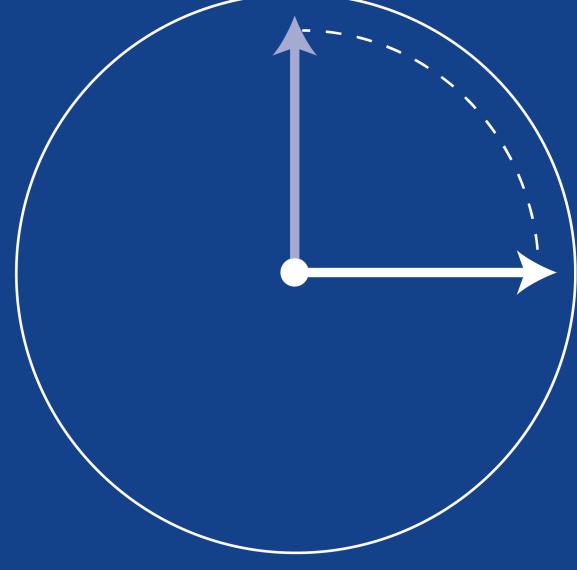
The 15-Minute City International Experiences











The 15-Minute City - International Experiences

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About the project:

This is the first report in the Realdania-funded research project on the concept of the '15-minute city,' which explores how the concept can be understood and applied in a Danish context. This initial report examines how the concept has been utilized internationally, highlights international experiences from five case studies, and reflects on how the concept could potentially be applied in smaller cities.

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SUMMARY

Summary

The concept of the 15-minute city has gained international traction in recent years, partly due to its proposed rethinking of urban structures to address issues such as climate change, social inequality, and the consequences of the COVID-19 pandemic. Major international organisations, such as the IPCC, C40, and UN-Habitat, have embraced the 15-minute city by placing it at the core of their agendas. This report examines how major cities work with the concept tailored to each city's context. While the idea has yet to be implemented in smaller cities, the report shows how two smaller cities have worked on similar initiatives.

What is a 15-minute city? Introduced by Carlos Moreno in 2016, the concept describes the idea of changing urban structures so residents can access the essential functions of everyday life within a 15-minute walking or biking radius from their homes. The 15-minute radius is adaptable to the context of each city, i.e., it can be adjusted to 5, 10 or 20 minutes. In large cities, the urban structure is altered to create several smaller neighbourhoods and city centres while the functions are brought closer to the residents' homes without using a car. The concept is also expandable to the 30-minute territory to emphasise the access between different neighbourhoods and suburbs.

This report focuses on how the different cities deliberately use storytelling as a tool to create a simple and understandable vision of the city for all citizens. These stories are essential in building consensus and stakeholder support for reconfiguring urban structures. In addition, the report examines how cities integrate everyday life into their planning and what influence this has had on implementing the 15-minute city. Focusing on five cities, the report shows how the main narrative behind the concept's different policy approaches - making the city more liveable and sustainable - serves as a political tool to address contemporary urban challenges.

In Paris and Milan, the 15-minute city is used as a recovery strategy for COVID-19 through temporary planning. In Paris, the concept was additionally used as a political vehicle in Anne Hidalgo's re-election campaign as city mayor, while in Milan, it has been combined with 'tactical urbanism' to experiment with the city's land use. Portland's 'complete neighbourhoods' emphasise accessibility within a 20-minute radius to create a fairer and healthier city by achieving more evenly distributed functions, while Melbourne's 20-minute neighbourhoods aim to connect urban and rural districts by directing attention to health, community, and social justice via more inclusive participatory planning processes. Bogotá uses the 30-minute city to address the need for reducing inequalities between citizens and neighbourhoods. Characterised by an uneven distribution of functions across its neighbourhoods, Bogotá thus seeks to minimise travel time and costs across the city.

Finally, two smaller cities, Vauban and Kirkland, work on bringing together functions and creating social diversity to make neighbourhoods more liveable and sustainable through projects resembling the idea of the 15-minute city.

City	Inhabitants	City/region scale	Concept	Storytelling
Paris	2,2 millions	City	15-Minute City	'Paris en Commun'
Portland	660.000	City	20-Minute City	'Portland is a healthy and equitable city where people can thrive'
Melbourne	5 millions	City and region	20-Minute City	'Melbourne is a city where you can live locally in inclusive, healthy neighbourhoods'
Milan	1,4 millions	City and region	15-Minute City	'In Milan, the city is no more than 15 minutes away'
Bogotá	7,4 millions	City	30-Minute City	'Bogotá is a diverse and accessible city for all citizens'
Vauban	5600	District	Partly car-free city	`Eco-friendly living in Vauban´
Kirkland	91.000	City	10-Minute City	`Kirkland is a city where you can live, work, and play´

The table illustrates the different sizes of the case cities, the temporal and spatial levels on which they work with the concept, as well as the storytelling that each city creates through the concept. It shows that the concept of a 15-Minute City can be adapted to the individual context, visions, and needs of each city.

¹ Tactical urbanism: A bottom-up, community-based approach to urban design and planning using low-cost, short-term interventions to create lasting change in the built environment through community engagement and experimentation.

Introduction

INTRODUCTION · THE 15-MINUTE CITY

The 15-Minute City

Two significant challenges cities face worldwide are climate change and the consequences of the COVID-19 pandemic. These challenges require substantial changes to how we have planned for many decades. The emphasis of SDG 11: Sustainable Cities and Communities on the role of cities in catering for sustainability transitions has turned political attention to developing new planning concepts in urban planning and policy to address global climate change. A planning concept that has gained traction is the idea of the 15-minute city.

Professor Carlos Moreno (Université Paris I, Sorbonne Business School) introduced the concept of the 15-minute city in 2016. Its basic principle is that all citizens have access to essential daily functions within a radius of 15 minutes away from their homes, either by foot or by bike. Depending on the context, the 15-minute radius acts as a framing narrative, which can be adjusted to 5, 10 or 20 minutes. The minute-based prefix places proximity and time usage at the top of the urban planning agenda. The idea in large cities is to change the city structure by forming smaller neighbourhoods so that the city becomes polycentric. In smaller cities, the basic idea is to change the existing car-dominated infrastructure. Altogether, the goal for both small and large cities is to prioritise green mobility.

The concept of the 15-minute city became even more relevant during the COVID-19 pandemic. The lockdowns caused citizens to predominantly stay in their local areas, positively impacting everyday life in the city. The 15-minute city's focus on local life, with reduced need for travel across the city, was, therefore, a way to reduce the risk of infection and pressure on the public transport system and strengthen local economies. This gave the 15-minute city increased international attention due to its potential to handle multiple crises simultaneously concerning climate and health. The concept has gained significant global interest and received several international awards. Forums such as C40 and UN-Habitat have taken the 15-minute city concept on board and are actively working with it to create international networks for cities. The significant international interest in the concept suggests that cities should learn from and apply alternative planning ideas differing from monofunctional planning.

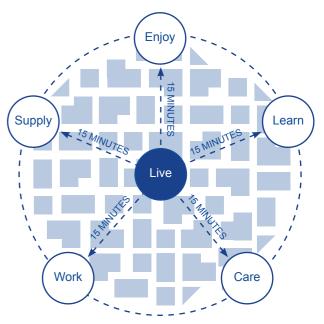
The 15-minute city concept is based on six essential functions that should be accessible to all citizens. These six functions are (illustration (ill.) 01): 1. living (the possibility to live in the city regardless of socio-economic status and income), 2. working (workplaces and remote workplaces), 3. supplying (shopping opportunities), 4. caring (medical clinics, health centres, dentists, etc.), 5. learning (schools, universities, day-care centres, etc.), and 6. enjoying (cultural activities, green spaces, places to dwell, etc.). In this light, the idea behind the 15-minute city breaks from modern monofunctional city structures by focusing on proximity, density, diversity, and equality.

Proximity is about the distance and the time it takes to access the city's essential functions. For example, shopping options should be physically close and easy to access by changing the physical barriers and obstacles affecting travel time. By incorporating proximity into urban development, problems related to car transport CO2 emissions, urban sprawl, and land use can be counteracted.

Density is essential in planning the 15-minute city, as proximity to functions is only possible in a dense city. Density refers to the minimum threshold of people needed to maintain the necessary urban functions. Still, it is also essential that the number of people in the neighbourhoods is manageable for the available functions—thus creating an optimal connection between the supply of functions, area, infrastructure, resources, and the number of residents in the neighbourhoods.

Diversity refers to functions, buildings, people, and culture. Residents should be able to access the functions included in the concept (work, supply, care, learning, and enjoying) within 15 minutes of their homes. In addition, the neighbourhoods should also be diverse so that it is attractive for people with different cultural backgrounds and family compositions to live there.

Ubiquity focuses on how functions are currently spread throughout the city, as regards (in)equality among citizens in their daily lives. Most cities today are car-oriented, meaning those who can afford cars are favoured over those who cannot (or do not want to own) a car and instead use public transport or walking and cycling networks. The potential of innovative solutions that can improve shared mobility, carpooling, new digital construction methods, renewable energy forms, remote workstations, and co-working offices emphasised by the 15-minute city is in direct opposition to the functional zoning of urban planning, where the city structure is built around separate residential, commercial, and industrial areas. This form of urban planning, promoted by the modernist development ideal, has dominated for the past 70 years. Architects like Le Corbusier were at the forefront of planning cities based on functional zoning and dispersed urban development. The idea was to create efficient cities that prioritise access to cars, reflecting the views of the ideal society at the time.



III. 01 The six essential functions that must be accessible in 15 minutes of the city.

INTRODUCTION · THE 15-MINUTE CITY INTRODUCTION · THE 15-MINUTE CITY

Today, the sustainability of these planning ideals is being questioned, resulting as it has in cities primarily designed for cars, in issues related to land use, air pollution, and CO2 emissions – all problems that cities worldwide are trying to address. The 15-minute city is therefore seen as a means of breaking with functional zoning principles and counteracting dispersed urban development. Although the city's functions are still at the centre of urban planning, the focus of the 15-minute city shifts from access to functions to focus on the proximity and distribution of the city's functions. Therefore, integrating functions and diversity in the city's different neighbourhoods is crucial in planning the 15-minute city.

What About Public Transportation?

The concept focuses on social functions accessible within a 15-minute time radius through active green mobility, such as walking or cycling. However, the distance covered within 15 minutes depends on the mode of transportation and physical ability. This does not mean public transit is not essential to the city's transportation network. Instead, it entails that active green mobility should be necessary to promote health, well-being, social interaction, and equality in mobility opportunities. Nevertheless, a well-functioning public transportation system in the city is crucial as it should connect neighbourhoods and districts with the rest of the country.

WANT TO KNOW MORE?

Moreno, C.; Allam, Z.; Chabaud, D.; Gall, C.; Pratlong, F. Introducing the "15-Minute City":Sustainability, Resilience and PlaceIdentity in Future Post-Pandemic Cities. Smart Cities 2021, 4, 93-111. https://doi.org/10.3390/smartcities/101006

Allam Z, Moreno C, Chabaud D, Pratlong F. Proximity-Based Planning and the "15-Minute City": A Sustainable Model for the City of the Future. IDEAS Working Paper Series from RePEc. Published online 2022. doi:10.1007/978-3-030-38948-2

Why 15 Minutes?

The time interval of 15 minutes is not particularly important, according to Carlos Moreno. The exact format can be used with a 5-, 10-, 20-, or 30-minute city. However, the temporal dimension of the concept is crucial because it suggests a shift in urban planning from the classical distance-based approach, where distances are measured in meters or kilometres, to a more time-based approach, where distances are calculated in minutes. This promotes a human scale, active green mobility, and social interactions. Moreno describes this temporal dimension with the concept of chrono-urbanism, a planning principle that understands the different rhythms of the city that change throughout the day, week, and season.

Chrono-urbanism deals with the relationship between time and space. The temporal dimension should be integrated into planning by combining time, space, movement, the built environment, schedules, and flow. To integrate lived time, i.e., the way we experience time, into urban planning, it is essential to understand the various rhythms of the city. The city's rhythm is greatly influenced by the time of day, week, and year. At one moment, a place may be bustling with people, while at other times, it may be empty. As the city's rhythm changes, the activity, and thus the function of a given space, should also be seen as fluid. The concept of the 15-minute city proposes that each neighbourhood's six functions should also be planned considering the temporal aspect. For example, if an office is only used during working hours on weekdays and the space is empty outside of these hours, it has the potential to fill another function. Or a schooly-ard that can be used as a public park for citizens outside school hours.

Storytelling

Stories are essential to remembering the past, depicting the present, and dreaming about the future for as long as humans have existed. Whether stories reflect the past or show how we envision the future, storytelling is a relevant communication tool that helps define the material world.

The role of storytelling in politics and planning was discussed when Forester and Fischer (1993) first published The Argumentative Turn in Policy Analysis and Planning, raising the question of whether our language merely reflects and depicts the world or if language shapes our view of the world. This book marked the beginning of a discussion about the importance of storytelling. When Fischer and Gottweis published The Argumentative Turn Revisited: Public Policy as Communicative Practice in 2012, they emphasised language, discourse, and argument in politics and planning. Other theorists inspired by this line of thought, e.g., Throgmorton (1996) and Sandercock (2003), stressed the relevance of storytelling in persuading stakeholders regarding decisions about the future of cities. This focus makes it clear that planning is both a practice and a way of thinking about the future. According to Fainstein and DeFilippis (2016), '...planning is an intervention that aims to change the existing course of events'. In other words, it is about influencing the future in a particular desired direction.

This report focuses on strategic thinking and storytelling as we review the different case studies in which the 15-minute city concept supports specific political discourses on the environment, public health, safety, social integration, and economic growth. Here, the idea is to illustrate how the concept 15-minute city is used to frame different urban policy problems and solutions while shaping political agendas at different levels—thus showing how other cities adapt the concept or similar approaches to the local context.

To make this process visible, we identify overarching storytelling (discourses) alongside specific storylines that frame different measures and initiatives supporting the overall story associated with each case. Storylines are statements that summarise complex issues and generate meaning, showing connections between situations or events. As these stories become uttered, repeated, and accepted, they become proverbs evoking approaches to solving problems, simultaneously strengthening the stories. When planning issues and possible solutions are defined, the rhetorical and discursive qualities of the stories play a central role in promoting specific solutions and convincing stakeholders of their necessity.

WANT TO KNOW MORE?

Sandercock, L. 2003. "Out of the Closet: The Importance of Stories and Storytelling in Planning Practice." Planning Theory Practice 4 (1): 11–28.

Hajer, & Versteeg, W. (2005). A decade of discourse analysis of environmental politics: Achievements, challenges, perspectives. Journal of Environmental Policy & Planning, 7(3), 175–184. https://doi.org/10.1080/15239080500339646

The New Mobilities Paradigm

The starting point for this report is the mobility paradigm, which describes a theoretical approach focused on the global and local movement of people, capital, goods, ideas, concepts, thoughts, and more. The aim is to understand its role in shaping modern society and its development. The approach was popularised by the English sociologist John Urry, who authored Sociology Beyond Societies: Mobilities for the Twenty-First Century in 2000. Here, it is argued that we can no longer understand social life based on something static but must instead understand it through movement.

The concept of mobility focuses on the mental, social, and cultural aspects of movement and its physical dimension. This approach has grown into an interdisciplinary research field with continuously expanding applications. In 2007, Urry authored Mobilities, where he criticised traffic planning for treating the need and consumption of mobility as a 'black box' and arguing that there is too much traffic and too little culture and societal dynamics in understanding physical movement. Concerning the concept of a 15-minute city, the mobility paradigm focuses on much more than active green mobility itself. Instead, the focus is on the cultural, social, and environmental aspects of a new planning concept that fundamentally changes the hierarchy in the way we have previously moved around.

WANT TO KNOW MORE?

Urry, J. (2000) Sociology Beyond Societies: Mobilities for the Twenty-First Century. Routledge. https://doi.org/10.4324/9780203021613

Urry, J. (2007). Mobilities. Polity.

Cresswell, T. (2006). On the Move: Mobility in the Modern Western World (1st ed.). Routledge. https://doi.org/10.4324/9780203446713

INTRODUCTION · EVERYDAY LIFE

INTRODUCTION · EVERYDAY LIFE

An Everyday Life Approach to the 15-Minute City

An everyday life approach and the importance of its various activities is the starting point for understanding the 15-minute cities in this report. The city and how it is planned create the framework for everyday life and how it will be implemented. People must change their habits and behaviours, consumption patterns, and everyday life practices to transition towards sustainability.

Everyday life is the life we live and reproduce daily: the tapestry of interconnected activities such as work, school, shopping, culture, and leisure. For families, it means coordinating not only a single person's everyday activities but also their partner's and children's. Yet, with its car-centred underlying logic, modernist planning has mostly relegated everyday activities to the periphery. The car continues to function as the 'glue' that combines all the activities associated with modern life. Planning a 15-minute city entails a significant cultural change and a paradigmatic shift. Besides being routine-based (how we get to work or do our shopping) and thus taken for granted, everyday life activities entail a conception of mobility that transcends physical distance, e.g., the car is usually intertwined with ideas, feelings and perceptions of 'the good life' based on freedom and choice (of school, gym, grocery stores), not necessarily based on distance from home but on how these activities fit into the life we want to create for ourselves and our families.

An everyday life approach to the city demands shifting away from the contemporary hierarchy of values underlying urban planning practices towards placing active mobility, public health and climate change mitigation at the top of the agenda. This entails understanding how certain practices are produced and reproduced and how they enable certain cultures and patterns that shape and reshape urban planning policies and practices. In this sense, an everyday life approach demands recognising that our daily behaviour should not only be dictated by instrumental factors such as time and money but also by alternative values, behaviours, and perceptions.

Asking families to change their daily routines (e.g., by taking public transportation or cycling instead of driving to work) demands rethinking everyday life practices since activities are often interlinked, e.g. taking the car to work often coincides with other activities such as picking up or dropping off children at day-care or schools or doing daily shopping on the way home. Accordingly, the widely accepted statement: "When you have children, you need a car", fills much of the planning practice and organisation of everyday life. Yet, it should be stressed that this discourse is often taken for granted. According to Statistics Denmark, 40% of households in Denmark lived without using a car in 2020.

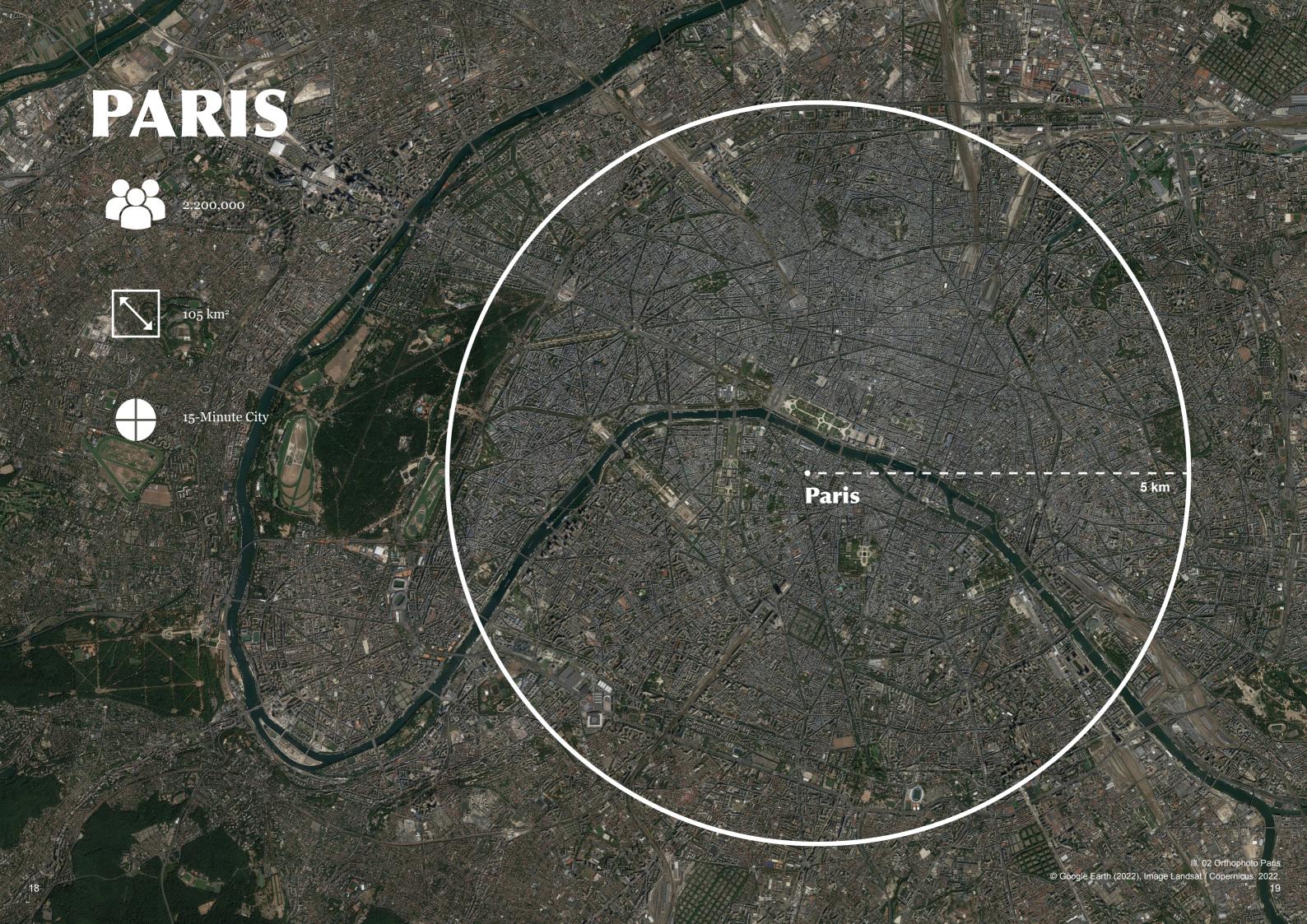
The core of a 15-minute city is, first and foremost, to rethink the city as a place where people can live and thrive based on sustainability, quality of life, and climate change mitigation. While active movement underlies the implementation of the 15-minute city, it remains a significant challenge due to the path dependencies of the contemporary city, which was planned and designed according to a car-dominated logic. For example, 54% of the city's common space is used for roads and parking in Copenhagen.

Over the past 20 years, research has focused on the significance of storytelling in creating alternative futures for urban policy and planning. The concept of everyday life centres on how people's lives could function without the car taking centre stage. It recognises that cities have been planned and built based on a car-centric logic. If an everyday life perspective is to be taken seriously in the context of the 15-minute city, it should conceive urban planning as context-specific. Accordingly, the six urban functions of the 15-minute city should be conceived as broader categories adaptable to fit different cities' needs. Understanding everyday life is essential to address how every 15-minute neighbourhood should target young people, older adults, and families based on their perceptions of key urban functions. Imagining 15-minute city neighbourhoods demands giving a voice to everyday life and envisioning what it should entail. Here, storytelling and storylines play a crucial role, as illustrated by the following five cases from around the world.

WANT TO KNOW MORE?

Freudendal-Pedersen, M (2022). Making Mobilities Matter. Routledge. https://doi.org/10.4324/9781003100515.

Case Studies



CASE STUDIES · PARIS

LE PARIS DU 1/4 HEURE



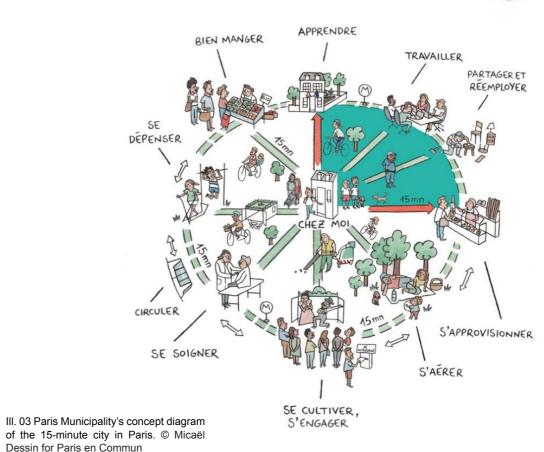
Paris en Commun

The story of the 15-minute city played an essential role in Paris' Mayor Anne Hidalgo's election campaign using the headline 'Paris en Commun' ('Paris Together'). Since then, Anne Hidalgo has worked closely with Carlos Moreno to transform Paris into a 15-minute city, focusing on making Paris green, sustainable, and inclusive for all citizens. The central elements of the plan encompass a CO2-neutral economy, public health, community engagement, social cohesion and interaction, reducing car dominance, and promoting active green mobility. The 15-minute city broadly represents the desire for a 'good life' where transport time is replaced with personal quality time. The Paris City Council supplements the 15-minute city with a concept diagram that clearly illustrates how the 15-minute city occurs in Paris (ill. 03).

The 15-Minute City in Paris

Paris' vision for a 15-minute city prioritises proximity to urban functions. The city is actively developing neighbourhoods based on the four principles: proximity, density, diversity, and equality. The neighbourhoods should contain six functions: housing, employment, education, healthcare, shopping, and entertainment, with the end goal of creating local self-sufficient arrondissements. Paris wants the city's most essential functions to be accessible to the citizens within 15 minutes by bike or on foot, which is also illustrated through the city council's concept diagram (see ill. 03).

The driver for creating a 15-minute city in Paris largely rests on a post-COVID-19 recovery strategy that aims to improve citizens' health by lessening car traffic, reducing noise and air pollution, and changing citizens' mobility practices in the long term. A key measure is creating more street space for pedestrians and cyclists. Moreover, the plan also has a social focus on creating new meeting places in the city. As part of the city's 2030 goals, Paris also wants to increase the share of public housing from 25% to 30%; thus, a rental cap has been introduced to limit the rising rent prices. In implementing the concept, the city council works on several initiatives based on the following storylines.



MICAEL

Storyline 1. In the 15-minute city, citizens are at the centre

Everyday life perspectives take centre stage in city planning via a citizen budget for urban development. In 2017, the city council introduced a citizen budget through which residents can propose ideas and vote on what 5% of the city's annual investments should be used for. The budget was nearly half a billion euros in 2019-2020, and Paris residents submitted over 2000 projects. The process starts with an open call where project ideas are collected. This is followed by a workshop targeting convergent projects, a public hearing and project selection through online and physical voting. The winning projects become part of the municipality's budget negotiations and are implemented by the citizens who initiated them. The citizen budget is an excellent example of a measure that follows the 'citizens at the centre' storyline, allowing citizens to influence urban development and giving the city council first-hand knowledge of citizens' everyday life priorities.

CASE STUDIES · PARIS

Storyline 2. The 15-minute city strengthens the local economy

Since 2004, the city council has tasked the semi-public company Semaest with helping to establish retail and local shops in neighbourhoods that lack functions or have mono-activity and to ensure the presence of shopping opportunities in new or revitalised neighbourhoods. This initiative has resulted in the establishment of more than 650 retail stores for independent shops such as local food stores, bookstores, service providers, art shops, restaurants, cafes, etc. (see pictures, ill. 04). Semaest focuses on establishing diverse functions to meet the local needs of citizens. Paris also strengthens local production, consumption, and employment through the trademark 'Produced in Paris'. In addition, remote work offices are being established so citizens can work closer to their homes. To create local centres within 15-minute neighbourhoods, Paris has launched the 'Citizen's Kiosk' initiative to establish local community centres where citizens can exchange information and services through support functions in the local community. These measures play an essential role in ensuring the presence of local functions, including jobs, across different neighbourhoods.





III. 04 Pictures of two shops that have been supported by the programme.

Storyline 3. In the 15-minute city, space can be used more efficiently to benefit all citizens

Paris is an old city, evidenced by its many historical buildings, boulevards, monuments, squares, gardens, and bridges. A large part of the city centre has been designated as a UNESCO World Heritage Site since 1991. While density in Paris is high, there is a need to increase diversity. The city, therefore, focuses on developing buildings with mixed functions and uses. For example, homes can be mixed with shops, health centres with entertainment, and offices with education. In this way, the city's private spaces are transformed into semi-public spaces, allowing more people to use the existing spaces for multifunctional purposes. The plan is, therefore, not to rebuild all of Paris' 20 arrondissements to create a 15-minute city but to reuse the existing buildings and convert them to multifunctional use. This is done, amongst other things, by creating partnerships between public and private actors. This way of thinking about double functions in the city's spaces has already begun with an initiative called Les Cours Oasis. Here, schoolyards are transformed into local parks that are open to the neighbourhood's residents and visitors outside of school hours, as seen in the pictures below (ill. 05). The schoolyards become a multifunctional space that can be used at all times of the day, not just when the school is open. The transformed schoolyards should also function as a LAR solution and flood protection to prevent flooding. The various local initiatives that promote multifunctionality, in both time and space, all fall within the same storyline of making the most efficient use of existing land and, at the same time, creating access for more citizens. In the example where schoolyards are opened to the public, the multifunctional land use benefits citizens through local recreational areas, one of the six essential social functions in the 15-minute city.











III. 05 Pictures of the initiative 'Les Cours Oasis'. © Laurent Bourgogne / Ville de Paris

Storyline 4. The 15-minute city promotes safe traffic and healthy living

In addition to making schoolyards into local parks, Paris conceives schools as the capital of 15-minute city neighbourhoods. As the school creates social interactions and bonds between citizens, the streets surrounding it should be made child-friendly by improving pedestrian and cycling paths and restricting car traffic during school opening and closing hours. By 2026, Paris intends to create cycle paths throughout the city by removing 60,000 parking spaces. As a result of COVID-19, temporary cycling paths were quickly built in Paris, allowing citizens to travel by bike instead of using public transportation. Car and right-turn lanes reserved for vehicles were converted into temporary cycling paths and have since been made permanent (see pictures, ill. 06). Traffic reduction measures include banning non-essential traffic from the city. The ring road surrounding Paris, the Boulevard Périphérique, causes significant noise and air pollution for citizens living along the road and creates a physical barrier between the city and suburban neighbourhoods—a symbolic border for the inequality between the less wealthy suburbs and exclusive inner Paris. Between 350,000 and 500,000 daily car trips are currently being taken in Paris, and half of the trips are of traffic passing through the city. Therefore, this kind of traffic plays a significant role in the congestion and air pollution in the city.

An example of changing the car-dominated street is the transformation of the 2.75 km long Rue de Rivoli, which has been transformed into an active green mobility artery. The bike path has been extended, covering over half of the road throughout its sections. At the same time, car space has been sizeably reduced to only one lane (see pictures, ill. 06). Although these measures are also expected to affect the transport sector's CO2 emissions, their storylines focus mainly on enhancing public health and promoting safe traffic. This is supported by the city's bike-sharing system, Vélib Métropole, consisting of bicycles and e-bikes (currently at 215,000 daily trips).







III. 06 Pictures of how bicycles have been prioritised in Paris by allocating space from road lanes to expand the bicycle network.

Paris Summary

Based on the principle of accessibility and proximity to the six social functions through active green mobility, the above measures are essential in implementing the 15-minute city in Paris. This illustrates the connection between the city's overall vision and its implementation strategies. Simultaneously, the four identified storylines support the narrative of the 15-minute city in Paris, which Anne Hidalgo presented in her re-election campaign.

'Paris en Commun'		
Storylines	Initiatives which support the storyline	
1. In the 15-minute city, citizens are at the centre	Introducing participatory budget where citizens decide how to spend 5% of the city's annual investment.	
2. The 15-minute city strengthens the local economy	 Semaest, which helps build local businesses bringing a more diverse mix of functions. Establishment of local community houses – citizens' kiosks. 	
3. In the 15-minute city, space can be used more efficiently to benefit all citizens	Les Cours Oasis - schoolyards being converted for multifunctional use.	
4. The 15-minute city promotes safe traffic and healthy living	Roads converted into cycle paths, e.g., Rue de Rivoli.	

Table illustrating Paris' storytelling, storylines and supporting initiatives.



CASE STUDIES · PORTLAND

CASE STUDIES · PORTLAND

Portland Is a Healthy and Equitable City Where People Can Thrive

Portland coined the concept of Complete Neighbourhoods, a 20-minute city that should offer easy access to daily functions and services within 20 minutes of active green mobility. A progressive North American city, Portland adopted the concept in the 'The Portland Plan' in 2013. The plan has a solid social focus rooted in four sustainable development qualifiers for the city (prosperous, educated, healthy, and equitable) with an underlying narrative of creating the best possible conditions for every citizen to live a healthy life. While the other cases in this report use time-based concepts to prioritise COVID-19 recovery strategies, Portland has employed the concept to protect the environment, improve public health, and create more vibrant local communities. Portland was the first city in the US to adopt a plan to reduce its CO2 emissions while placing citizens at its core.

Portland's Complete Neighborhoods

The Complete Neighbourhoods idea ensures an interconnected network of streets, sidewalks, and bike paths to provide easy and safe access to make active green mobility possible for everyone, regardless of age and physical ability. Through accessibility and proximity, it promotes self-sufficient neighbourhoods by locating essential urban functions within 20 minutes by foot or bike. A Complete Neighbourhood should include access to health services, education, childcare, recreational opportunities, retail, and fresh food. By providing short distances to citizens' essential daily needs and improving conditions for pedestrians and cyclists, the goal is to create a local and people-oriented city designed primarily for its residents. Portland has also developed an illustration of the Complete Neighbourhoods concept, see ill. 08.

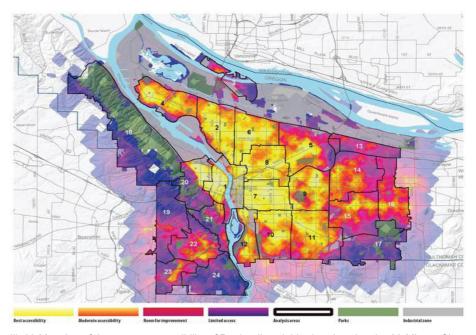
Complete Neighbourhoods sets the framework for the city's future development until 2035. The strategy contains three focus areas: Thriving Educated Youth, Economic Prosperity and Affordability, and a Healthy Connected City. With its clear social focus, the strategy's fundamental goal is to ensure equality and a sound economy by improving public health and providing high-quality public services at affordable prices. The idea of Complete Neighbourhoods underlies the strategy by ensuring that public investments support Portland's ambition to create a more interconnected city by enhancing social interaction through mixed-use neighbourhoods that offer different opportunities to live and work. The idea behind Complete Neighbourhoods contrasts significantly with the dominant American lifestyle and transport patterns, where an average of 1305 trips are made in private cars per person per year. Besides harmful environmental impacts, the many car trips also have economic significance for Portland residents. On average, residents living in Portland's suburbs spend 24% of their annual income on car transport, while those in the urban areas spend 16%. To enable 80% of citizens to walk or cycle for non-work-related daily activities, Portland seeks to reduce the daily distance travelled per inhabitant by 30% compared to the 2008 level. In doing so, Portland has been working on several initiatives to change the city's structure and create the framework for Complete Neighbourhoods. The selected initiatives from Portland are grouped under the three following storylines.



III. 08 Portland's illustration of their 20-minute concept 'Complete Neighborhoods' © City of Portland Bureau of Planning and Sustainability.

Storyline 1. Complete Neighbourhoods promote fair urban development through targeted and measurable efforts

Portland has created a 20-minute city index to measure and determine the accessibility of facilities, services, and amenities in different neighbourhoods. Suppose a neighbourhood achieves a score of 70 or higher on a scale of 0-100. In that case, it is classified as a relatively Complete Neighbourhood (see ill. 09). The areas ranked with the lowest scores, i.e., the least accessible to functions, are given priority investments. Here, the goal is to make it possible for citizens to meet 90% of their daily needs, except for work, within 20 minutes on foot or by bicycle. Physical barriers to pedestrians, such as rivers, intersections, slopes, etc., are also considered within the 20-minute distance. This storyline relates to equity as one of the city's core priorities. The index is designed to ensure that the city's investments are targeted to areas that need it the most, based on measurable evidence-based data. However, the distance a person can travel in 20 minutes depends on physical ability and mode of transport. Therefore, the index should be seen more as a planning tool than an actual initiative.



III. 09 Mapping of the current accessibility of Portland's neighborhoods using the 20-Minute City Index. © City of Portland Bureau of Planning and Sustainability.

Storyline 2. Complete Neighbourhoods are equal and diverse

The City of Portland knows that developing Complete Neighbourhoods can result in more affluent neighbourhoods with increasing housing prices and gentrification. The Anti-Displacement Action Plan has thus been developed (in collaboration between the city and local communities) to ensure equitable development while minimising the displacement of residents, businesses, and cultural organisations. The city is also coordinating strategies to mitigate and reduce the adverse effects that vulnerable communities may face due to Portland's growth, development, and public investments. Equity, economic prosperity, and affordability run across Portland's three strategic development areas. As the action plan is intended to mitigate any potential negative consequences of implementing Complete Neighbourhoods, it may significantly impact the composition of the population and the diversity of the city's neighbourhoods.

Storyline 3. Complete Neighbourhoods create a healthy and connected city

Portland has created The Healthy Connected City Network to promote active green mobility and improve the walking and cycling experience. It aims to identify and classify green pedestrian and cycling corridors and ensure the presence of sidewalks, cycle paths, signage, a more comprehensive range of routes, and easy access to frequent high-quality public transport.

Portland is therefore investing in new cycling infrastructure, including improving and developing the cycling network and implementing a bike-sharing program to promote a modal shift from cars to bikes in the city centre. Portland's focus on active green mobility aims to reduce daily car travel and promote public health by addressing issues related to obesity, heart diseases, respiratory diseases, and other chronic conditions. With a goal of 80% of Portland's residents living in Complete Neighbourhoods, the aim is for 70% of commuters to cycle, walk, use public transport, and carpool to work or avoid transportation altogether through remote work by 2035. This initiative aims to reduce the number of daily car trips significantly but follows a storyline that focuses heavily on public health. Therefore, it is the health-promoting aspects of active green mobility and the reduced air pollution as a result of fewer cars that the initiative centres on. At the same time, a modal shift is seen as a means of reducing transport costs for citizens. Portland recognises this as an essential part of everyday life while attempting to promote alternatives to private car ownership through expanding cycling and pedestrian infrastructure - making it more accessible, cheaper, and healthier to commute between daily activities.

Portland Summary

The overall story of Portland's Complete Neighbourhoods is supported by and expressed through the initiatives in the three selected storylines. The social and health aspects defined in the different storylines also speak to Portland's self-understanding as a progressive North American city. Portland differs from the other cases in this report as the city focuses on measurability in implementing Complete Neighbourhoods to ensure more equitable development of the city's neighbourhoods and access to functions.

'Portland is a healthy and equitable city where people can thrive'		
Storylines	Initiatives which support the storyline	
Complete Neighbourhoods promotes fair urban development through targeted and measurable efforts	An index that measures the current proximity to city functions is used as a tool for prioritising neighbourhoods and actions.	
2. Complete Neighbourhoods are equal and diverse	The Anti-Displacement Action Plan constitutes a strategy to prevent inequality due to rising housing prices and gentrification as Complete Neighbourhoods are developed.	
Complete Neighbourhoods create a healthy and connected city	 Promotes active green mobility by establishing The Healthy Connected City Network, which identifies green mobility corridors and invests in new bicycle and pedestrian infrastructure. 	

Table illustrating Portland's storytelling, storylines and supporting initiatives.



CASE STUDIES · MELBOURNE

Melbourne Is a City Where You Can Live Locally in Inclusive, Healthy Neighbourhoods

The idea of 20-minute neighbourhoods began in 2018 in a pilot project testing the concept, which was adopted as the fundamental principle behind the comprehensive development strategy for Greater Melbourne. Like Portland, Melbourne's 20-minute neighbourhoods mobilise the social ideals underpinning the metropolitan strategy: quality of life, free choice, and opportunities for all citizens. Emphasis is placed on creating a 'good life' for citizens while addressing the city's risks and consequences derived from the impacts of global climate change.

Although an essential function of the 20-minute neighbourhoods is to reduce daily transportation needs and, thus, CO2 emissions, the rationale behind the concept is to enhance local living conditions by enabling solid communities and increased quality of life. With a high degree of citizen involvement, values such as participation, equality, and justice are central to the overall vision of Melbourne's future. The concept of 20-minute neighbourhoods thus enables an understanding of citizens' everyday lives, supported by a physical distance (800 m), visual models and figures, making the concept easy to understand, see ill. 12.

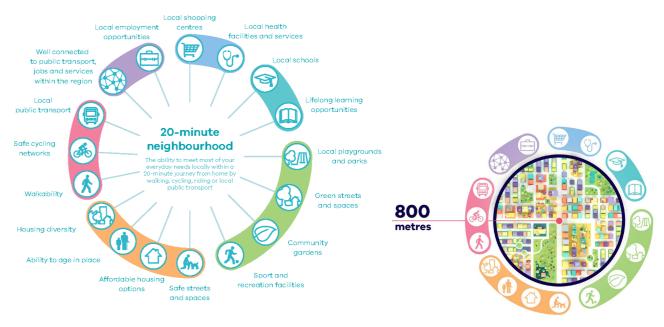
Melbourne's 20-Minute Neighbourhoods

Plan Melbourne (2017–2050) is a long-term, comprehensive planning strategy for central Melbourne, the Greater Melbourne region, and the state of Victoria, spanning 35 years. The plan addresses the city's challenges product of its growing population. It aims to make the city more resilient to environmental impacts due to climate change, such as extreme heat, drought, forest fires, storms, and flooding, while maintaining and improving the city's culture, sustainability, and quality of life. The plan was partly developed based on the study Places for People (2015)— investigating living conditions in central Melbourne. The plan introduces the idea of 20-minute neighbourhoods as a supporting principle for realising the city's vision while prioritising social sustainability promoting the idea of 'living locally' where people can meet their daily needs within a 20-minute round trip from their home by foot, bike, or public transport, see ill. 12. the concept throughout the city.

The plan stresses that 20-minute neighbourhoods should:

- Be safe, accessible, and connected to green mobility for cyclists and pedestrians.
- Offer public spaces of high quality.
- Offer services that support the local way of life.
- Facilitate access to public transport that connects people to services outside the neighbourhoods and gets people to work.
- Offer high-density housing that enables local services and sustainable public transport.
- · Support local economies.

Ideally, 20-minute neighbourhoods should provide a range of 17 urban and social functions, promote a cohesive and inclusive community, improve health and well-being, and reduce travel costs, congestion, and CO2 emissions throughout the city, see ill. 11.



III. 11 Concept diagram of which functions the 20-minute neighbourhoods should contain. © Plan Melbourne and State Government of Victoria.

III. 12 Concept diagram of the functions and the distance in meters of the 20-minute neighbourhoods.

© Plan Melbourne and State Government of Victoria.

A critical element crucial to implementing the concept is the creation of Neighbourhood Activity Centres—'high streets' with shops, cafes, small supermarkets, service businesses, public services and amenities, and public spaces supporting local surrounding communities and providing local jobs and opportunities for social interaction and participation.

Plan Melbourne focuses on active green mobility in combination with public transport. It promotes suitable design measures and expansion of the existing infrastructure, e.g., protected bike lanes, wide sidewalks, and school drop-off zones. The primary public transport network connects the 20-minute neighbourhoods, its activity centres, and the stretches from home to work throughout Melbourne. High-density development and mixed-use areas are associated with the primary public transport network.

Plan Melbourne is accompanied by a five-year implementation plan, which constitutes the strategies for developing the Greater Melbourne area, anchored by initiatives across state ministries, agencies, authorities, and local governments. Plan Melbourne will be reviewed every five years with annual reports and updates. Several organisations have adhered to Victoria's authority composition in the implementation process. The Department of Environment, Land, Water and Planning (DELWP) connects all aspects of planning and coordinates the state of Victoria's approach to implementing Plan Melbourne alongside other sectoral departments: the Department of Jobs, Precincts, and Regions (DJPR), the Department of Transport, and the Victoria Planning Authority (VPA).

Plan Melbourne is a comprehensive strategy that includes diverse initiatives supporting sustainable development in the Greater Melbourne area and the state of Victoria. Here, we identify four storylines supported by several initiatives for implementing 20-minute neighbourhoods.

CASE STUDIES · MELBOURNE

CASE STUDIES · MELBOURNE

Storyline 1. 20-minute neighbourhoods create space for recreation and promote sustainable modes of transport

In connection with Plan Melbourne, the state of Victoria has introduced a new approach to their transportation planning, called Movement and Places, which constitutes an overarching framework that seeks to integrate land-use and transport planning through three principles: 1) People first, 2) Outcomes focused, and 3) One system. The fundamental idea is that streets have multiple functions - as movement corridors and as important places and destinations. This means that the network of roads must be balanced. Hence, it functions as movement corridors that minimise time and prioritise public modes of transportation and local public spaces where visitors can dwell. The initiative in this storyline rethinks what the street structure should offer. Instead of prioritising cars, the street becomes a space for movement where people are in focus. This supports the overall goal of reducing CO2 emissions and increasing the quality of life in the city. At the same time, the new movement corridors should be seen as a space for both movement and dwelling, which supports the idea of bringing social spaces closer to citizens and reducing travel time to local communities and destinations.

Storyline 2. In 20-minute neighbourhoods, social infrastructure is a prerequisite

Plan Melbourne outlines a comprehensive strategy to provide social infrastructure, which is considered a positive net return on investments that offsets the costs of providing various facilities. In growth areas, these facilities must be provided early in the development process and in suitable locations to support the development of a strong local community. The existing community infrastructure should be optimised in established neighbourhoods while promoting greater space utilisation. This can be done, for example, by converting former town halls into libraries, using temporary locations and buildings for local activities, integrating different services by placing them in the exact location, and ensuring flexibility in design and planning to accommodate population changes and needs. The social infrastructure should be accessible to all members of society, and both the public and private sectors play an essential role in delivering, operating, and maintaining these. This storyline portrays the social infrastructure as a prerequisite for creating inclusive and socially just neighbourhoods in Melbourne. It thus supports the narrative that the 20-minute neighbourhoods in Melbourne should be inclusive with a fair distribution of functions and services for all citizens.

Storyline 3. 20-minute neighbourhoods enable green public spaces to create strong communities and improve the quality of life

To create healthy and attractive 20-minute neighbourhoods, Plan Melbourne is directed at all members of society, regardless of age, gender, ability, or residence, having access to local green areas. Establishing new and developing existing green spaces should be carried out in collaboration with residents to ensure fair distribution in all neighbourhoods. The temporary use of vacant areas, as well as the use of schoolyards after closing time, are seen as means to increase accessibility and use space as best as possible. As part of this initiative, 50 local community gardens have been developed, and more are already planned (see ill. 13). The community garden projects support the development of strong local communities, promote local food production, and ensure local engagement through active citizenry involvement.

In addition, it is also mentioned that planting trees along streets and in parks that produce fruit and nuts that all can pick is a way to increase the city's green profile and local food production. With a focus on community, quality of life, and citizen involvement, this storyline and its initiatives support the inclusive function of the neighbourhoods by creating space for local communities.



III. 13 Picture of one of the 50 local community gardens. © Plan Melbourne

Storyline 4. 20-minute neighbourhoods are based on citizen needs

In 2018, the Department of Environment, Land, Water, and Planning (DELWP) launched a pilot project to implement 20-minute neighbourhoods in three different areas. The project was carried out in partnership with The Heart Foundation, Victoria Walks, Resilient Melbourne, and local authorities, who tested the implementation of 20-minute neighbourhoods in various parts of Melbourne. The results highlight that place-based planning can effectively address the challenges of coordinating projects and citizen engagement between ministries and agencies. This approach involves holistic coordination between authorities at one location where open communication is maintained with the local community to understand local challenges and needs in different areas. In addition, a bottom-up approach with participatory planning processes and local partnerships and engagement was fundamental for the projects' success.







III. 14 Strathmore is one of the areas included in the pilot projects. Here, a local youth group called "Let's Make A Park" established a pop-up park outside Strathmore train station. It was launched with a street party in June 2018, attended by over 400 people. © Plan Melbourne.

Melbourne Summary

This storyline emphasises Melbourne's approach to urban development, which prioritises social inclusion, quality of life, and participatory planning processes. Citizen involvement is incorporated into everyday neighbourhood planning practices addressing context-specific considerations. To measure quality of life, city planners conducted two initial studies addressing the impacts of spatial change on citizens' everyday lives: Places for People (2015) and The Local Liveability Study (2015). These studies provide a good starting point for developing stories that reflect the local population's desires.

Melbourne is a city where you can live locally in inclusive, healthy neighbourhoods		
Storylines	Initiatives which support the storyline	
20-minute neighbourhoods create space for recreation and promotes sustainable modes of transport	A new approach to transport planning 'Movement and Places' aims to change the understanding of streets to a place where people come first.	
2. In 20-minute neighbourhoods, social infra- structure is a prerequisite	 A strategy considering social infrastructure as an investment with a positive net return. Utilising buildings for social infrastructure to create local communities for all citizens. 	
3. In 20-minute neighbourhoods, green public spaces create strong communities and improve the quality of life	Implementation of 50 local community gardens based on providing everyone access to green areas. The initiative promotes local communities, citizen participation, and food production.	
4. 20-minute neighbourhoods are based on citizen needs	 A pilot project testing the implementation of 20-minute neighbourhoods in various locations in Melbourne where citizen participation and inclusive planning processes were found to be crucial factors for the concept's success. Two initial studies examined the citizens' quality of life and how the physical changes have impacted their everyday lives. 	

Table illustrating Melbourne's storytelling, storylines and supporting initiatives.



CASE STUDIES · MILAN

CASE STUDIES · MILAN

In Milan, the City Is No More Than 15-Minutes Away

The COVID-19 pandemic heavily impacted Milan and underwent a severe crisis. A recovery strategy was implemented to restore the city and assist residents in adapting to a new form of social interaction and city life, including goals to make Milan a 15-minute city. Like Paris, Milan's approach to the 15-minute city and the storylines supporting it are based on Giuseppe Sala's re-election campaign as city mayor, which was based on making Milan better connected, sustainable, and socially just. Sponsored by the slogan 'Milan, easier and easier', Milan's 15-minute city vision centred on strengthening the city during the COVID-19 crisis by rethinking mobility around the city.

The 15-Minute City in Milan

In Milan, the 15-minute city was initiated mainly as a response to the pandemic's consequences on the city and its economy, with widespread restrictions on citizens' movements and social activities. Despite a working 'periphery plan' to decrease inequality between the city centre and outer districts, access to essential functions and services was unevenly distributed. With the 15-minute city, the focus shifted from the peripheral areas of Milan towards including the entire city, starting with the most socially challenged districts. The transition is intended to ensure that the characteristics of the different neighbourhoods are considered and that local challenges in the individual neighbourhoods are addressed. Milan does not yet have a comprehensive strategy for implementing the 15-minute city. Instead, the city's COVID-19 recovery plan from 2020 stresses collaboration across administrations and planning departments to implement the 15-minute city concept.

With the concept of the 15-minute city, Milan promotes access to a wide range of private and public functions and services within 15 minutes of active green mobility, including shopping opportunities, restaurants and bars, cultural offerings, green spaces, schools, health services such as doctors and pharmacies, public transportation, and other services such as post offices and ATMs. Additional goals include reducing the number of car trips in the city in favour of active green mobility and public transportation, improving and increasing the number of green spaces, promoting local communities, and creating a more connected city through physical and digital networks. With this approach, Milan seeks to fulfil the original goals described in the 'periphery plan' while equipping the city to handle a possible future pandemic considering the local economy. The overarching goal is to improve the quality of life and the experience of living in the city. For Milan, two storylines associated with the 15-minute city have been identified, which are relevant to the city's overall vision.

Storyline 1. Milan is sustainably connected

Milan is actively working with the EU's 'Sustainable Urban Mobility Plan' (SUMP) guidelines, and transformations in the city have resulted in several adaptations to the public transportation system, consisting of buses, trams, and trolleybuses connecting the city both within and outside the city area, as well as a metro system consisting of four lines. In addition, a range of shared mobility services is also available in central Milan. Milan has a continued desire to invest in public transportation in order to ensure an efficient system that connects the different districts of the city. To reduce citizens' daily mobility needs, various digital solutions are being rolled out that, through online services, will bring public services closer to the citizens. Through digital 'citizen files', large parts of citizens' contact with the public will in the future take place via the internet rather than physically. Furthermore, through public subsidies, it will be made more attractive to work from home or shared office spaces for both schools and businesses and thus reduce the pressure on the city's transportation system and public spaces. In Milan, the work to improve connections across the city's 88 districts has primarily been focused on public transportation. However, the goal has also been to eliminate the need for mobility through digitalization, for example when citizens need to contact the public system. The initiatives both follow a storyline about the connected city, which is intended to make everyday mobility easier for the individual Milanese so that 'the city is no more than 15 minutes away'.

Storyline 2. Urban space is for the citizens

Milan mainly works on two initiatives: 'Open Squares' and 'Open Streets'. Open Squares aim to temporarily transform parking lots and other spaces connected with transit areas into central squares within the 15-minute city neighbourhoods. Open Streets aim to provide more space for active green mobility and create a healthy and safe cycling and pedestrian network. The idea behind the temporary squares is to change the function and bring social interaction back to the neighbourhood. Emphasis has been placed on active citizen involvement in developing and designing the squares through 'tactical urbanism' and citizen participation. The success of this project is reflected in citizens' surveys showing that a vast majority (84%) would prefer the new squares to be made permanent.

As the medieval centre of Milan is highly dense, more space for active green mobility restricts car use even though there are no ambitions to create a completely car-free city. To enable safer roads, the maximum speed across Milan's traffic network has been changed from 50 km/h to 30 km/h to reduce car traffic in the inner city, CO2 emissions, and pollution. For both initiatives, public space is redesigned and reconfigured to improve public health and well-being - the idea being that open squares and streets are established within 15-minute city neighbourhoods by improving pedestrian and cycling conditions. This development occurs mainly around the city's schools and other neighbourhoods that lack green recreational spaces. Both Open Squares and Open Streets will serve as central places, designed by citizens and various local actors based on the characteristics and challenges of the neighbourhoods. The temporary aspect of the initiatives makes them easy to test and establish at a relatively low cost, see pictures, ill. 16 and 17.

These initiatives aim to improve the quality of life in the city by developing better conditions for active green mobility, reducing pollution, and providing space for social interaction. Through tactical urbanism, the idea is to redevelop areas (that prioritised car infrastructure) in collaboration with citizens, allowing local needs to be met - and an everyday life perspective integrated into planning. The story-line for these measures supports developing public space to enable social interaction.





III. 16 © Bloomberg Philanthropies

III. 17 © Comune di Milano

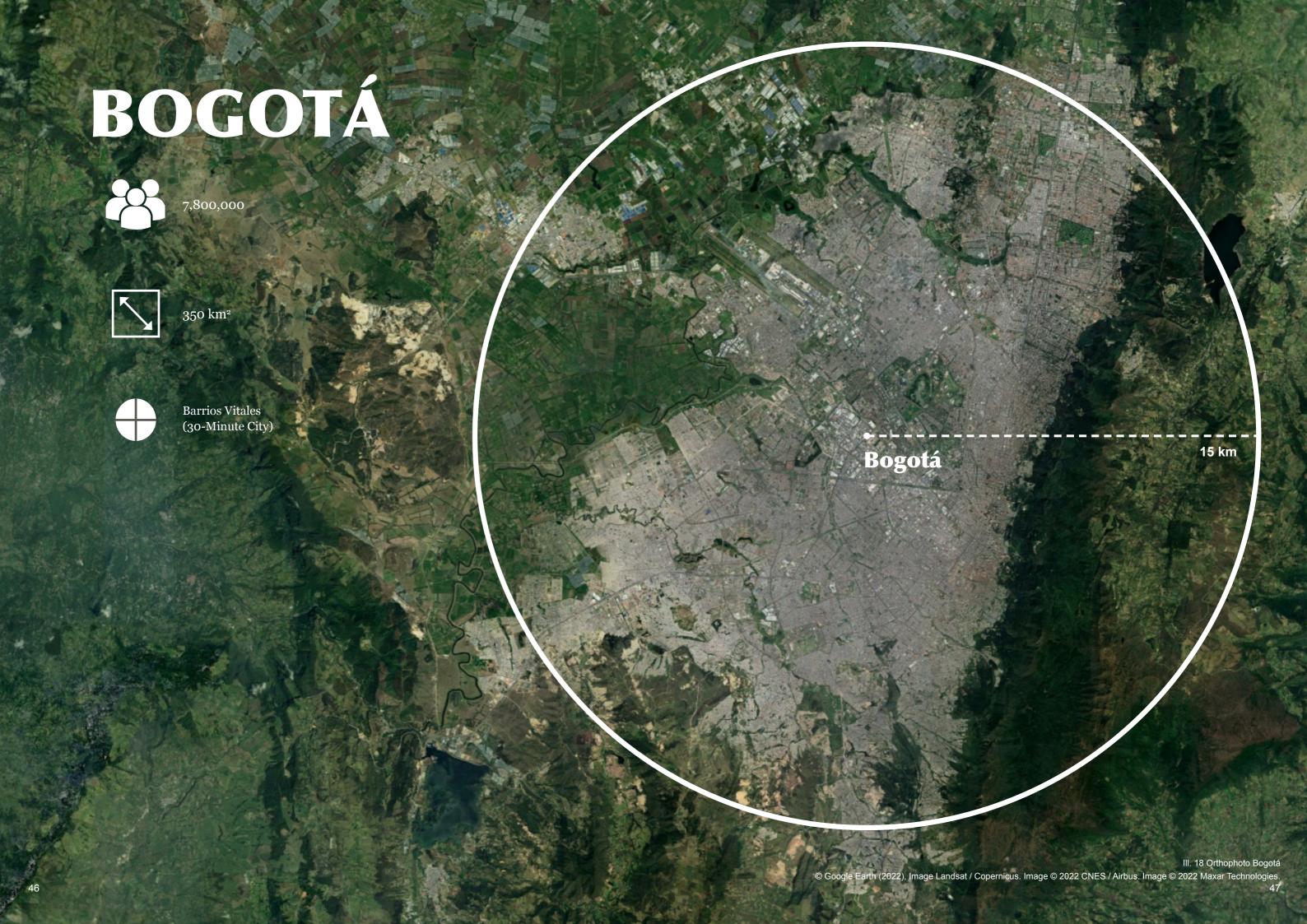
Pictures of the open squares and open streets initiative in Milan.

Milan Summary

Both storylines aim to change land use to create space for more sustainable modes of transport and increase accessibility to the city's functions, not least the opportunity for social interaction in public spaces. The initiatives support the mayor's vision of 'Milano, easier and easier' by strengthening mobility, making the city and its functions more accessible and 'no more than 15 minutes away'.

In Milan, the city is no more than 15 minutes away			
Storylines	Initiatives which support the storyline		
With the 15-minute city, Milan becomes sustainably connected	 Investments in the public transport sector to connect the city with sustainable mobility options. Implementing digital public services to reduce mobility needs and bring public services closer to citizens. 		
2. Urban space is for the citizens	 Open Squares through tactical urbanism transform parking spaces into social gathering places in the local communities. Open Streets aims to change the priorities in the road structures to allocate more space for active green mobility and create a healthy and safe cycling and pedestrian network. 		

Table illustrating Milan's storytelling, storylines and supporting initiatives.



CASE STUDIES · BOGOTÁ

CASE STUDIES · BOGOTÁ

Bogotá Is a Diverse and Accessible City for All Citizens

Since 2020, Bogotá has adopted the concept of Barrios Vitales ('Vibrant Neighbourhoods') based on the concept of a 30-minute city. The rationale behind the concept is to enable a fairer distribution of road space, prioritising cycling, walking, and public transportation to ensure that citizens do not incur high costs and long travel times when commuting. The concept was recently used as a political narrative by the city mayor, Claudia Lopez, in her campaign to change the city's physical structure: establishing green corridors to promote active mobility and more inclusive planning processes. According to the city mayor, implementing Barrios Vitales entails an ambitious yet realistic plan, considering Bogotá's complex topography (consisting of hilly terrain that limits displacement), high population (7.8 million in 2021), and car infrastructure taking up most public road space. Yet, since 2010, the city began developing a more integrated planning approach to public transportation with measures to build a well-connected public transportation system across the city alongside improving options for cycling and walking. Due to its high levels of car traffic, Bogotá has faced significant levels of air and noise pollution, resulting in public health issues and a decline in well-being. A considerable share of Bogotá's citizens commute to and from work for up to two hours due to the unequal distribution of jobs and homes, resulting in about 30% of the annual income spent on transportation.

Barrios Vitales in Bogotá

Bogotá adopted its Plan de Ordenamiento Territorial (POT) to break down the city's functional zoning, reduce inequality, and promote sustainable development. The POT focuses on creating Barrios Vitales (Vital Neighbourhoods), with access to facilities and services through public transport within a 30-minute radius. This involves centralising actions in each neighbourhood, improving the local economy, reducing space for private cars, and increasing space for pedestrians and cyclists. In addition, the plan advocates developing green recreational areas and increasing social interaction, well-being, and public health in Bogotá. In response to the COVID-19 pandemic, Bogotá has reviewed its transport planning, establishing a temporary 76-km network of bike lanes to supplement the existing network. This was an essential public intervention for improving air quality and reducing pressure on the public transportation system. Bogotá's Barrios Vitales are supported by several initiatives condensed in the following three storylines.

Storyline 1. Barrios Vitales create fair and equal access to city functions

To identify Bogotá's current proximity to functions, this has been measured in the city's neighbourhoods. This measurement considers the physical and geographic conditions of the neighbourhoods (for example, whether they are hilly), the distance to public transportation with active green mobility, and physical limitations such as age and disability. The city's POT may prioritise ad hoc neighbourhoods to tackle inequalities between neighbourhoods. Bogotá's Barrios Vitales should thus be designed so that all residents have fair and equal access to the city's functions. This reflects the storyline on fairness in Bogotá, where equal access is crucial and where the most challenged neighbourhoods will be the first to be converted into Barrios Vitales.

Storyline 2. Barrios Vitales are the citizens' neighbourhoods

Bogotá has established a platform that allows citizens to create their 'own' Barrios Vitales. Citizens can contribute ideas and themes to improve traffic safety, revive local trade, or promote cultural life in the neighbourhood. This initiative focuses on involving citizens in urban development through, e.g., tactical urbanism so public space responds to citizens' wants and needs. Bogotá works with the Street Mix platform to allow citizens to develop and show their ideas. This design tool enables citizens to envision how a street can be changed into an attractive public space. Citizens get involved when they receive an invitation to suggest improvements in their neighbourhood and are thus given access to the platform and tools, e.g., in redeveloping Avenida Séptima, a major thoroughfare. Acknowledging the city's roads and neighbourhoods as the citizens' domain implies equal access to urban planning through a shared responsibility and an increased capacity to influence local neighbourhood change.

Storyline 3. In Barrios Vitales, children come first

'Children First' is a programme based on the city's Vision Zero strategy—targeting zero fatalities in traffic. The programme aims to foster sustainable mobility habits and behavioural change among local youths by ensuring active green mobility, investing in walking and cycling infrastructure and teaching good traffic behaviour, see pictures, ill. 19. It consists of several initiatives, among other things, Cycle School, whereby public schools teach children good cycling behaviour and safe cycling routes; and playful workshops, which aim to develop a bicycle culture amongst children. Moreover, the programme has designated school zones by limiting speed limits to 30 km/h, made visible through innovative and notable designs. Safe paths and lanes have also been established to make schools more accessible through active green mobility while increasing safety and security. Cycling lanes are given preference between 6:00 and 8:30 a.m. (e.g., in Suba district). Thus, The Children First story-line endorses a modal shift from cars to active green mobility in the longer term, supporting Bogotá's overall discourse that the city should be accessible and diverse.



III. 19 Pictures of the initiative 'childeren first' and school zones in Bogotá. © Bogotá Programa De Buenas Práctica.

Bogotá Summary

Altogether, the three storylines support the discourse of creating equal access to everyday life functions regard-less of the neighbourhood, with citizens having a say in co-creating urban planning initiatives while being able to move safely around the city using active green mobility.

Bogotá is a diverse and accessible city for all citizens		
Storylines	Initiatives which support the storyline	
Barrios Vitales create fair and equal access to city functions.	Identifies the current proximity to functions to determine which neighbourhoods should develop Barrios Vitales.	
2. Barrios Vitales are the citizens' neighbour- hoods.	 Citizens are involved in the development of Barrios Vitales through tactical urbanism. Establishing an online design tool so citizens can envision how to make roads and streets more attractive. 	
3. In Barrios Vitales, children come first	 Creating behavioural changes for children while encouraging them to use active green mobility: improving pedestrian and cycling infrastructure, teaching cycling culture and safe routes, and partaking in playful workshops. Establishing school zones, safe paths, and school lanes to ensure the safety of roads surrounding the local schools. 	

Table illustrating Bogotá's storytelling, storylines and supporting initiatives.

The 15-Minute City Concept in Smaller Cities

So far, work on the 15-minute city concept has been carried out in capital cities and other large cities worldwide. However, the concept, or its elements, are relevant for smaller cities. As the concept is conceived, there is no defined size for a 15-minute city. Transitioning towards urban sustainability while reducing CO2 emissions should apply to all cities regardless of size. As the concept's minute figure (10, 15, 20 or 30) is not set in stone, it remains flexible and adaptable to the local context.

Hence, principles for designing urban structures can be equally relevant for small cities when dealing with challenges such as climate change, segregated functions and population, equal access to mobility, and overall quality of life in the city. With a focus on living locally, the concept proposes easy access to essential functions while revitalising local city centres by integrating functions and ensuring good social, cultural, and recreational opportunities to help create strong local communities and neighbourhoods.

Multifunctional use of buildings and public space is necessary for many large cities due to high density and the need for more space. In smaller cities where available space is not necessarily the biggest problem, multifunctionality can bring more functions to the city centre or other central locations. For example, the school can be used as a cultural centre or for cultural purposes outside of opening hours, the playground can be turned into a public park and playground, and empty retail spaces can be used as temporary remote workspaces. At the same time, improved conditions for active green mobility can help create a more vibrant urban environment through increased human activity and make walking or cycling more accessible and attractive.

Currently, there are only limited examples of small cities being planned according to the concept of the 15-minute city. Yet, several smaller cities have worked on sustainable urban transformation related to the concept. In what follows, we present two examples.

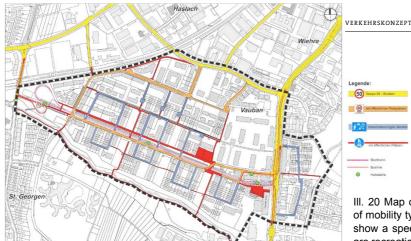
Vauban, Freiburg, Germany

Eco-Friendly Living in Vauban

Vauban is a district in the German city of Freiburg. The district is an old French military base that has been converted into a small alternative urban community with around 5600 inhabitants. The area was built around several principles relating to the 15-minute city. Offering various types of housing to attract residents with varying incomes and ages, diversity in citizen composition has taken centre stage in Vauban's urban strategy. Here, diversity is crucial for maintaining essential everyday functions such as grocery stores, schools, restaurants, health services, leisure activities, green spaces, and public transport. Like the 15-minute city, access and proximity to functions are understood as essential elements to attain the 'good city', even though the time aspect of the concept is not explicitly used.

Another 15-minute city-related principle in Vauban is the promotion of active green mobility through a connected and well-developed network of bike- and pedestrian paths. To support this initiative, the role of the car in the city has been diminished by establishing measures to reduce car traffic. While driving in Vauban is not prohibited, access is somewhat limited. In several city areas, the speed limit has been reduced to 30 km/h or even walking speed, and many streets do not have public parking spaces. At the same time, there is a wide range of shared mobility solutions and good public transport connections—thus resulting in significantly lower car ownership. Like the 15-minute city, these principles aim to create healthy, sustainable neighbourhoods with a higher quality of life for all citizens.

From the initial planning phases, there has been close collaboration between the local authorities and the residents via the association Forum Vauban. The local authorities developed the principles for planning the area in partnership with this forum, and many implemented measures are based on residents' wishes. The goal showcases how a sustainable ecological urban area with 'Eco-friendly living' is designed through collaborative planning. Due to its sustainability approach and high citizen involvement, the association was already awarded the Dubai International Award for Best Practices in 2002.



III. 20 Map of the road classification and prioritisation of mobility types in Vauban. The yellow road markings show a speed limit of 50 km/h, orange 30 km/h, blue are recreational and play streets, and red are cycle and pedestrian paths. © Stadt Freiburg im Breisgau.

Kirkland, Washington, United States

Kirkland Is a City Where One Can Live, Work, and Play.

The 'Complete Communities' concept has been used for over 15 years in the North American city of Kirkland, Washington. With about 91,000 inhabitants, Kirkland has been working towards creating more sustainable communities and higher quality of life. The concept is based primarily on the overarching principle that urban development must include the essential functions that residents need in their everyday lives within walking distance. In addition, Kirkland focuses on creating a diversity of functions, population composition, and participatory planning processes. By introducing a 10-minute neighbourhood approach, Kirkland's planning strategy focuses on accessibility to essential everyday life functions within a 10-minute walk.

Kirkland centres its urban development on principles similar to the 15-minute city, even though the time perspective was not originally a part of the strategy. This includes improving pedestrian infrastructure, constructing a green corridor across the city, and connecting to green recreational areas and schools (see ill. 21). The car-free pedestrian environments are intended to make walking safer and more attractive, especially for children and young people. The benefits of children being able to transport themselves daily and the health aspects of active green mobility, have become an essential part of the city's political narrative and vision. Like the other cases addressed in this report, Kirkland uses storytelling to sell and legitimise the idea of a sustainable, connected community with a high quality of life by appealing to people's everyday life values. As in Melbourne, Kirkland has strengthened the collaboration between different planning departments to ensure the strategy is integrated and implemented across sectors.



III. 21 Map of the "Cross Kirkland Corridor", a walking route connecting green spaces and schools in the city. This will make walking to the functions safer and more pleasant. The city of Kirkland are making a great effort to create a new culture for children to walk to and from school. © City of Kirkland, Washington.

THE POTENTIAL OF THE 15-MINUTE CITY

THE POTENTIAL OF THE 15-MINUTE CITY

The Potential of the 15-Minute City

A key strength of the 15-minute city concept lies in its capacity to integrate and manage the critical problems and challenges cities face globally. Through its different principles, the 15-minute city has the potential to contribute to sustainable urban development by establishing synergies across other sectors and areas of intervention.

The cases explored in this report show how active green mobility is inextricably linked to the principle of proximity to essential daily functions. Proximity and easy access to functions offer people the daily choice of active green mobility. At the same time, smaller neighbourhoods and proximity to functions are vital for promoting social sustainability through local communities while strengthening local economies.

The motivation for promoting active green mobility varies from city to city. Still, measures that promote active green mobility, to a large extent, achieve positive effects across several different parameters. While the most apparent goal remains to limit CO2 emissions from the transport sector, attention is also paid to how active green mobility influences the possibility of using the additional space for social activities.

In Melbourne, authorities directly distribute public space in all neighbourhoods based on a desire to create better frameworks for social and recreational activities while promoting better access to nature. Hence, space previously reserved for cars is now allocated to active green mobility, public transport, and green areas so that streets and roads encourage recreational activities and provide better conditions to create stronger local communities. Combined with greener spaces and local community gardens, these initiatives can help reduce the degree of paving, thus positively affecting rainwater management by diverting and infiltrating it.

Public health is essential in Portland's desire to promote walking, cycling, and combining trips with public transport as an attractive alternative to private car ownership. This will help reduce particle pollution, which is significant in Portland due to the car's dominant role.

In Bogotá, the focus is on creating more equal and inclusive access to mobility in daily life. As in Paris and Milan, better distribution and accessibility to public space are fundamental. Bogotá distinguishes itself from other cities by giving children an active role in this change. This stems from evidence that physical activity increases concentration and learning and that mobility habits established in early childhood persist in adulthood. The fact that children transport themselves independently also holds the potential for a better organisation of citizens' everyday lives.

The cases of Vauban and Kirkland show how active green mobility enables a more leisurely, healthier, and functional everyday life. Similarly, active green mobility contributes to an enhanced quality of life as more public space is allocated to everyday activities.

Several cities strongly focus on creating diversity in functions and population composition. It is a known criticism that urban regeneration projects lead to gentrification. In both Portland and Paris, specific strategies address this critical issue by advancing housing prices and guidelines for tenant composition.

The report shows that an urban transformation narrative with a vision for creating an overall framework to live more sustainable everyday lives has been made in every city. These narratives are driven by ideas about the 'good life' with a focus on time. In this sense, chrono-urbanism stresses the relevance of temporal and spatial aspects catering to the rhythms of everyday life. In Paris and Bogotá, time is spared on transportation, which is converted into 'valuable' time spent in more meaningful activities with friends and family. In Melbourne, values such as equality, justice, and participation are crucial elements that everyone can easily relate to. Based on its persuasive narratives, the 15-minute city concept promises to deliver solutions to multiple urban problems related to climate and sustainability while promoting more engaging participatory planning processes that contribute to developing ownership and, not least, the possibility of incorporating everyday life into planning. This is highly relevant as the necessary changes to create a 15-minute city must be implemented in citizens' everyday lives. Many ideas embedded in the 15-minute city concept are familiar in a Danish planning context. The focus on creating cities for people has been on the planning agenda of many municipalities over the past decade. Yet, the concept challenges traditional Danish planning by simultaneously handling the different elements across conventional disciplines and administrations. The potential of the 15-minute city lies in its capacity to enable cross-sectoral and institutional coordination through its shared narrative and storylines.

REFERENCES AND LIST OF ILLUSTRATIONS

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References

15-Minute City

Moreno, C.; Allam, Z.; Chabaud, D.; Gall, C.; Pratlong, F. Introducing the "15-Minute City":Sustainability, Resilience and Placeldentity in Future Post-Pandemic Cities. Smart Cities 2021, 4, 93-111. https://doi.org/10.3390/smartcities4010006

Allam Z, Moreno C, Chabaud D, Pratlong F. Proximity-Based Planning and the "15-Minute City": A Sustainable Model for the City of the Future. IDEAS Working Paper Series from RePEc. Published online 2022. doi:10.1007/978-3-030-38948-2

Storytelling

Throgmorton, J. 1996. Planning as Persuasive Storytelling: The Rhetorical Construction of Chicago's Electric Future. Chicago, IL: University of Chicago Press.

Sandercock, L. 2003. "Out of the Closet: The Importance of Stories and Storytelling in Planning Practice." Planning Theory Practice 4 (1): 11–28.

Hajer, & Versteeg, W. (2005). A decade of discourse analysis of environmental politics: Achievements, challenges, perspectives. Journal of Environmental Policy & Planning, 7(3), 175–184. https://doi.org/10.1080/15239080500339646

The New Mobilities Paradigm

Urry, J. (2000) Sociology Beyond Societies: Mobilities for the Twenty-First Century. Routledge. https://doi.org/10.4324/9780203021613

Urry, J. (2007). Mobilities. Polity.

Cresswell, T. (2006). On the Move: Mobility in the Modern Western World (1st ed.). Routledge. https://doiorg/10.4324/9780203446713

Everyday Life

Freudendal-Pedersen, M (2022). Making Mobilities Matter Routledge. https://doi.org/10.4324/9781003100515.

Case: Paris

Pozoukidou, G., & Chatziyiannaki, Z. (2021). 15□minute city: Decomposing the new urban planning Eutopia. Sustainability (Switzerland), 13(2), 1–25. https://doi.org/10.3390/su13020928

Ville de Paris. (2022, May 23). Paris ville du quart d'heure, ou le pari de la proximité. https://www.paris.fr/dossiers/paris-ville-du-quart-d-heure-ou-le-pari-de-la-proximite-37

Ville de Paris. (2022, June 10). Les cours Oasis. https://www.paris.fr/pages/les-cours-oasis-7389

Ville de Paris. (2018). Paris Resilience Strategy.

The City of Buenos Aires, & C40. (2022). Benchmark - 15-Minute Cities. https://www.c40knowledgehub.org/s/article/Benchmark-15-minute-cities?language=en_US

Case: Portland

City of Portland. (2012). The Portland Plan. Prosperous. Educated. Healthy. Equitable. www.pdxplan.com

The City of Buenos Aires, & C40. (2022). Benchmark - 15-Minute Cities. https://www.c40knowledgehub.org/s/article/Benchmark-15-minute-cities?language=en US

Pozoukidou, G., & Chatziyiannaki, Z. (2021). 15-minute city: Decomposing the new urban planning Eutopia. Sustainability (Switzerland), 13(2), 1–25. https://doi.org/10.3390/su13020928

Case: Melbourne

The State of Victoria, Department of Environment, Land, Water, and Planning (2017). Plan Melbourne 2017-2050 ISBN 978-1-76047-500-0

The State of Victoria, Department of Environment, Land, Water, and Planning (2019). Plan Melbourne: five-year implementation plan

The State of Victoria, Department of Transport (2019). Movement and places in Victoria

ISBN 978-1-76090-080-9

City of Melbourne (2016). Places for people: ESTABLISHING A PLATFORM OF EVIDENCE TO SHAPE MELBOURNE'S FUTU-

The State of Victoria, Department of Environment, Land, Water, and Planning (2019). 20-Minute Neighbourhoods - Creating a more liveable Melbourne ISBN 978-1-76077-704-3

The State of Victoria, Department of Planning and Community Development (2010). ACTIVITY CENTRES TOOLKIT: MAKING IT HAPPEN ISBN 978-1-921607-44-8

Stanly, J. & Stanly, j. (2014). Achieving the 20-minute city for Melbourne: Turning our city upside down.

Pozoukidou, G., & Chatziyiannaki, Z. (2021c). 15-minute city: Decomposing the new urban planning Eutopia. Sustainability (Switzerland), 13(2), 1–25. https://doi.org/10.3390/su13020928

Case: Milan

Abdelfattah, L., Bazzoni, F., Borovkova, O., Choubassi, R., Deponte, D., Hanson Jonelle, Marconi, M., Presicce, D., & Zuretti, M. (2020, July 18). Living local: Mapping Milan micro-centers . Transform Transport - Systematica. https://issuu.com/systematica/docs/15-minute-city-milan

Abdelfattah, L., Deponte, D., & Fossa, G. (2022). The 15-minute city: interpreting the model to bring out urban resiliencies. Transportation Research Procedia, 60, 330–337. https://doi.org/10.1016/j.trpro.2021.12.043

Comune di Milano. (2020). Piano di Governo del Territorio, Milano 2030 Visione, Costruzione, Strategie, Spazi.

The City of Buenos Aires, & C40. (2022). Benchmark - 15-Minute Cities. https://www.c40knowledgehub.org/s/article/Benchmark-15-minute-cities?language=en_US

Illustrations

Marchigiani, E., & Bonfantini, B. (2022). Urban Transition and the Return of Neighbourhood Planning. Questioning the Proximity Syndrome and the 15-Minute City. Sustainability (Switzerland), 14(9). https://doi.org/10.3390/su14095468

Pinto, F., & Akhavan, M. (2021). Scenarios for a Post-Pandemic City: urban planning strategies and challenges of making "Milan 15-minutes city." European Transport - Trasporti Europei, 85. htt-ps://doi.org/10.48295/ET.2021.85.12

Case: Bogotá

Alcaldía mayor de Bogotá. (2021). Plan de Ordenamiento Territorial, Bogotá Reverdece 2022-2035, Document Abstract (translation).

Alcadía de Bogotá D.C. (2021). POT - Bogotá Greens 2022 - 2035. Bogota. Retrieved September 20, 2022, from https://bogota.gov.co/mi-ciudad/pot-bogota-reverdece-2022-2035/articula-do-del-pot-bogota-reverdece-2022-2035

The City of Buenos Aires, & C40. (2022). Benchmark - 15-Minute Cities. https://www.c40knowledgehub.org/s/article/Benchmark-15-minute-cities?language=en_US

Sáenz Laverde, G. (2020, September 23). Mayor Claudia López spoke about her plan to build a 30 minute city. Alcadía de Bogitá D.C. https://bogota.gov.co/en/international/mayor-claudia-lopez-spoke-about-her-plan-build-30-minute-city

Urban Sustainability Exchange. (n.d.). Children First. Retrieved September 26, 2022, from https://use.metropolis.org/case-studies/children-first#casestudydetail

Smaller Cities

Coates, G. J. (2013). The sustainable Urban district of vauban in Freiburg, Germany. International Journal of Design and Nature and Ecodynamics, 8(4), 265–286. https://doi.org/10.2495/DNE-V8-N4-265-286

Freiburg Im Breisgau. (n.d.). Verkehrskonzept. Retrieved October 14, 2022, from https://www.freiburg.de/pb/208744.html

Stadtteil Vauban. (n.d.). Traffic. Retrieved November 18, 2022, from https://stadtteil-vauban.de/en/traffic/

City of Kirkland. (n.d.). 10 Minute Neighborhood Analysis. Retrieved October 19, 2022, from https://www.kirklandwa.gov/ Government/Departments/Planning-and-Building/10-Minute-Neighborhood-Analysis

City of Kirkland. (2021, December 14). Kirkland Comprehensive Plan. Code Publishing Company. https://www.codepublishing.com/WA/Kirkland/html/KirklandCPNT.html

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