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“The 15-Minute City”: redesigning urban life with proximity to services

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This article presents a comprehensive exploration of the concept of the “15-Minute City,” an urban planning model aimed at redesigning cities to ensure that all essential services are within low-carbon proximity. We discuss how this model is grounded in urban theories prioritizing human scale, sustainability, and social cohesion. Practical implementation strategies, associated challenges, and the crucial roles of technology and community participation in its realization are examined. The significant impact of the model on urban mobility is equally considered, emphasizing that it extends beyond traffic management to fully integrate accessibility and service proximity. Finally, reflections are offered on the future relevance of the model, its alignment with global sustainability goals, and its potential to adapt to emerging challenges, thereby redefining urban life for current and future generations.

Introduction: proximity as a pillar of urban planning

Evoking the “15-Minute city” refers to a concept of urbanism that prioritizes accessibility to services and versatile spaces within short distances, promoting a polycentric environment where residents can meet most of their daily needs in a low-carbon manner (Moreno, 2022). The emphasis is not on the rigidity of time in a specific figure but on creating a capillary network of services that fosters an integrated and sustainable community life. This model has inspired numerous variations worldwide (X-Minute City, Neighborhood, Y-Minute Territory, Neighborhood), all under the umbrella of what we term “happy proximity,” an idea seeking to enhance urban life quality by reducing vehicle dependency and reinforcing economic and social cohesion. It is within this conceptual framework and for simplicity's sake that the recurring expression “15-Minute city” is to be understood in this text.

The notion of balanced and sustainable urban life has been an elusive goal in the history of metropolitan development. The “15-Minute city,” as a concept in urbanism, offers a fresh and pragmatic vision to achieve this goal. It is an extensive research task initiated in 2010, gaining worldwide popularity after being adopted by the Mayor of Paris, Anne Hidalgo, in November 2019, and the Mayor of Milan, Giuseppe Sala, in March 2020, leading the “Global COVID-19 Recovery Task Force” of C40 Cities, created during the pandemic, and by C40 Cities as a whole in July of the same year (C40, 2020).

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This proposal seeks a reorganization of urban areas so that citizens can meet their essential needs through proximity, favoring low-carbon mobility and promoting physical health by walking or cycling. This approach implies a profound reconfiguration of urban life, where proximity becomes the organizing principle of the city.

The significance of this approach lies in its multifaceted ability to reduce carbon footprint, strengthen local communities, and improve urban life quality. It redefines the relationship between space and time in the urban context, encouraging greater social interaction and a sense of belonging among residents. The “15-Minute city” and its counterpart for medium and low-density areas, the “Territory of the 1/2 Hour,” are more than just a measure of distance; they are a reimagining of urbanity and territoriality advocating for sustainability, accessibility, and quality of life through four pillars: a) proximity, b) density, c) mixture, and d) ubiquity (Moreno et al., 2021).

Contrary to the ideal of a successful city defined by its speed and expansion in the Athens Charter of 1933 and Le Corbusier's functionalism (CIAM, 1954) spread worldwide, this concept proposes a successful and livable city with access to daily needs through low-carbon accessibility in the outskirts. This includes not only shops and services but also schools, parks, medical services, workplaces, or cultural centers. The implementation of this vision requires an interdisciplinary approach covering economics, sociology, public health, ecology, and technology, among other fields.

The purpose of this article is twofold. Firstly, it seeks to analyze the practical implementation of the “15-Minute city” model in different urban contexts, illustrating how it adapts and modifies based on local characteristics and needs. Secondly, it aims to evaluate the tangible and intangible benefits promised by this model, as well as the criticisms and challenges it faces in its adoption.

Throughout this interdisciplinary exploration, case studies will be examined, innovative urban policies will be reviewed, and the idea that a restructuring towards proximity could be the answer to many persistent problems in contemporary cities will be tested. Ultimately, this analysis aims to provide a profound understanding of how the “15-Minute city” could reshape the future of urbanization, placing people and the environment at the center of urban planning agendas.”

1. Theoretical foundations: rooting the “15-Minute City” in contemporary urbanism

The concept of a city where all essential services are within close proximity is not only appealing but is also grounded in robust urbanistic principles supported by theories of urban development and numerous studies and practices over time. The “15-Minute City” is founded on principles of inclusive mobility, spatial efficiency, social equity, and sustainability, all essential concepts for the design of contemporary urban areas (Allam et al., 2021):

a) **Urban Mobility and Human Scale:** Modern urban planning theories emphasize the importance of calibrating the city to human scale, a concept that has evolved significantly since urbanists like Jane Jacobs advocated for vibrant streets and mixed urban functions (Jacobs, 1961). This principle is a cornerstone of the “15-Minute City” model, emphasizing accessibility and connectivity for pedestrians and cyclists, displacing the car as the central axis of urban design.

b) **Sustainability and Urban Resilience:** Designing a compact and multifunctional city that promotes the proximity of essential services is not only a response to the climate crisis but also a strategy to increase the resilience of urban communities. By reducing long-distance travel, greenhouse gas emissions are diminished, resources are preserved, and air quality is improved, contributing to the health and well-being of residents (IPCC, 2021).

c) **Equity and Social Cohesion:** A “15-Minute City” provides equal access to services and public spaces, fostering social equity and cohesion. Closing mobility gaps offers equal opportunities for all citizens, promoting inclusion and reducing social disparities.

d) Proximity Economy: The proximity of services reinforces the local economy by promoting the flow of capital within the community and supporting the growth of local businesses. This economic model fosters a network of more personal and less dependent commercial exchanges, thus driving the economy on a more human and sustainable scale.

e) Technological Innovation and Citizen Participation: Modern technology and community involvement play vital roles in the effective implementation of the “15-Minute City”. The collection and analysis of data provided by smart technologies enable urban planning that dynamically responds to the needs of the population. Active resident participation ensures that urban development reflects the desires and needs of the community, creating a sense of belonging and empowerment.

f) Interdisciplinarity in Urban Planning: The intersection of various disciplines such as geography, ecology, sociology, and economics enriches the theory and practice of the “15-Minute City”. Each field contributes unique perspectives that, when integrated, provide a holistic approach to addressing the complex challenges of urbanization. For example, geographers contribute mapping and spatial analysis techniques to identify optimal areas for neighborhood-level service development, while economists can assess the impact of these services on the local economy.

g) History and Evolution of Urbanism: The “15-Minute City” also draws support from the history of urbanism, from Perry's (1929) designs of the Neighborhood Unit to Ebenezer Howard's garden cities (Aguado Moralejo, 2021) to the principles of New Urbanism (Steuteville and Langdon, 2008) and the work of the renowned urbanist Jan Gehl (2010), aiming to restore the human dimension of cities. This model is presented as the natural evolution of these theories, adapting them to contemporary challenges and the expectations of a society increasingly aware of the importance of sustainable development.

h) Urban Psychology and Quality of Life: From the perspective of urban psychology, the proximity of services positively affects the mental health and happiness of citizens. Urban spaces designed to encourage social gatherings and outdoor activities contribute to greater life satisfaction and the creation of more cohesive and resilient communities (Simmel, 1903).

These theoretical foundations delineate the framework within which the “15-Minute City” develops and thrives. The application of these principles is not only a response to current issues but also an anticipation of the future needs of cities.

2. Benefits of service proximity: enhancing urban life

The urban shift towards service proximity is a rising trend that promises to improve the quality of life in cities. The benefits of this approach are multidimensional, ranging from improving public health to revitalizing the local economy. The vision of the “15-Minute City” is not only a response to the need for environmental sustainability but also a means to foster stronger and more resilient communities:

a) Improvements in Public Health: One of the most evident benefits of the “15-Minute City” is its positive impact on the health of its inhabitants. Promoting walking and cycling as primary modes of transportation not only reduces lifestyle-related diseases but also enhances mental health by reducing stress associated with long commuting times. For example, cities like Copenhagen, which have invested in bicycle and pedestrian infrastructure, have seen overall health improvements and a reduction in mortality related to pollution and inactivity (Allam et al., 2022).

b) Environmental Benefits: The reduction of reliance on motorized vehicles has a clear environmental benefit. Fewer cars on the streets mean fewer greenhouse gas emissions and better air quality. The “15-Minute City,” by encouraging short-distance travel, directly contributes to the fight against climate change. Cities like Paris have begun experimenting with this model by closing streets to car traffic and transforming them into green and pedestrian spaces.

c) **Local Economic Revitalization:** Concentrating services within walkable neighborhoods can revitalize local economies. Farmers' markets, neighborhood shops, and local services thrive when residents choose to consume locally. This fosters a circular economy and supports small businesses. In Melbourne, Australia, local commercial corridors have thrived thanks to policies promoting economic activity within walkable distances.

d) **Cohesion and Social Capital:** Neighborhoods designed with service proximity foster greater interaction among neighbors, reinforcing cohesion and social capital. The possibility of spontaneous encounters and participation in community life increases when people spend more time in their neighborhoods. In Portland, Oregon, the implementation of mini plazas and community spaces has been observed to encourage social interaction and a sense of community.

e) **Efficiency and Accessibility in Time Use:** The concept of the "15-Minute City" also enhances efficiency and accessibility in time use. Reducing travel time allows people to dedicate more time to recreational, family, or rest activities, instead of losing it in traffic. Pontevedra shows that it is possible to limit traffic in certain areas, allowing spaces to be used more efficiently, freeing up time for social life and recreation.

f) **Traffic Reduction and Mobility Improvement:** Decreasing car usage leads to a significant reduction in traffic, alleviating congestion and improving mobility for all road users, including emergency services and public transportation. Cities like Amsterdam have led the way in demonstrating how bicycle and pedestrian infrastructure can coexist with efficient urban mobility.

g) **Increase in Urban Safety:** Neighborhoods with more pedestrian and cyclist traffic tend to be safer due to increased natural surveillance. The constant presence of people on the streets acts as a deterrent to criminal activity and enhances overall safety.

h) **Resilience in Crisis:** The proximity of essential services has proven crucial in times of crisis, as evidenced during the Covid-19 pandemic. Neighborhoods that could access basic goods and services without traveling far had significant advantages in terms of continuity and well-being. In Seoul, the quick response to the pandemic was facilitated in part by the density of neighborhood-accessible services.

The benefits of the "15-Minute City" are clear and varied, offering improvements in health, the environment, the economy, and social cohesion. These concrete examples demonstrate how theory can translate into practice, yielding tangible results for citizens and their communities. The next section will examine the challenges that this model faces and how it can adapt to different urban contexts.

3. Challenges and critiques: assessing the complexities of the proximity urban model

While the "15-Minute City" presents numerous advantages, it also faces significant challenges and has been the subject of criticisms questioning its viability and effectiveness. Understanding these points is crucial for realistically evaluating the potential of this urban model and designing strategies to overcome its limitations.

a) **Implementation Challenges:** Transforming existing cities to adapt them to the 15-minute model involves a series of logistical and structural challenges. Cities historically designed around automobiles must undergo profound changes in their infrastructure, requiring a decisive assertion as a public policy of urban or territorial planning and detailed planning. Additionally, in many cities, real estate speculation and commercial interests may resist changes that prioritize public spaces over private development.

b) **Diversity of Urban Needs:** Each city has its own idiosyncrasies and specific needs, meaning that the 15-minute model cannot be applied uniformly. Differences in population density, the

geographical distribution of services, and mobility cultures require personalized adaptations, complicating the standardization of policies and strategies.

c) **Inclusion and Equity:** A common criticism of the model is that it can lead to gentrification and the displacement of less privileged populations if not handled carefully. Improving neighborhoods and introducing proximity services can increase housing prices, excluding those with fewer resources. It is essential that policies accompanying urban transformation include measures to preserve socioeconomic diversity and broadly promote social mixing.

d) **Economic Viability:** Critics have also raised concerns about the economic viability of the “15-Minute City.” They argue that the concentration of services may not be sustainable for certain types of businesses or that the reduction of traffic may negatively impact industries that depend on long-distance transportation. Multiple studies show that this is a paradigm shift that is materializing after the pandemic.

e) **Resistance to Change:** The cultural change required for the adoption of the “15-Minute City” model should not be underestimated. Entrenched habits of car dependence and expectations of convenience can be significant barriers. The transition requires behavior adaptation and a widespread acceptance of new mobility patterns.

f) **Need for Citizen Participation:** The success of the model depends largely on active citizen participation. However, achieving a level of community involvement that allows co-creation of the city can be a challenge, especially in contexts where distrust of authorities is high, or political culture is apathetic.

g) **Infrastructure and Technology:** The technological infrastructure needed to support a “15-Minute City” is considerable. Cities must invest in smart technologies that enable data collection and analysis for effective planning. This can be an obstacle, especially in regions with budget constraints or a lack of technical expertise.

Addressing challenges and critiques of the “15-Minute City” model is crucial when considering its potential benefits. Overcoming these challenges requires careful consideration of local circumstances and the implementation of inclusive and sustainable policies.

4. Urban design and planning strategies: forging the future of cities around human proximity

The transformation of our metropolises into “15-Minute Cities” represents a revolution in how we conceive and experience urban spaces. This transition, more than a series of isolated interventions or a traffic plan, is a holistic reinvention of the urban environment that places people and their daily needs at the center of planning. It is a response to the growing demand for urban environments that are both vibrant and sustainable, promoting health and well-being and fostering a stronger and more resilient community (UN-Habitat, 2023).

Cities embarking on this journey recognize that proximity is not only a matter of physical distance but also of accessibility and connection. It is not just about bringing people closer to services but weaving a network of experiences and opportunities that enrich daily life. The strategies they adopt are as diverse as the cities themselves, reflecting the diversity of their histories, geographies, and cultures. These strategies must be flexible enough to adapt to demographic and technological changes and robust enough to address the challenges of climate change and economic or health crises that may arise.

To navigate this paradigm shift, urban planners and policymakers must employ innovative and multidisciplinary thinking. They must link considerations of urban design with inclusive public policies, leverage technological advances for smarter planning, and ensure that economic growth goes hand in hand with social equity and environmental sustainability. The urban spaces of the

future must be designed with the flexibility to evolve alongside the communities that inhabit them, allowing cities not only to grow but also to learn, adapt, and thrive.

The ambition is high: to create cities that are more than just a place to live, work, and play, but spaces where every street, building, and square promotes rich and meaningful interaction. This requires a reassessment of traditional urban priorities and a new valuation of time and space in the life of the city. Commitment to this model is not an easy task or a quick solution, but it is an essential step toward creating a future urban environment that is worthy of future generations.

We will explore how cities worldwide are addressing these challenges and using innovative strategies to create urban environments that reflect the principles of the “15-Minute City”. These actions not only respond to current needs but also lay the groundwork for long-term resilience and adaptability, ensuring that cities not only survive but also thrive in the uncertain landscape of the future:

- a) **Redesign of Urban Infrastructure:** Redesigning urban infrastructure to promote pedestrian and cyclist mobility extends beyond simply adding bike lanes and wide sidewalks. It also involves the implementation of intelligent signaling systems, intersections prioritizing the safety of pedestrians and cyclists, and the development of parks and green corridors that connect different areas of the city. In Paris, the “Plan Vélo” (Paris, 2021) aims to double bike lanes and reduce car parking spaces to encourage alternative mobility.
- b) **Zoning and Mixed Land Use:** Effective mixed land use requires careful planning to balance residential life with commercial, industrial, and leisure activities. Flexible zoning policies allow spaces to adapt to multiple uses over time, fostering the vitality and adaptability of urban areas. In Copenhagen, mixed-use developments in the Nordhavn area are creating a new neighborhood from scratch, designed to be sustainable and people-centered.
- c) **Incentives for Local Development:** Incentives for local businesses can include not only financial support but also assistance in marketing, management, and training for entrepreneurs. This helps create a diversified economic fabric resistant to economic shocks. In Portland, the Neighborhood Prosperity Initiative program (Portland, 2021) has revitalized commercial districts through investment in the identity and business capacity of urban areas.
- d) **Integration of Green and Public Spaces:** Creating green and public spaces goes beyond simply providing parks, extending to the integration of nature into the design of buildings and streets. In Buenos Aires, the crisis generated by Covid-19 has facilitated the “renaturalization” policy of the city, with green streets incorporating vegetation that enhances biodiversity and manages stormwater.
- e) **Sustainable Transport Policies:** Sustainable transport policies must be comprehensive and systematic, integrating bicycles, public transport, shared vehicles, and other forms of electric mobility. In Amsterdam, the approach has been not only to create bicycle infrastructure but also to restrict car access to the city center and expand the public transport network.
- f) **Technology and Data for Smart Planning:** Smart planning also involves the development of applications and platforms that facilitate mobility and access to services. Singapore, for example, uses advanced traffic management systems and apps that provide real-time information on transport options, making navigating the city more efficient and accessible.
- g) **Active Citizen Participation:** Citizen participation benefits from the creation of digital and physical platforms for debate and decision-making. Many cities use tools like tactical urbanism and participatory budgets to directly involve citizens in the creation and improvement of their urban spaces.

h) **Affordable Housing Policies:** Affordable housing policies can include the construction of social housing, rent regulation, and the promotion of cooperative ownership. Vienna has been able to maintain diversity and affordability in its city center through a strong investment in social housing, avoiding the gentrification that often accompanies proximity-focused urbanization.

i) **Integration of Public Services:** The effective integration of public services requires planning that puts them at the heart of communities. Helsinki has innovated with the integration of services with the concept of the “city library,” creating spaces that are both learning centers and cultural activity hubs (Urban Next, 2018).

The aspiration to reshape our cities around the ideal of the “15-Minute City” is an initiative being adopted in cities worldwide. This global drive towards more human and accessible urban planning is based on a shared recognition that the quality of urban life can and should be improved. Urban design and planning strategies must, therefore, be as dynamic and diverse as the populations they serve, incorporating the uniqueness of each place and its people.

To materialize this vision in a variety of urban contexts, it is essential to have a commitment to innovation and adaptability. Successful tactics and policies in one city can serve as inspiration or a starting point for another, but they must always be adjusted to accommodate cultural, economic, and environmental differences. Collaboration between urban planners, the business sector, citizens, and other key actors is crucial to fostering a rich dialogue that can translate into effective actions and vibrant and sustainable urban environments.

Through a holistic and participatory approach, urban planners and policymakers can transcend the traditional limitations of city design and, instead, foster the creation of spaces that truly reflect the needs and aspirations of their citizens. By doing so, they are not only improving the habitability and resilience of cities but also reaffirming a commitment to creating an urban environment that is inclusive, equitable, and designed for human well-being in its broadest sense.

The universality of the concept of the “15-Minute City” underscores its relevance on the world stage. From the expanding metropolises of Asia and Africa to the historic cities of Europe and the varied urbanizations of the Americas, this model is being explored and adopted as an approach to more sustainable and human-centered urban development. It reflects a new era of urban responsibility, where distances are measured not only in kilometers or miles but in the quality of human connections and access to a full and healthy life.

The “15-Minute City” is emerging as a new paradigm in urban planning, one that promises to redefine the fabric of our cities and the daily lives of their inhabitants. As this concept continues to gain momentum globally, it becomes a powerful tool to address the urban challenges of the 21st century, creating cities that are not only more efficient and sustainable but also more welcoming, vibrant, and humane (Moreno, 2024).

5. Technology and innovation: catalysts of the “15-Minute City”

The model of the “15-Minute City” is not a static entity; it is a living organism that grows and adapts through the integration of advanced technologies and innovative practices. In this digital era, technology plays a crucial role in facilitating and advancing this urban model. Innovations in data collection, analysis, and citizen participation are enabling cities to better understand and respond to the needs of their residents:

a) **Big Data and Predictive Analysis:** Cities are utilizing big data to make informed decisions about urban planning and mobility. Predictive analysis allows urban planners to understand traffic patterns, travel trends, and real-time service needs, facilitating more dynamic and adaptive urban planning. For example, in Singapore, data collected from sensors and smart devices are being used to optimize traffic flow and enhance the public transportation experience.

b) Citizen Participation Platforms: Digital technologies are revolutionizing how communities engage in urban planning. Online platforms enable citizens to express their opinions, vote on initiatives, and contribute ideas for the development of their neighborhoods. Helsinki has used digital tools to promote participation in urban project development, ensuring they reflect the needs and desires of residents.

c) Intelligent Transport Systems (ITS): ITS utilizes communication technologies to improve transport efficiency and safety. These systems can control traffic, manage public transport networks, and provide real-time information to users. In cities like Amsterdam, ITS has contributed to creating a more cohesive and accessible mobility system, reducing the need for long and complex journeys.

d) Sustainability and Energy Efficiency: Technology is also at the core of urban sustainability. Smart buildings and efficient energy networks are essential for reducing cities' carbon footprint. In Copenhagen, technology is being used to enhance energy efficiency and promote the use of renewable energy, contributing to the city's vision of being carbon-neutral by 2025.

e) Digital Urban Planning and 3D Modeling: 3D modeling and augmented reality tools allow planners and the public to visualize urban development projects before construction. This not only improves the design process but also encourages greater transparency and public participation. San Francisco has used 3D models to plan and communicate urban changes, enabling citizens to visualize and understand the impact of new developments.

f) Mobile Applications for Urban Services: Mobile applications are making urban services more accessible than ever. From parking payment to reserving spaces in public facilities, these apps make city life more convenient and efficient. In Seoul, a wide range of governmental and community services is available through applications, providing residents with access to the information and resources they need.

Technology and innovation are cornerstones in building the “15-Minute City”, not only in terms of infrastructure and services but also in creating an open and dynamic dialogue between the city and its citizens. With the integration of smart systems, participative tools, and sustainable solutions, cities are forging an urban future that is more responsive, connected, and livable.

6. Community participation and governance: cornerstones of the “15-Minute Cities”

The realization of the “15-Minute City” concept is based on significant community engagement and effective governance. These elements are not only crucial for the acceptance and success of the model but also foster a sense of ownership and responsibility among residents. Community participation and collaborative governance thus become essential catalysts in the transformation of cities:

a) Community Participation in Urban Planning: Active community involvement in urban planning allows the voices of citizens to be heard, ensuring their needs and desires are reflected in the development of their surroundings. Initiatives such as community design workshops, public forums, and online consultations can help gather a broad range of perspectives, fostering transparency and trust in the planning process. In cities like Porto Alegre, Brazil, the implementation of participatory budgets has allowed residents to directly decide on the allocation of funds for urban projects, resulting in a more equitable distribution of resources and engaged citizenship.

b) Inclusive and Responsive Governance: Effective governance for the “15-Minute City” must be inclusive, considering the needs of all population groups, including those historically marginalized. It must also be responsive, capable of adapting and responding quickly to emerging changes and challenges. Collaborative governance involving multiple stakeholders, including local governments, businesses, NGOs, and citizen groups, is fundamental to

developing solutions that are sustainable and widely supported. Examples of this can be found in cities like Melbourne, where collaboration between the city government, universities, and community groups has led to innovative projects promoting sustainability and community cohesion.

c) **Digital Tools for Participation and Governance:** Digital tools are revolutionizing how communities engage with their governments and participate in the governance of their cities. Online platforms like Decidim in Barcelona allow citizens to propose, debate, and vote on municipal policies and projects. These tools not only facilitate broader and more diverse engagement but also enable citizens' ideas and concerns to be quickly incorporated into decision-making.

d) **Education and Community Empowerment:** Education is a vital facet of community participation. Civic education programs and workshops on urbanism can empower citizens to participate more effectively in the planning process. In Copenhagen, educational efforts have increased awareness of sustainable urbanism and fostered a culture of active participation in urban development.

e) **Integration of Community Participation in Governance:** Community participation must be integrated into governance processes to be effective. This involves establishing clear and consistent channels for citizen participation at all stages of the planning and urban development process. In cities like Montevideo, Uruguay, neighborhood councils play a formal role in urban planning, ensuring that community perspectives are an integral part of decision-making.

f) **Transparency and Accountability:** Transparency and accountability are fundamental to effective governance and maintaining community trust. Governments must be transparent in their planning processes and be accountable for results and the use of resources. In Toronto, Canada, open data initiatives and progress report publications enable citizens to track and evaluate government performance in key areas such as urban development and mobility.

g) **Innovative Governance Models:** Governance models that promote collaboration and flexibility are emerging as effective approaches for urban development. These models often feature less hierarchical structures and greater autonomy for local communities in decision-making. In Helsinki, "neighborhood contracts" are an example of how the city delegates authority and funds directly to neighborhoods for specific urban improvement projects, incentivizing innovation and local participation (NY Times, 2020).

Community participation and effective governance are indispensable for the success of the "15-Minute City." Active citizen involvement, inclusive and responsive governance, and the use of digital tools to facilitate these processes are elements that enable cities to adapt to the needs of their inhabitants. By engaging the community at every step and fostering transparent and collaborative governance, cities can ensure that their efforts to achieve proximity and accessibility align with the needs and desires of those they serve.

7. Reconceptualization of urban mobility in the "15-Minute City"

The model of the "15-Minute City" presents itself as a radical innovation in urban planning, challenging the traditional notion that urban planning should focus on traffic and vehicle circulation. This avant-garde approach goes beyond conventional traffic calming interventions and zoning for reduced traffic. At its core, it proposes a reinvention of urban life, where mobility is intertwined with accessibility to a complete range of services and facilities that enrich the daily lives of citizens.

The "15-Minute City" advocates for an environment where proximity is not merely measured in terms of distance but in the quality and integration of urban life. It envisions a space where residents' needs, from access to education and health to leisure and work options, are embedded in the very fabric of the community. This integration means that reducing or managing traffic is only

a part of the issue; the true measure of success is the availability of vital services within a short and pleasant walking distance.

We assert that the model cannot be reduced to creating urban “islands” of accessibility within a sea of car-oriented infrastructure. It is not merely a series of pacified blocks or neighborhoods with traffic calming; it is a commitment to a comprehensive vision that spans from the presence of multiple urban services throughout the city to green space planning, public transportation system design, and the promotion of community interaction.

This model implies a profound transformation in the conception of urban infrastructure and mobility. It requires a redesign of urban spaces to be inherently multifunctional, where mobility is understood as the capacity to access a rich and full urban life without relying on individual private transport. A successful “15-Minute City” is one where traffic planning becomes a tool to achieve a larger goal: optimal urban quality of life characterized by health, sustainability, and social cohesion.

Therefore, the impact on urban mobility within the framework of the “15-Minute City” must be assessed not only in terms of transport efficiency or congestion reduction but also in how it facilitates a more connected daily life and satisfies fundamental human needs. Mobility becomes a means to a higher end: the full realization of human potential within the urban environment.

a) **Redefinition of the Mobility Concept:** The “15-Minute City” invites us to rethink the concept of urban mobility. It involves mobility that prioritizes human well-being and access to basic services, promoting the integration of daily life rather than viewing movement simply as the act of going from one place to another. Mobility in this context is holistic, encompassing physical, social, and digital aspects.

b) **Integration of Mobility with Daily Life:** Instead of designing transport systems to maximize vehicle traffic efficiency, the “15-Minute City” focuses on how mobility systems can enhance the quality of life. This means creating environments where transport is an integrated part of daily life, not an end in itself. For example, in cities like Freiburg, Germany, residential areas are designed so that essential services are within walking distance, reducing the need for long journeys and fostering a more united community.

c) **Improving Accessibility and Reducing Car Dependency:** One key to improving mobility in the “15-Minute City” is reducing car dependency. This is achieved not only through traffic restrictions but also by offering attractive and practical alternatives such as efficient, safe, and frequent public transport networks, bicycle and pedestrian infrastructure, and promoting the use of shared electric vehicles. Cities like Utrecht have transformed their mobility with multimodal systems, including extensive bike lanes and improvements in pedestrian infrastructure.

d) **Urban Development and Sustainable Mobility:** The “15-Minute City” model promotes urban development centered on sustainability. This involves planning that reduces the need for long-distance travel and promotes active mobility. In Copenhagen, for example, the ambition is for over 50% of journeys to be made by bicycle. Sustainable mobility becomes a cornerstone of urban planning, contributing to a healthier and less polluted environment (Tools of Change, 2022).

e) **Innovation in Transport Systems:** Innovation in transport systems is essential for the success of the “15-Minute City”. This includes the implementation of intelligent traffic technologies to the development of mobile applications that facilitate intermodality. These innovations enable residents to plan and carry out their journeys more efficiently and in harmony with their schedules and personal needs.

f) **Impact on Equity and Social Inclusion:** Mobility in the “15-Minute City” has a profound impact on equity and social inclusion. Making services and opportunities easily available to all,

regardless of their economic capacity or physical mobility, promotes a more equitable city. Public transport systems like the London Underground have adopted tiered fare policies and accessibility improvements to ensure that all citizens can move around the city with ease.

g) **Measuring Success in Urban Mobility:** The success of mobility in the “15-Minute City” is measured not only in terms of traffic flow or travel speed but in the quality of urban interactions and access to a fulfilling life. Analysis tools and citizen satisfaction metrics are employed to evaluate the effectiveness of mobility systems and their contribution to the overall well-being of the community.

Mobility in the “15-Minute City” is an integral facet that impacts every aspect of urban design. Its success is based on creating an urban fabric that supports human well-being and promotes a balanced life, where movement and access are easy, natural, and enjoyable. Mobility strategies must be multifaceted, innovative, and people-centered, supporting an urban model that is both dynamic and sustainable.

8. Future and sustainability: cities as pioneers in the fight against climate change and social innovation

At the forefront of sustainable urban design and social innovation, the “15-Minute City” model emerges as a transformative strategy in response to the global call to combat climate change and foster resilient communities. Organizations such as C40 Cities and United Cities and Local Governments (CGLU) have been instrumental in promoting a future vision where cities play a pivotal role in addressing environmental and social challenges. Initiatives like CGLU's Pact for the Future of Humanity (CGLU 2022) and the establishment of the Global Proximity Observatory by UN Habitat, C40 Cities, CGLU, and the ETI Chair of the Paris Sorbonne Business School illustrate international commitment and cooperation in redefining urban spaces for the future.

These global alliances underscore the urgency of reimagining our cities in terms of comprehensive sustainability, resource efficiency, and quality of life. The “15-Minute City” encapsulates this vision, proposing an urban environment where sustainability is not merely an addition but the core of urban planning. This holistic approach not only addresses the need to reduce greenhouse gas emissions and improve resource management but also focuses on creating cohesive and economically dynamic communities.

The concept of the “15-Minute City” aligns with global efforts to forge a sustainable future, as reflected in the United Nations' Sustainable Development Goals (SDGs). It is not just about reducing distances or altering traffic patterns; rather, it advocates for a cultural shift towards sustainability and community interdependence. Cities within the C40 network, for instance, are committed to bold actions that translate theory into practice, implementing zero-emission policies and human-centered urban developments that are both innovative and inclusive. International collaboration and knowledge exchange through platforms like the Global Proximity Observatory Sustainable highlight the importance of sharing experiences, strategies, and lessons learned. These alliances enable cities worldwide to adapt and apply the principles of the “15-Minute City” in a way that respects their unique contexts and addresses their specific challenges.

As we move towards the future, the “15-Minute City” emerges as a global framework for urban innovation through the design of proximity services. It responds not only to the climate urgency but also redefines what it means to live in a city. The emerging strategies and policies of this model promise to address current environmental concerns while building the necessary resilience to face the uncertainties of tomorrow (Global Observatory, 2023).

a) **Resilience to Climate Change:** The “15-Minute Cities” incorporate resilience as a key principle, preparing urban communities to face and adapt to the impacts of climate change. This is achieved through the integration of green spaces that enhance biodiversity and stormwater management, the promotion of active and sustainable mobility, and the implementation of

infrastructure that reduces carbon emissions. These collective efforts in sustainable urban planning are fundamental steps towards mitigating the effects of global warming.

b) **Economic Sustainability:** The “15-Minute City” model also focuses on economic sustainability. By fostering local economies and proximity trade, it stimulates economic growth within the community and reduces dependence on long and complex supply chains. The local economy becomes more robust and less susceptible to fluctuations in the global market, as seen in cities that have successfully promoted local markets and small businesses.

c) **Social Equity and Universal Access:** One of the most significant implications of the model is its potential to improve social equity. Urban planning that allows all citizens, regardless of age, ability, or socioeconomic status, to access services and opportunities is a foundation for a fair and equitable society. The “15-Minute City” is inclusive by design, ensuring that all residents benefit from its resources.

d) **Public Health and Well-being:** Health and well-being are critical aspects of the long-term sustainability of cities. The “15-Minute City” model promotes an active lifestyle by making walking and cycling the most convenient and enjoyable forms of transportation. This not only has a positive impact on physical health but also improves mental health by reducing the stress associated with long commutes and fostering social interactions.

e) **Adaptability and Urban Growth:** “15-Minute Cities” must be able to adapt to emerging trends and population growth. This means designing spaces that can change and evolve over time. Flexible planning allows neighborhoods to develop and respond to future needs, which is essential in a world where change is the only constant.

f) **Technology and Sustainable Innovation:** Technology and innovation will continue to play a crucial role in the sustainable development of cities. From smart buildings to clean energy networks and autonomous transport systems, the integration of sustainable technologies is key to building cities that are efficient and environmentally friendly.

g) **Global Challenges and Local Solutions:** “15-Minute Cities” face the challenge of translating global goals into local actions. This requires a deep understanding of local dynamics and the ability to implement solutions that, while globally informed, are finely tuned to the local context.

Looking towards the future, they offer a vision of sustainability that encompasses environmental resilience, economic prosperity, social equity, public health, and urban adaptability. By placing these principles at the center of urban planning, cities can not only ensure their own sustainability but also contribute to global efforts to build a greener, fairer, and healthier future. The “15-Minute City,” therefore, is not an end in itself but a way of thinking and acting that prepares our cities for the challenges and opportunities of tomorrow.

9. Conclusion: happy proximity in the “15-Minute City”. A sustainable urban future

The “15-Minute City”, more than a utopian urban idea, has proven to be a viable model for the future of urban planning. Its essence lies in a commitment to quality of life, sustainability, and equity, promoting a vision of cities that favor service proximity and accessibility for all residents. Throughout this analysis, we have explored the various facets and dimensions that compose this innovative approach, from the theory and foundations that underpin it to the practical strategies and challenges it faces.

We have seen that the “15-Minute City” is a response to the growing need for more humane and sustainable urban spaces. It is not merely about restricting traffic or promoting active mobility but a complete reimagining of urban life, where proximity and accessibility become the norm. This model promises transformations ranging from improvements in public health and social well-being to local economic revitalization and community cohesion. The environmental benefits are undeniable, with

a reduction in greenhouse gas emissions and improved air quality as direct results of reduced car dependence. However, the benefits extend beyond the environment, fostering a culture of community participation and inclusive governance that places citizens at the heart of urban decision-making.

Emerging technology and innovation are crucial for facilitating the transition to these cities of the future. Big data, predictive analysis, citizen participation platforms, and smart transportation systems are just a few examples of how technology can support the viability and implementation of the model. These digital tools enable more precise planning and dynamic urban management that can adapt to the changing needs of the population. However, this model is not without challenges. Gentrification, economic viability, and resistance to change are significant obstacles that need to be addressed with careful policies and an inclusive approach. Community involvement and collaborative governance are essential to overcoming these challenges, ensuring that urban development is fair and beneficial for all.

Looking to the future, “15-Minute Cities” have the potential to align with the UN's Sustainable Development Goals (SDGs) and play a crucial role in the global fight against climate change. Resilience and adaptability are defining characteristics of this model, which must be able to evolve with emerging trends and the needs of future generations. The happy proximity at the core of the “15-Minute City” is not only viable but essential. It is a call to action for urban planners, politicians, entrepreneurs, and citizens to collaborate in creating cities that are not only efficient and sustainable but also vibrant, inclusive, and conducive to human well-being. The “15-Minute City” is not a doctrine or strict guidelines to follow; above all, it is a vision that reimagines our cities as spaces of proximity, community, and harmony with the environment.

The happy proximity of the “15-Minute City” represents an opportunity to redefine urban life for tomorrow. It is a commitment to an urban future that embraces the complexity and diversity of the human experience and recognizes that sustainability and quality of life are two sides of the same coin. With each step towards this model, cities are getting closer to becoming spaces of coexistence, creativity, and sustainability that we aspire to for ourselves and future generations.

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