **KA 4: Wijkmobiliteitsplannen (Neighbourhood Mobility Plan)**

As many other cities presented in the Deep Dives, Ghent works on cooperating closer with its residents to improve traffic safety, air quality, and street design in its neighbourhoods. To achieve this goal, neighbourhood mobility plans are being produced together with citizens, schools, shop owners, and other neighbourhood stakeholders since 2021. In the first stage, the stakeholders are asked to provide feedback on a 'neighbourhood mobility market', which will be evaluated and put into scenarios by the municipal planners in the second stage. In the third stage, the different scenarios are presented to the stakeholders in a second neighbourhood mobility market. Based on this feedback, a final neighbourhood mobility plan is created and executed after adoption. To ensure a satisfying implementation, the adjustments are constantly evaluated.



### Implementation and monitoring

The implementation of the Gent's practices is guided by well-conceived planning ideas that inform and guide the individual practices. The green climate axes are the main pillar in the planning for active modes and give a clear guidance for the development of the walking and cycling network, but also recreational areas. Concepts like the green climate axes are regularly updated to counteract weakness, e.g., improving the connectivity of the axes by adding a ring. On the other hand, successful implementations, such as the circulation plan, are being translated to other parts of the city with different conditions. A crucial part to achieve this is regular involvement of stakeholders and monitoring of the effects of such practices. For the monitoring, the City of Ghent mainly uses data on its citizens' travel behaviour, such as traffic and cyclist counts. By this, the city is able to see changes induced by its transport and land use policies. For example, the implementation of the Circulation Plan was accompanied by constant monitoring of car traffic in the city centre and along the ring road. Related to the 15mC, accessibility of public green spaces is one of the indicators that is monitored by the city. However, other 15mC accessibility indicators are not (yet) used by the city.

### Key lessons: strengths

Ghent offers some important lessons on the strengths that support the implementation of 15mC practices:

- Long-standing commitment: A strength of Ghent's approach is the long-standing commitment to its policies, particularly the green climate axes. For over 20 years, Ghent has constantly improved its cycling network and support is ongoing.
- Adaptation of concepts: The implementation of the green climate axes shows a second strength: the adaptation to changing circumstances. At the start, cycling lanes were built with a width of 2.50 m next to roads. However, with increasing number of cyclists the city adapted its strategy changing the minimum width to 4.00 m and separating cyclists from car traffic, which led to the establishment of the green axes.
- Context-sensible adaptation: Ghent also utilizes the natural conditions in which it finds itself. The city is relatively flat without steep inclines, making it highly suitable for cycling. Furthermore, its canals, as well as green areas and abandoned rail tracks, offer ideal conditions to locate walking and cycling paths along them.

### Key lessons: challenges and criticalities

Some critical points, however, also remain for the mobility transition in Ghent:

- The most critical challenge is public support: While the circulation plan has received widespread support after 7 years of its implementation, adopting similar concepts in 20th-century neighbourhoods faces significant opposition. There seems to be a divide between citizens who are in favour of improving public space and traffic safety and others who do not want to give up their cars and see car-based mobility restricted.
- A second problem is financial concerns: Streets typically enjoy a lifespan of 70 years in Ghent. Speeding up the transformation process means redoing streets well before their lifespan is over. This will lead to additional stress on municipal budgets and can be an obstacle to the implementation of 15mC practices that involve the redesign of urban roads.

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## 3.3.4 Lisbon

### 15mC concept and goals

The City of Lisbon has embraced the 15mC concept through the implementation of the “Há Vida No Meu Bairro” (There’s Life In My Neighbourhood) program. Lisbon considers the 15mC as a way of organizing the city to allow all essential services and needs of residents to be reachable within a 15-minute walk. Specifically, the city’s 15mC program is focused on promoting active mobility, mainly walking, as the primary mode of transport to access local activities, to improve the liveability and quality of life in the city’s neighbourhoods.

### Overview on 15mC practices implemented/planned

Below is a chronological summary of the most important 15mC practices being implemented/planned in Lisbon.

#### KA1: Plano De Ação Mobilidade Urbana Sustentável (PAMUS) Do Municipio De Lisboa (Sustainable Urban Mobility Plan)

Lisbon’s 2014 Sustainable Urban Mobility Plan (SUMP) is connected to the 15mC concept due its critical role in making cycling a viable mode of transport in the city, namely through the construction of a dedicated cycling network (Figure 11) (CML, 2014a).

#### KA2: Plano Diretor Municipal de Lisboa (Lisbon Master Plan)

Although not explicitly stated as such, the city of Lisbon had some of the 15mC principles already incorporated in their Master Plan since 2012 (“Plano Diretor Municipal de Lisboa”), specifically (CML, 2012):

- the promotion of mix development and decentralization of employment, aiming at reinforcing its dense network of small neighbourhood centralities
- Transit Oriented Development (TOD) strategies of promoting densification and relocation of activities near areas with high accessibility by PT in areas designated as “Polaridades Urbanas” (Urban polarities) (POLU)
- Increase of affordable housing, especially for rental, as well as creating more public and green spaces



**Fig. 11:** Lisbon's dedicated cycling network (green lines)  
(Source: CML, 2012).

### **KA2: Uma Praça Em Cada Bairro (A Square in Every Neighborhood)**

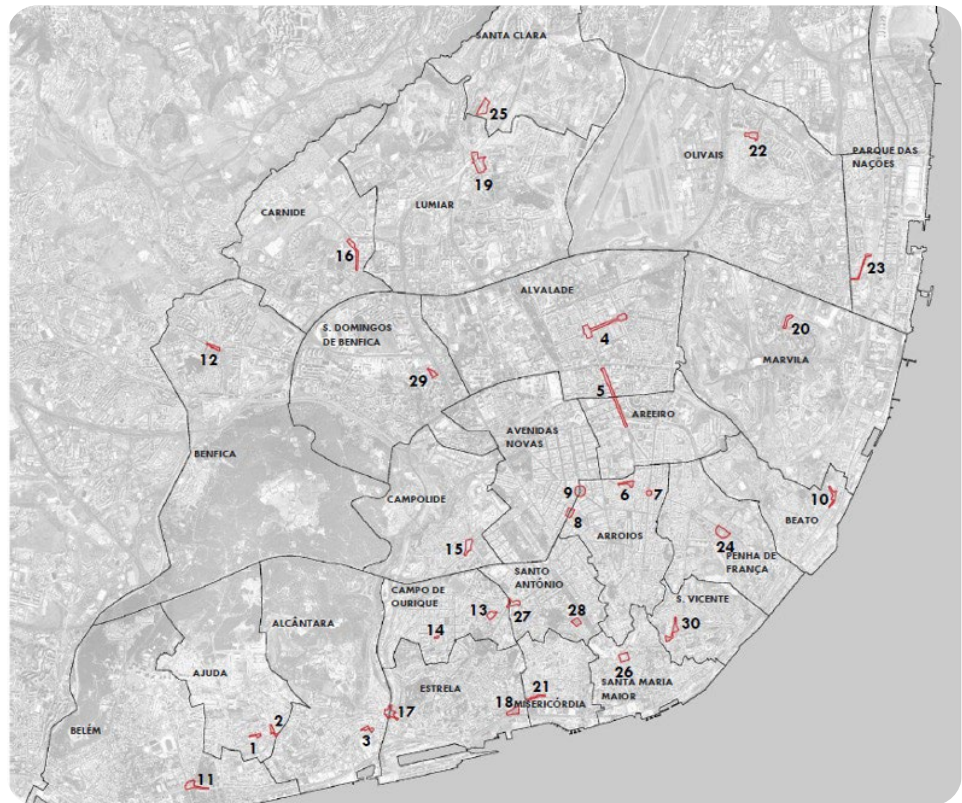
The principles of the 15mC concept are also found in the “Uma Praça Em Cada Bairro” (A Square in Every Neighbourhood) initiative implemented in 2014. The initiative involved organizing meeting points for the local community, a micro centrality that concentrates activities and employment, in diverse contexts such as a square, a street, a commercial area, a neighbourhood garden, or an existing or planned community facility. These meeting points are implemented as public spaces where walking, cycling, and public transport are prioritized while car traffic is restricted (CML, 2014c, 2014b).

### **KA2: Há Vida No Meu Bairro (There's Life In My Neighborhood)**

More recently, in 2023, Lisbon has officially adopted the 15mC concept through its “Há Vida No Meu Bairro” (There's Life In My Neighbourhood) program. The program focuses on developing a set of interventions in the public space that promote active modes, specially walking, ensuring that essential urban activities (commerce, green spaces, education, sport, culture and social support) are within walking distance in all of the city's neighbourhoods. When the activities are not present, the City Council will also promote their establishment (CML, 2023).

### **Implementation and monitoring**

The “Há Vida No Meu Bairro (There's Life In My Neighbourhood)” program will start with 24 pilot-projects, one in each parish. Currently, the interventions are in the final planning stage, with the 24 locations already identified. The first 12-13 interventions should be implemented by the end of 2025.



**Fig. 12:** The 30 locations in Lisbon originally identified as a priority for the implementation of the “Uma Praça Em Cada Bairro” program (Source: CML, 2014b)

Monitoring is not yet established. The city council focus on ad hoc monitoring of selected projects, mostly in the disadvantaged areas of the city, to assess whether the interventions have solved the most pressing issues. The city council has a monitoring division in the urban planning department, but it has been significantly stripped down in recent years due to an organization reconfiguration and currently has insufficient capacity. The city council is currently trying to recover it, but it is a slow process, particularly regarding recruiting new employees for the division.

**Key lessons: strengths**

The strengths derived from the Lisbon case study encompass several key facets:

- Citywide approach: The strategies pursued by the Lisbon target all areas of the city. For example, pilot projects for the A Square in Every Neighbourhood program are located in all the city’s 24 parishes. The city council is particularly focused on the most deprived areas of the city.
- Popularity of the programs: The presented programs enjoy broad support from the current City Council, the main opposition parties, local parish local governments, and the community.
- Involvement of different stakeholders: The program involves a variety of stakeholders, in particular the parish local governments and local residents.



Bureaucracy often slows down large-scale 15-minute city projects, highlighting the importance of simplifying governance processes.

- Citizen participation: The city council uses public participation processes, especially in the largest and most contested projects, to involve residents in all stages of the projects.

### **Key lessons: challenges and criticalities**

However, challenges persist within the framework of the Lisbon case study, including:

- The “Há Vida No Meu Bairro” (There’s Life In My Neighbourhood) program is still in the planning stage, with no intervention yet implemented.
- Bureaucratic issues: The implementation of the program is significantly slowed by bureaucracy. Among others, large-scale interventions need to be validated by the nation’s Audit Court, which takes up to one year to make decisions.
- Financial issues: Funding for implementing all the projects is currently insufficient. Furthermore, inflation and high demand in the real estate sector have increased construction costs, resulting in public tenders without competitors which leads to the need of relaunching the tender, delaying the projects for months.
- As a result of bureaucratic and financial barriers, the original plan of implementing 24 pilot projects by 2025 has been downgraded to 12-13 projects

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### 3.3.5 Paris

#### 15mC concept and goals

The city of Paris, known as the birthplace of the 15mC concept, is a pioneer in its implementation and operationalization. Known as the “Ville du quart d’heure”, Paris’s 15mC concept promises to bring to the city a “Big Bang of proximity”, aiming to offer a base of hyper-proximity services encompassing the spectrum of everyday life by providing (Figure 1), among others (Ville de Paris, 2022):

- green spaces 5 minutes from home
- places for cultural and sports activities
- citizen and association meeting places
- primary healthcare facilities and local shops



Paris integrates the 15-minute city concept into its long-term urban planning, ensuring its implementation and impact will continue for the next 10-15 years.

The 15mC concept of hyper-proximity has been adopted as the strategic vision for the development of Paris for the next years, guiding all the city’s new policies. In December 2021, the 15mC plan was officially approved through the “Pact parisien de la proximité” (Parisian pact of proximity). The 15mC principles of proximity have in 2023 been incorporated in the renovated City’s Master Plan entitled “Plan local d’urbanisme bioclimatique” (Local bioclimatic urban planning plan), which will be valid for the next 10-15 years, solidifying the long-term strategic commitment to the 15mC concept in the city of Paris.

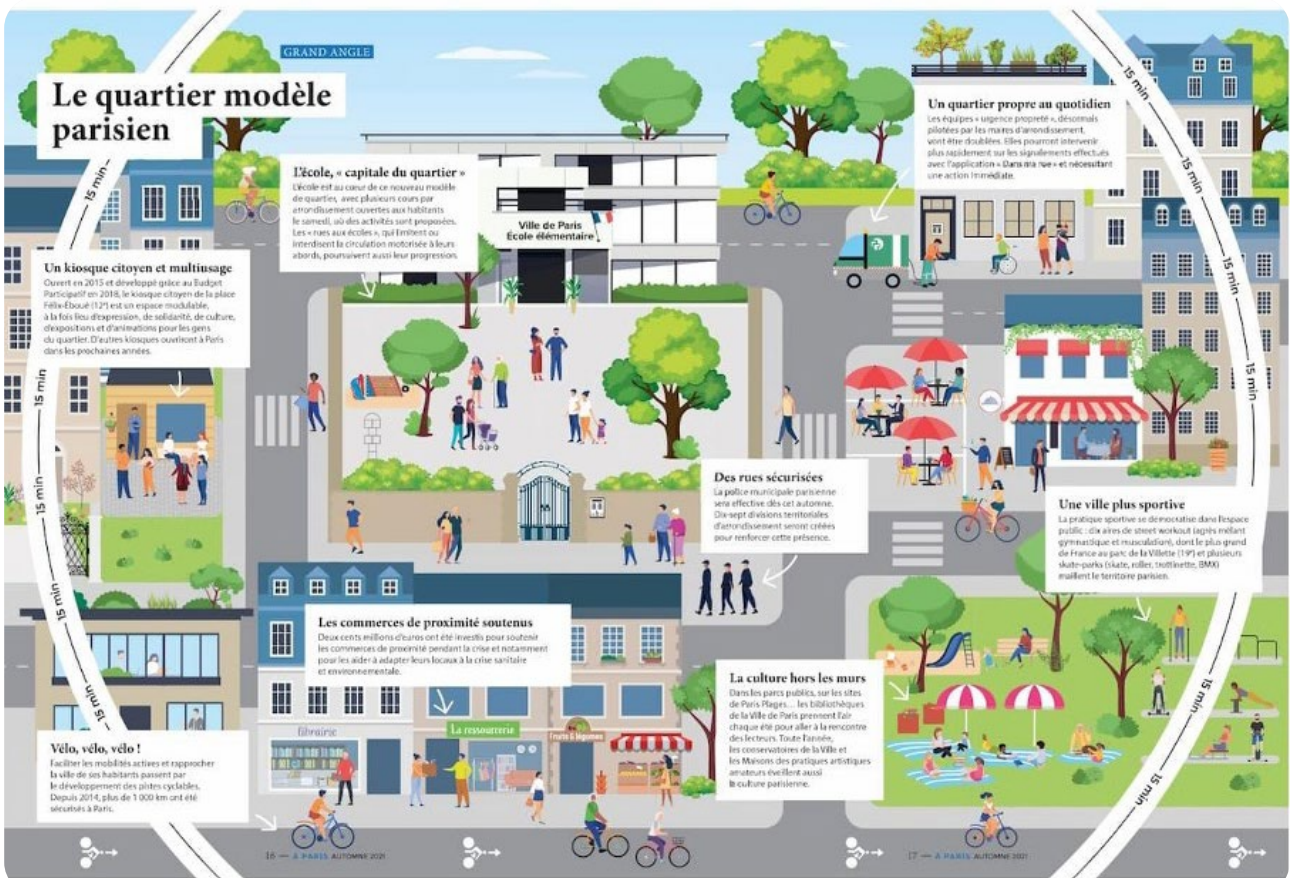


Fig. 13: The “Ville du quart d’heure” concept of Paris (Source: Ville de Paris, 2022)

### Overview on 15mC practices implemented/planned

Below some of the many 15mC practices being implemented/planned in Paris are presented.

#### KA 2: Les cours oasis (Oasis courses)

Paris started its 15mC strategy by making the school the “capital of the neighbourhood” (i.e., its central place) through the “Les cours oasis (Oasis courses)” program. Taking advantage of the extension and geographical dispersion of schools that exist throughout the city, Paris has converted them into multipurpose buildings opened to the community with renovated courtyards acting as new green spaces. As of 2023, around 130 courtyards have already been transformed into oases in Paris, with 42 school and college courtyards, as well as 29 nurseries, opened to the public on Saturdays during the school year to family activities (Ville de Paris, 2023a).

#### KA 1: Rues aux écoles (School streets)

Complementing the renovation and opening of the schools to the public, Paris has implemented the “Rues aux écoles” (School Streets) program. The program involves measures ranging from traffic calming to the full pedestrianization of streets in the vicinities of schools with the goal of making home-school trips by active modes safer and more pleasant for children. In some “school streets” new green and public areas (including street furniture for children to play) were also implemented. As of November 2023, 201 streets were traffic calmed or pedestrianized, covering almost half of the city’s nursery and elementary schools. Furthermore, 56 of those streets received new green and public spaces (Ville de Paris, 2023b).

#### KA 1: Plan vélo (Cycling plan) and Plan piéton (Pedestrian plan)

Closely aligned with the “Rues aux écoles (School Streets)” program, the “Plan piéton (pedestrian plan)” program aims to make walking more accessible, safe and enjoyable for all residents and visitors of Paris by (Ville de Paris, 2023c):

- Giving more space to pedestrians and asserting pedestrian priority everywhere
- Raise the standards of quality, safety and comfort of pedestrian space
- Adapting walking to climate issues (namely through new green and cool areas)

The plan aims to create 100 new hectares of pedestrian spaces by 2030 and continue the rebalancing of public space in favour of walking, having an allocated budget of 300 million € (Ville de Paris, 2023c).

The City of Paris has also developed the “Plan vélo (Cycling Plan)”, aimed at making Paris a 100% cycle-friendly city by 2026. The plan aims to develop more than 1 000 km of cycling lanes and 130 000 new bike parking spots through a dedicated budget of 100 million € (Ville de Paris, 2021c).

### **KA 1: Les États Généraux du Stationnement (The General Conditions of Parking)**

One of the most consequential measures introduced is the reform of Paris's "Les États Généraux du Stationnement (The General Conditions of Parking)" aimed at reallocating public space from the cars to new uses, namely active modes as well as more green and public spaces. To achieve this, the new regulation will convert 60,000 on-street car parking places into new uses such as widening of pavements, greening, creation of new street furniture, terraces, and cycling lanes (Ville de Paris, 2021a).

The development of the parking reform was conducted through a participatory approach consisting of (Ville de Paris, 2021a):

- **An Online consultation**, where residents could vote on alternative uses for car parking places (they could also make suggestions subject to a vote by Internet users), resulting in 16 500 participants
- **Thematic workshops** open to associations and professionals allowing them to submit written recommendations to the City
- **A Citizens' conference**, where a set of recommendations to the City of Paris were developed in response to the question: "With a view to a reduction in parking spaces on the streets of Paris, how should parking be organized in Paris?"

### **KA 1/2/3: Plan local d'urbanisme bioclimatique (Local bioclimatic urban planning plan)**

Approved in May 2023 (and currently under public consultation before a final vote in 2024), the "Plan local d'urbanisme bioclimatique" (Local bioclimatic urban planning plan) solidifies the 15mC concept and the importance of proximity in the City's strategic urban planning for the next 10-15 years. The fundamental objectives are to improve the living environment of Parisians, reduce inequalities, promote social diversity, and assert the role of Paris Métropole within its metropolitan area. The plan focuses on four main pillars (Ville de Paris, 2024):

- **Provide more housing and social diversity**, with the objective of having 40% public housing in Paris in 2035, divided between 30% social housing and 10% affordable housing.
- **Response to the ecological emergency** through measures such as developing 11 new public parks, planting 100 000 street trees, protecting existing green spaces, producing renewable energy (compulsory for all projects of more than 1000 m<sup>2</sup>), and promoting the use of more sustainable construction materials and processes.
- **Support Local Businesses** through measures such as the implementation of the Foncière Paris Commerces (former semaest program) where the city buys buildings and rents them to local shops, a ban on the transformation of commercial premises and offices into tourist accommodations, and the allocation of public buildings for cultural and sports facilities as well as healthcare centres.
- **Promotion of active modes** namely by making walking and cycling facilities mandatory in new buildings (e.g., bike parking).



The city followed a participatory approach involving the public in all the stages of the plan with five phases of consultation. So far, the plan received 53 138 proposals made by 7 955 different contributors, collected in 233 meetings and 88 workshops (Ville de Paris, 2024).

#### KA 4: Pact parisien de la proximité (Parisian pact of proximity)

Approved by Paris City Council in December 2021, the “Pact parisien de la proximité (Parisian pact of proximity)” marks the official adoption of the 15mC concept by the City of Paris. Among others, the Pact provides more authority and funding to local neighbourhood governments for the implementation of policies affecting the public space, making the neighbourhood the reference level for municipal action (Ville de Paris, 2021b).

#### Implementation and monitoring

The City of Paris has a multi-tier monitoring program implemented. Paris is currently creating an observatory consisting of a consortium of main partners in the social sector to pool tools for observation and intervention. This observatory will ensure monthly monitoring of the evolution of the 15mC concept implementation, providing clear, compiled, and shared data, up to date and over time. This will ensure that the measures and policies are implemented as closely as possible to the needs of the neighbourhoods.

Specific monitoring of the different programs connected to the 15mC also occurs. For example, the “Les cours oasis (Oasis courses)” program is evaluated on various aspects (microclimatic and thermal impact measurements, noise level, biodiversity potential, well-being, social impact, etc.), using measurements taken from sensors, observations, questionnaires, and interviews with various partners within the city and the scientific community. Furthermore, the progress on the implementation of the different measures is regularly updated on the city’s website, including before-and-after interactive photos and maps with the georeferenced location of the interventions across the city (Figure 2).

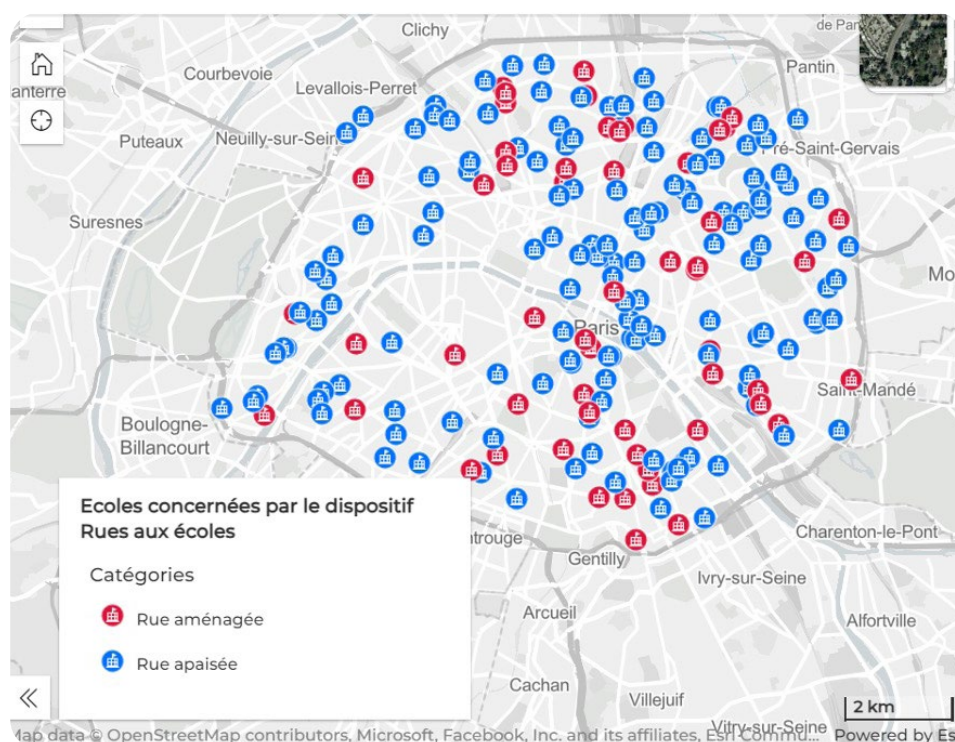


Fig. 14: Map of the implemented “Rues aux écoles” (School Streets) across Paris (Ville de Paris, 2023b)

Moreover, implementing the priority objectives defined in the “Pact parisien de la proximité” (Parisian pact of proximity) is subject to at least one annual review between each neighbourhood mayor and the management concerned in order to adapt the action plan of the following year if necessary.

#### **Key lessons: strengths**

The strengths derived from the Paris case study encompass several key facets:

- Comprehensive and multidimensional approach with the 15mC concept guiding the city's new policies.
- Approved roadmap: Paris has a clear roadmap for the implementation of the 15mC with detailed measures for different sectors (public space, green spaces, mobility, culture, healthcare, etc.) and specific funding allocated to their implementation.
- Long-term strategic vision: The 15mC is embedded as a planning principle in the City's Master Plan (Plan local d'urbanisme bioclimatique), ensuring that the 15mC concept will remain in place for the next 10-15 years.
- Citywide approach: The 15mC policies are distributed across Paris, ensuring the ubiquity. This includes social housing, limiting the potential for gentrification and other negative impacts.
- Strong participatory planning approach: The city's different stakeholders, including the residents, are heavily involved in all the phases of the different projects. Furthermore, the city provides regular updates on the progress of the implementation of the different measures through its official website.

#### **Key lessons: challenges and criticalities**

However, challenges persist within the framework of the Paris case study, including:

- Administrative organization on the regional level: The major limitation concerns the administrative organization of Paris Metropolitan Area, in which the city of Paris is only one of eight departments. As such, the scope of the current 15mC plan is largely limited to the city of Paris where the mayor has the authority to enact these policies.

#### **Main references**

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Ville de Paris (2021b) Pacte Parisien De La Proximité (Parisian pact of proximity). [Link](#)

Ville de Paris (2021c) Un nouveau plan vélo pour une ville 100 % cyclable (Cycling Plan). [Link](#)

Ville de Paris (2022) Paris ville du quart d'heure, ou le pari de la proximité (Paris, quarter-hour city, or the bet of proximity). [Link](#)

Ville de Paris (2023a) Les cours oasis (Oasis courses). [Link](#)

Ville de Paris (2023b) Plus de 200 « rues aux écoles » dans Paris (School Streets). [Link](#)

Ville de Paris (2023c) Un « plan piéton » pour piétonniser massivement Paris (pedestrian plan). [Link](#)

Ville de Paris (2024) Plan local d'urbanisme bioclimatique : vers un Paris plus vert et plus solidaire (Local bioclimatic urban planning plan). [Link](#)

### 3.3.6 Vienna

#### 15mC concept and goals

In Vienna, the 15mC was first introduced as one of the mobility & transport goals in the “Smart Klima City Strategie Wien: Der Weg zur Klimamusterstadt” (Smart Climate City Strategy Vienna: The path to becoming a model climate city). It represents an evolution from the previously prominent ‘Stadt der kurzen Wege’ (City of Short Distances), which had been central to earlier planning documents. Unlike its predecessor, the 15mC emphasizes polycentricity and the revitalization of local neighbourhoods, two goals which have recently been embraced by the City of Vienna. Beyond supporting short distances and fostering vibrant mixed-used neighbourhoods, the goal of the “15-Minuten-Stadt” also encompasses a redistribution of public street space to prioritize active mobility, public transport, and attractive urban environments. The transformation of public space is a critical component as this is also heavily tied with Vienna’s climate adaptation strategies. Currently, there is no dedicated planning policy dedicated to the 15mC. Instead, individual policies that aim towards common objective are viewed as being complementary to the 15mC strategy.



With its shift to the 15-minute City, the City of Vienna re-focused its urban planning on polycentricity, neighbourhood revitalization, and the transformation of public space.

#### Overview on 15mC practices implemented/planned

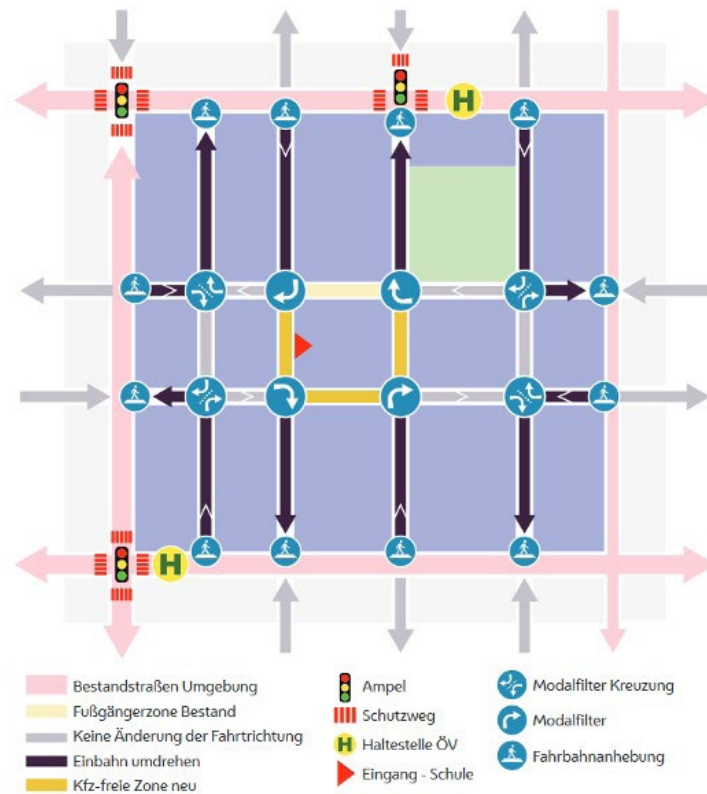
The City of Vienna has adopted the following practices that cover the four KAs.

##### KA1/2: Supergrätzl

The Supergrätzl are an adaptation of Barcelona’s Superblocks. Just like the Superblocks, the aim is to reduce car traffic within a group of blocks, particularly by preventing through traffic by applying one-way loops, diagonal filters, and modal filters. Within the Supergrätzl, a combination of measures should ensure safe and barrier-free access for all road users, the improvement of public street space, and economic development as well as climate adaptation and protection:

- **Road safety is improved** through infrastructural measures such as curb extensions and raised crossings as well as legal measures such as a maximum speed of 30km/h in most streets and car-free zones around schools.
- **Public space and quality of stay** are improved by transforming the space freed up by reducing car traffic for tree planting, plant beds as well as permeable paving.

The City of Vienna has defined several prerequisites for a Supergrätzl, most importantly a population density of around 130 residents per hectare and outer edge lengths of the area between 200 and 400 metres. Larger arterial roads are used



**Fig. 15:** Schematic sketch of a Supergrätzl (Stadt Wien, 2022a, p. 13)

as “natural” edges and all outside edges should be reachable within a short walk of around 3 minutes or roughly 250 metres. The first Supergrätzl is currently being permanently implemented in the district of Favoriten following a successful test phase.

**KA 3: WienBox**

A practice related to logistics that is also integrated in the Supergrätzl is the so-called ‘WienBox’. It is a white-label solution for parcel deliveries and aims to tackle the last-mile problem. Every business, delivery company or private person can drop of, collect, or store parcels in these boxes 24/7. As a result, business-to-business (B2B) and customer-to-customer (C2C) deliveries are simplified. The boxes are coordinated by Wiener Stadtwerke (Vienna Municipal Utilities) in cooperation with local companies who operate the boxes. Over 200 boxes are already in use. A study commissioned by Wiener Stadtwerke has identified a potential to reduce emissions from deliveries by 35-40 % on average and delivery times by up to 50 % (Breinbauer et al., 2021). Thus, they not only contribute to climate mitigation and customer satisfaction but also to reduced costs for businesses.

**KA 4: Wiener Klimateam (Viennese climate team)**

Like the Proximity Agents in Bologna or the Neighbourhood Mobility Plans in Ghent, Vienna also has a program for involving citizens in the planning of local mobility measures: the Viennese climate team. Citizens can become active as part of a climate team in their district. Every year, several districts are selected (2023: Mariahilf, Währing, Florisdorf), and all inhabitants of Vienna can propose measures to improve climate protection and adaptation in the selected districts. Ideas are then evaluated by experts from the City of Vienna, and eligible ideas are further

developed in collaboration with the idea providers. Eventually, a representatively drawn citizens' jury makes the final recommendations for each district based on the eligible ideas. The climate teams have four fields of action: climate friendly travelling, using renewable energy, making urban space climate friendly, and being sustainable in everyday life. Mobility is one aspect among others and ideally all aspects are integrated within the measures. In 2023, 34 winner projects were selected out of 1.300 submitted proposals.

### **Implementation and monitoring**

The City of Vienna currently has no specific monitoring for their 15mC strategy in place, as it is often difficult to attribute changes to single measures or parts of a wider strategy. Hence, the monitoring is focused on overarching goals using the following indicators among others (Stadt Wien, 2022b, p. 55):

- Modal split: The goal is to increase the share of trips made by active modes and public transport to 85 % until 2030).
- Motorisation rate should be reduced to 250 private vehicles per 1.000 inhabitants by 2030.
- Average daily car traffic at the city borders should be reduced by 50 %.

Individual practices, such as the Supergrätzl, are usually implemented in phases with a monitoring of mostly qualitative feedback from citizens and other stakeholders.

### **Key lessons: strengths**

The case of Vienna offers insights into strengths that support the implementation of the 15mC:

- Building on existing concepts: Vienna can build on its experience with existing concepts, namely the City of Short Distances, which are in-line with many of the 15mC's planning principles. Accordingly, the city does not have to radically change their policies but can build on existing knowledge and support within the administration but also the population.
- Integration of mobility and spatial planning: Vienna has a strong integration of mobility planning and spatial planning – mobility planning is part of the spatial planning department. This eases the collaboration between the different domains.
- Citizen engagement: Vienna has also established different ways of co-operation between the city administration and the citizens as well as other stakeholders, ensuring that they are involved in planning and implementation processes. Examples of this are the Climate Teams and the use of tactical urbanism and pilot projects.
- Public transport as a backbone: In contrast to the common argument that the 15mC segregates people in their neighbourhood, Vienna promotes high-quality public transport connections between the different neighbourhoods and districts. For Vienna, public transport is a crucial cornerstone of any mobility strategy and an important supplement to active mobility.
- Keeping logistics in mind: Vienna also incorporated all four key areas, in particular city logistics, from the start.

### Key lessons: challenges and criticalities

Even though, the City of Vienna has a long history of improving environmentally friendly transportation it also faces several obstacles in the implementation:

- Financial and personal resources: A crucial challenge is the lack of financial and personal resources. Increasing costs, especially after the COVID-19 pandemic, and a shortage of qualified personnel hinder a faster implementation of the many projects the city has already planned.
- Increased vacancies: The financial burden of the COVID-19 pandemic and rising energy costs have also led to increased vacancies in shops in the city, which leads to reduced local accessibility. While some locations still function, e.g., pedestrian zones, others need stronger support by the city. In the future, the mix of uses and the connection between shopping and services should be strengthened to ensure the sustainable economic viability of vulnerable locations.
- Regional and national planning policies: Polycentral structure also needs to be strengthened outside of the city to reduce the number of people travelling to Vienna to access services and shops. However, this would require major shifts in regional and national planning goals and the willingness from the surrounding municipalities. Accordingly, Co-operation across municipal borders needs to be improved.
- Regional co-operation for logistics: Regional co-operation is also needed for changes in logistics. There is not enough space for distribution centres within Vienna and, therefore, the surrounding municipalities are crucial stakeholders for a change in the logistics sector.
- Car-friendly national policies: Lastly, there are also policies, rules, and regulations on the national level that are in the way of the mobility transition. For example, the City of Vienna advocates for a reform of the Austrian road traffic regulations to address the requirements of other modes than the car as well as taking the ecological costs of car traffic into account, e.g., by greening the commuter allowance.

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Stadt Wien (2023) Zukunftsweisende City-Logistiklösungen für Wien (Pioneering city logistics solutions for Vienna). [Link](#)

## **4. Lessons learned and recommendations**



## 4. Lessons learned and recommendations

This study revealed the widespread adoption of the 15mC and similar concepts globally and particularly in Europe, but also highlights a significant discrepancy in the practical interpretation of the concept. While most definitions emphasize access to essential services through walking, cycling, and sometimes rolling and public transport, the implementation often extends far beyond these parameters. The term “15-Minute City” has garnered attention as a contemporary urban development goal, yet many cities have implicitly applied its principles under different nomenclatures for decades. This emphasizes the importance of recognizing and understanding the unique adaptations of the concept beyond its current buzzword status. Our study highlights the global and particularly European embrace of the 15mC and analogous concepts, revealing a high diversity in practical application.

While proximity-centred accessibility is foundational to the 15-Minute City concept, our analysis suggests a need for this framework to embrace participation and social elements of urban life more robustly. This expanded view requires the 15mC approach to equally prioritize community engagement and social connectivity alongside ensuring physical closeness to amenities. The most impactful practices such as Bologna or Paris, integrate these social and physical dimensions. Carlos Moreno’s transition to the term “happy proximities”, prioritizing citizens’ well-being, underscores the evolving social dimension that conventional accessibility-centric definitions may fail to fully encapsulate.

Conversely, the multitude of practices identified in our study prompts a critical examination of what truly constitutes a 15mC practice. It appears that in many cases any policy promoting sustainable transportation, reducing car ownership and usage, or reclaiming spaces from cars is often labelled as a 15mC practice. Yet, questions linger: Is car sharing inherently aligned with the principles of the 15mC? Is the construction of affordable housing a manifestation of 15mC principles? While many cities might tacitly agree, such practices diverge from the common understanding of the 15mC.

Delving deeper into the 15mC practices, our mapping showed a predominant focus on sustainable mobility (key area 1) and people-centric urban planning (key area 2), with comparatively less attention directed towards logistics (key area 3) and governance (key area 4). Notably, within the realm of sustainable mobility, reallocating road space emerges as a pivotal challenge in transitioning towards a 15mC. Such reallocations are not only necessary for accommodating sustainable modes of transport but also for enhancing the quality of urban life. Success stories like Pontevedra and Barcelona offer valuable lessons and exemplars for other cities seeking to navigate this transition. Furthermore, community engagement and temporary interventions present viable strategies for mitigating potential resistance to top-down road space reallocations, fostering smoother transitions towards the 15mC vision.

In Key Area 2, which emphasizes people-centred urban spaces and planning, we encountered the highest number of practices. The diversity of practices, ranging from densification around transit hubs to urban greenery initiatives, underscores



the intricacy of this domain and its interconnectedness with other planning spheres, notably climate mitigation and adaptation. A particular area of focus that could serve as a linchpin for numerous other 15mC policies in practice is the pivotal role assigned to schools in many deep dive concepts. Cities like Paris and Bologna regard schools as capitals of the neighbourhood. They prioritize re-designing their immediate surroundings and transforming schools into multifunctional spaces, for example, by allowing leisure activities in the afternoons. This approach proves especially efficient given the scarcity of available urban space. Initiating transformations from schools, with children as one of the most vulnerable user groups, provides a promising starting point for reshaping urban spaces.

Moving on to less commonly addressed aspects, the oversight in logistics practices poses a significant concern considering its pivotal role within the 15mC framework. Creating viable environments for local enterprises to thrive and curbing the ever-increasing mileage of delivery vehicles is vital for realizing the 15mC objectives. However, we found only a few cities that pursue 15mC practices related to urban logistics. Nonetheless, this scarcity does not imply a lack of solutions to address these challenges. Paris, for instance, champions its local businesses through initiatives like Foncière Paris Commerces, where the city acquires properties and leases them to local enterprises. Similarly, Vienna's "Wienbox," a white-label parcel box system, aims to minimize delivery journeys and simplify parcel collection and drop-off processes. These instances exemplify innovative approaches to addressing economic and logistical hurdles yet underscore the necessity for continued experimentation and advancement in this domain.

Like logistics, the key area of governance and citizen involvement remains notably underdeveloped. This comes as a surprise considering the significant emphasis city officials placed on citizen engagement during the deep dives, recognizing it as a pivotal factor in overcoming barriers to transformative processes. Empowering citizens during transitions should serve as a cornerstone of every 15mC strategy, fostering a city that caters to its inhabitants while minimizing conflicts. Many deep-dive case studies strive for this objective by decentralising decision-making authority, allocating budgets to the district level, and directly involving citizens. Initiatives such as the proximity agents in Bologna, climate agents in Vienna, or the "Pact Parisienne de la Proximite" in Paris exemplify efforts to bolster citizen involvement and local governance structures, reflecting the proposed shift to the neighbourhood level.

However, there exists a secondary layer of governance that necessitates improvement. Addressing the application of the 15mC concept in city outskirts presents a significant challenge, highlighting a gap in governance and collaboration between urban centres and their surrounding areas. A significant portion of urban traffic originates outside city limits due to the commuting and shopping activities of non-residents. Our deep dives identified collaboration as a primary concern for the cities examined, as there often exists a lack of established planning hierarchies at this level. These concerns underscore the need for a more robust role for metropolitan and regional governance structures. Additionally, promoting the principles of the 15mC in outskirts and beyond is imperative to mitigate the necessity for travel to urban centres, a step that has thus far been infrequently undertaken, as evidenced by cases like Hailsham in the UK.



With its shift to the 15-minute City, the City of Vienna re-focused its urban planning on polycentricity, neighbourhood revitalization, and the transformation of public space.

While our studies uncovered a rapid adoption of the concept, it's evident that the field continues to evolve, with many case studies lacking a comprehensive set of policies. Given the wide range of good practices identified through the mapping and the deep dives, there remains a clear need for policy transfer and inter-city cooperation. While this report may serve as an initial guide, further detailed information on specific practices is essential to ensure their effective implementation. To facilitate this, mediums such as videos, tutorials, and interactive formats like webinars could serve as effective communication tools. After all, our study showed that there are already many good examples; now, the job is to disseminate and mainstream them, paving the way for the realisation of the 15-minute City concept across Europe.

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