PIDE Knowledge Brief

15-MINUTES CITY

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WHY WE NEED 15-MINUTES CITY?

We need 15-Minutes city for different reasons.

Urban Sprawl	Traffic congestion	Air Quality	Fuel Demand
Financial Burden	Reduced green areas	Covid 19	Stay at home	Stay in neighbourhoods

CONCEPT OF 15-MINUTES CITY

A 15-Minutes city is a model of urban development and urban mobility. This concept was initially developed by Professor Carlos (Moreno, 2021). And, the idea was promoted by Paris mayor Anne Hidalgo. The 15-Minute City is a city in which all residents can reach daily necessities within a short walk or bike ride from their homes (within 15 minutes of distance). (Carlos 2021), has identified six essential   faction to be available within 15-minutes city.

Including, living, work, commerce, health, education, and entertainment. FMC is working as a model of linking people to their neighborhood and localizing. In fact, it brings activities to neighborhood rather than pushing people to activities. And, based on some principals such as walkability, density, diversity and multiple use of resources (Pozoukidou & Chatziyiannaki, 2021)
All in all, the primary focus of FMC is on the proximity, which aims to create a neighborhood where all the residents can access the basic needs within 15 minutes walking or biking from homes.
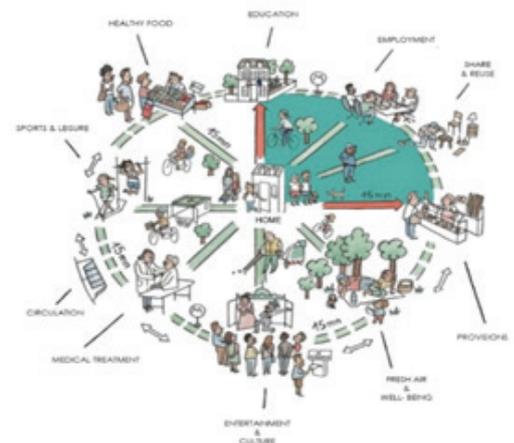
FUNCTIONS THE 15-MINUTES CITY SHOULD ENSURE

Carlos (2021), has identified six essential faction to be available within 15-minutes city. Including, living, work, commerce, health, education, and entertainment.

Objectives

The objective /goal of the 15-Minute City is a more
- Environmentally friendly
- Socially inclusive urban (sub)development
- which should make urban life more qualitative, nimble, healthy and flexible.

Main Features

15-Minutes city has three main features.
- The rhythm of the city should follow human, not cars

- Each Square meter should serve multiple purposes

As School

As Community center

As public park
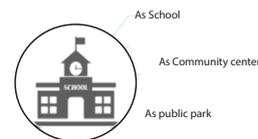
- Neighborhood should design in a way, that people do not need to commute

People do not commute

Framework

Source: Moreno et al, 2020

Conceptual Frame work:

There are four dimensions of 15-Minutes City, including (i) Density, (ii) Diversity, (iii) proximity, (iv) Digitalization. In fact, there were identified after massive spread of Covid-19 in different cities (Moreno et al, 2021)

Density

From the conventional city planning perspective, density refers to ultra-high density buildings. But, from the 15-minutes city concepts, it refers to the density of people per kilometer square. adequate density augmented the accessibility of amenities to inhabitants without time spend and energy consumption (Salingaros, 2006).

Proximity:

This dimension of 15-minutes city reviles that, the inhabitants in a given neighborhood/city can readily access basic services. Including, jobs, commercial markets, educational institutions, health facilities and many other required institutions in a lowest time-span. This dimension is indispensable because it not only reduces commuting time, but also reduce the environmental and economic implications (Marquet & Miralles-Guasch, 2015). Morene believes that this proximity element allows the residents to enjoy better services, as the planning model allows the multiple use of resources.

Diversity:

Diversity in the context of the above frame and in the advancement of the 15-Minute City concept is twofold: (i) the need for mixed use neighborhoods which are primary in providing a healthy mix of residential, commercial and entertainment components and (ii) diversity in culture and people.

Digitilization:

Digitilization is indispensable for the implementation of above three dimensions. It reduces proximity through online shopping, online transition and virtual communication reduced the need for commuting. Moreover, digitalization assists in efficient utralization of resources (Allam, 2020) and, generating job opportunities.

Conditions of 15-Minutes City:

The idea of 15-minutes city does not serve as a static way forward, rather proposes a model or framework of ideas and guidelines, that must be applied to materialize its goals or targets.
All the urban settlers, residing in urban center or sub-urban units must have access to essential goods and services in nearest proximity of 15 minutes' walk or bicycle. However, to achieve this it requires

A massive spatial decentralization

A transformation of existing infrastructure

The development of new services for each neighborhood

The transformation of streets into bike lanes and pedestrian areas

Public Transportation

Vertical Growth of cities rather than horizontal

Flats or Apartments Rather than Plots

New economic models that attract local businesses

CRITICS ON 15-MINUTES CITY:

Despite its support and opportunities, the 15-Minuts City concepts is also subject to criticism for different reasons. A study published by TUMI management (2021) has highlighted following critics.
Spatial distances between key functions defined by Carlos (2021) , such as living , work , commerce , health , education and leisure should be circumscribed to 15-minutes , so that the need for transportation is minimized and avoided the traffic. This strong focus on proximity is predominantly criticized. In fact, it encourages gentrification and consequently leads to segregation and isolation of the neighborhood.
Moreover, the TUMI study has briefly presented the debate on "Localizing Transport" in which the prominent speakers Prof. Edward Glaeser from Harvard University, among others, criticized the 15-Minute City concept .

• The concept, he says, indeed focuses on upper-middle-income group, who actually live in neighborhoods with supply opportunities above the average.

• And, the concept can't resolve the burning issue of how cities can become places of opportunities for everyone.

• Gleaser calls for burying the idea of dividing cities into 15-minute parcels, saying that after the COVID-19 pandemic, greater social connectedness across neighborhoods should be the goal.

• Journalist Alice Delaleu accuses Mayor Hidalgo of excluding the poorer population of the outlying neighbor-hoods from the center.

• The concept is occasionally criticized as an urban model best suited for European cities and not for each city.

• Although, the concept is people centric. And, predominantly based on spatial and environmental considerations but neglects socio-economic aspects.

EVALUATION OF 15-MINUTS CITIES

Paris: Paris en Commun

The Paris En Commun strategy visions a great Paris without borders and increased community involvement. The strategy came as result of Paris Climate action plan and the efforts of Mayor Hidalgo's re-election campaign in 2020. In response to the plan different policies have been endorsed and adopted. Such as reducing car dominance, recovering land from cars, aggrandizing tree canopy and promoting pedestrian mobility. Engaging local community in planning and implementation of the strategy. Moreover, the strategy attained new attention as a post COVID-19 way forward, and emerged the concept of 15-Minuts city (Pisano, 2020).

The vision of Paris strategy attempts for a carbon-free economy and wellbeing of household. The strategy has in fact four dimensions including the implementation of ecological measures, solidarity-centered ecological transformation, hyper-proximity and the commitment of citizens to the strategy. The 15-min concept falls under the hyper proximity dimension, which aims to create a neighborhood where all the residents can access the basic needs within 15 minutes walking or biking from homes.
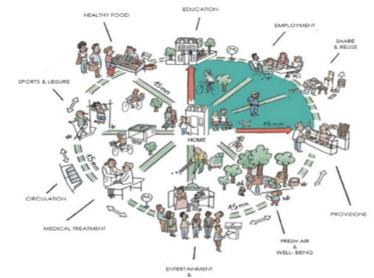
The Initiatives taken to meet 15-Minuts city Model

The Initiatives taken to meet 15-Minuts city Model
- Multiple Use of Resources:
- Localizing Services and Functions "Eat and Buy Local"
- Encouraging Local Entrepreneurship "Made in Paris"
- Skill Development and improving literacy for self-sufficiency
- Localizing Job Opportunities and local employment and promoting remote working.
- Prioritizing Predestination in large part of Paris.
- And, the model recommended to ban the cars, with some exceptions i.e. shopkeepers, aged, taxi, disable persons.
- Minimizing the traffic flow, and taking steps to change mobility habits of inhabitants,
- Focusing on networking of bike lanes and bike friendly roads.
- Promoting the Public Transport, such as (bus, metro).
- Considering Environmental Consideration
- And, in response to the climate change in for of reducing air quality, the strategy id focusing of green city.
- Preserving biodiversity in the city.
- Thus, focusing on artificial plantation, reducing walk route.
- Reducing energy consumption, which include installing solar panels, planted roofs, rainwater harvesting facilities etc.
- Composting, recycling and waste separation at local level, as well as zero garbage production is the part of the strategy.

(Source: Paris en Commun,2020)
(15-min City and its Social Function

Challenges:

- Providing inclusive and diverse housing is probably the greatest challenge for the quarter hour city. In particular, the Resilient Plan for Paris
- As the focus is only on the center where the prices are already high and increasing, thus creating challenges for providing inclusive houses for lower-income, sub-urban commuters.

Table 1, summarizes the overall evaluation of the "Paris" as a 15 minutes' city based on the three pillars. Including inclusion, health and safety (Pozoukidou & Chatziyiannaki, 2021)

Pillars	Spacial Planning	Evaluation Attributes	Week	Medium	Strong
Inclusion	Physical Planning	Housing	+		
		Proximity to services			+
		Proximity to workplace		+	
		Building density			+
		Land use mix			+
		Accessibility		Not Available	
		Multimodality			+
	Community Building & Planning Process	Co-design processes		+	
		Bottom-up initiatives for the improvement of life quality			+
Health	Physical Planning	Accessibility to health & affordable fresh food			+
		Proximity to basic health care			+
		Connectivity & multifunctionality of green & open spaces		+	
		Active Mobility			+
		Proximity to cultural & recreational opportunities			+
	Community Building & Planning Process	Cooperation of stakeholders & community			+
		Interaction between citizens			+
Safety	Physical Planning	Urban features that enhance felling of security			+
		Safe shearing of public spaces			+
		Social distancing (Covid-19)			+
		Safe mobility (Covid-19)			+
	Community Building & Planning Process	Lively neighborhood			+
		Participatory practices			+
Overall Proximity of Urban Amenities					+
Source; (Pozoukidou & Chatziyiannaki, 2021)					

EVALUATION OF 20-MINUTS NEIGHBORHOOD

Portland: The Portland Plan

Portland is the largest and highly populated city of Oregon state, USA. The city in 2012 introduced, Portland Plan. the plan mainly focuses on prosperity, education, health and equity and set both long and short term strategies to meet the desires goals. In fact, the plan comprises of three strategies. Including "Thriving Educated Youth", "Economic Prosperity and Affordability" and "Healthy Connected Cities" The concept of 20-min neighborhood is part of "complete neighborhood" (CN) that comes under the target of "Healthy Connected Cities".

Portland's Plan complete neighborhood

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Portland's 20-min Neighborhood

The Portland plan define the term "complete neighborhood" (CN) as a neighborhood where one has "safe and easy access to the products needed in daily life. The products include housing, Commerce, public schools, public open spaces and entertainment facilities, affordable transportation and civic amenities. Interestingly, key feature of CN is that it is built at a walkable and bike able human scale and meets the needs everyone. (Portland Plan 2012)

Source: Portland Plan 2012

Table 1, summarizes the overall evaluation of the Portland Plans, based on the three pillars. Including inclusion, health and safety (Pozoukidou, G. 2020)

Pillars	Spacial Planning	Evaluation Attributes	Week	Medium	Strong
Inclusion	Physical Planning	Housing			+
		Proximity to services		+	
		Proximity to workplace	+		
		Building density		+	
		Land use mix			+
		Accessibility			+
		Multimodality			+
	Community Building & Planning Process	Co-design processes			+
		Bottom-up initiatives for the improvement of life quality	+		
Health	Physical Planning	Accessibility to health & affordable fresh food		+	
		Proximity to basic health care			+
		Connectivity & multifunctionality of green & open spaces			+
		Active Mobility			+
		Proximity to cultural & recreational opportunities			+
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		Safe shearing of public spaces	+		
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		Safe mobility (Covid-19)			+
	Community Building & Planning Process	Lively neighborhood		+	
		Participatory practices			+
	Overall Proximity of Urban Amenities			+	
	Source; (Pozoukidou & Chatziyiannaki, 2021)				

Melbourne: Plan Melbourne

Melbourne is the capital of Australian state of Victoria. And, the most populous city in both Australia and Oceania. moreover, it's the second most densely in Australia and oceania. Plan Melbourne is long term urban development planning that defines the future design of the city and state over next 30 years. The strategy is articulated on 7 outcomes or strategies, 90 policies and 32 directions (Pozoukidou, G. 2020)

The 20 min neighborhood is of the plan's strategy, and aims inclusive, health and vibrant neighborhood. A 20-min neighborhood is defined as "giving people the ability to meet most of their everyday needs within a 20-min walk, cycle or local public transport trip of their home" and is intended to "help improve health and wellbeing, reduce travel costs and traffic congestion and reduce vehicle emissions" [60].

Portland's Plan complete neighborhood

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Melbourne: Plan Melbourne 2017–2050

The Melbourne plan identify 17 urban and social functions that should be ensured within boundary of 20 min neighborhood. That are given in diagram below

The paln defined the radious of 20 min-Neighbourhood as 80 maters walk from home to destinations and time iet takes coming back. In other words , its take 10 minuts walk to destination and 10 minutd bsck from destination .

(Source; Plan Melbourne 2020)

Source; (Pozoukidou & Chatziyiannaki, 2021)

Table 3, summarizes the overall evaluation of the Melbourne Plan based on the three pillars. Including inclusion, health and safety (Pozoukidou, G. 2020)

Pillars	Spacial Planning	Evaluation Attributes	Week	Medium	Strong
Inclusion	Physical Planning	Housing			+
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