



सत्यमेव जयते

Government of Gujarat



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GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS




एक कदम स्वच्छता की ओर

BUILDING 15-MINUTE CITIES: A PATHWAY TO SUSTAINABLE URBAN MOBILITY



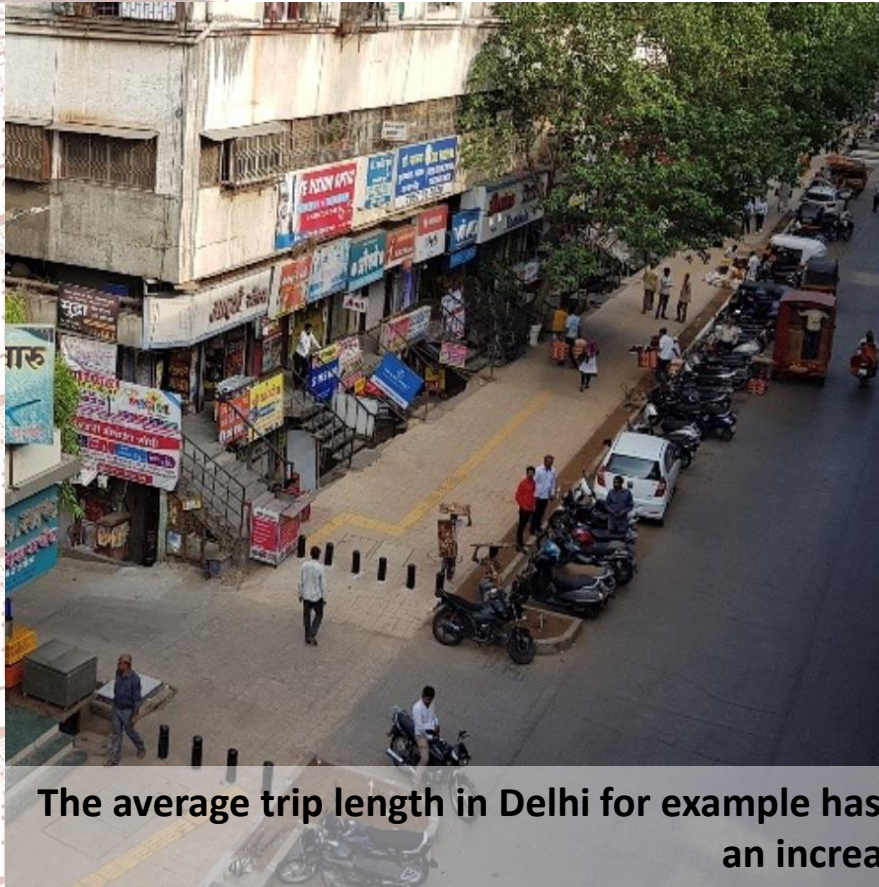
17th Urban Mobility India
Conference & Expo 2024
Standardization and Optimization
of Urban Transport Solutions





WHAT DOES A 15 MINUTE CITY MEAN FOR INDIA?

INDIAN CITIES HAVE MOVED FROM BEING HIGH-DENSITY MIXED-USE TO LOW-DENSITY SINGLE-USE, CAUSING URBAN SPRAWL

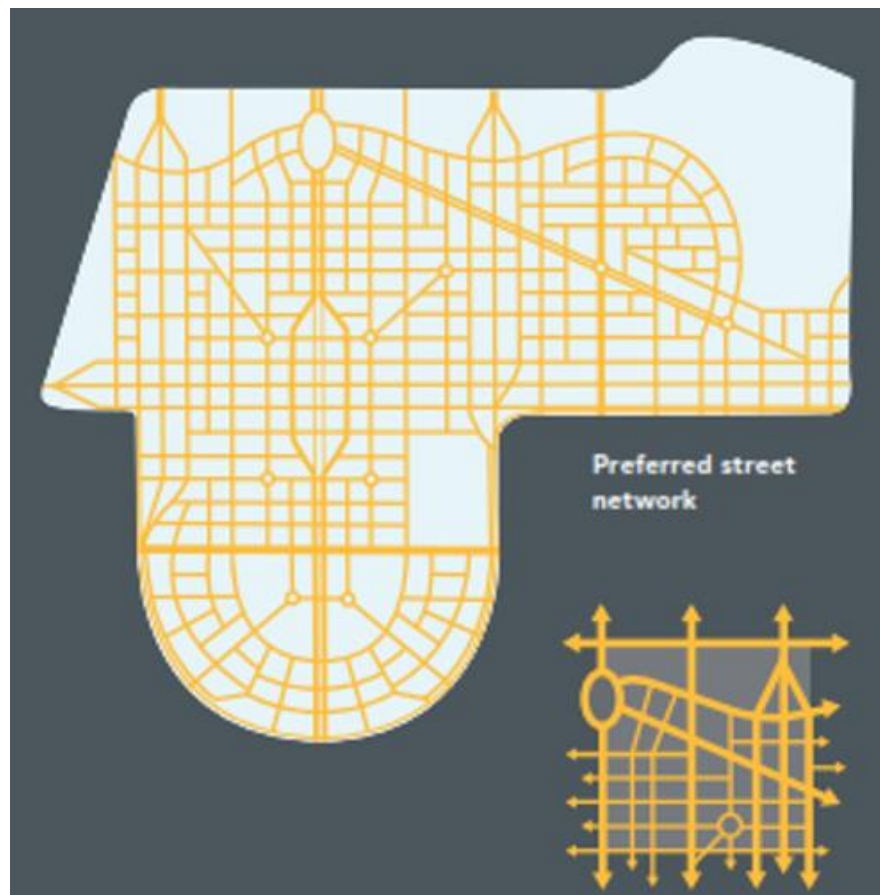
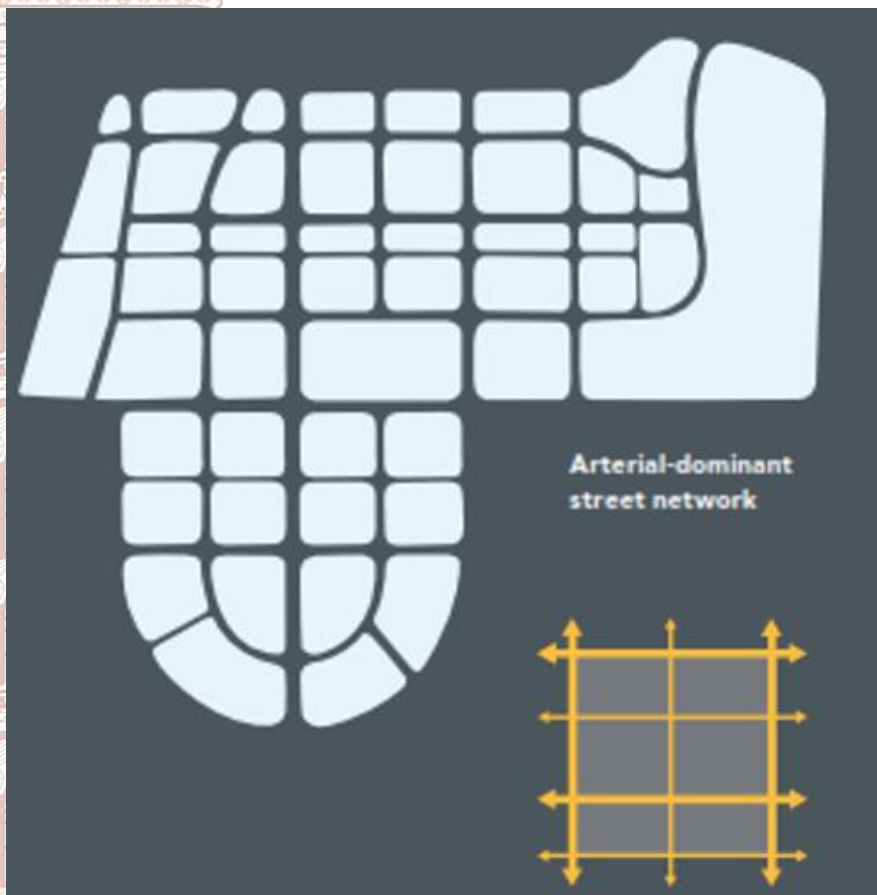


The average trip length in Delhi for example has increased from 6 km in 2007 to 10.9 km in 2018 – an increase of 81% !

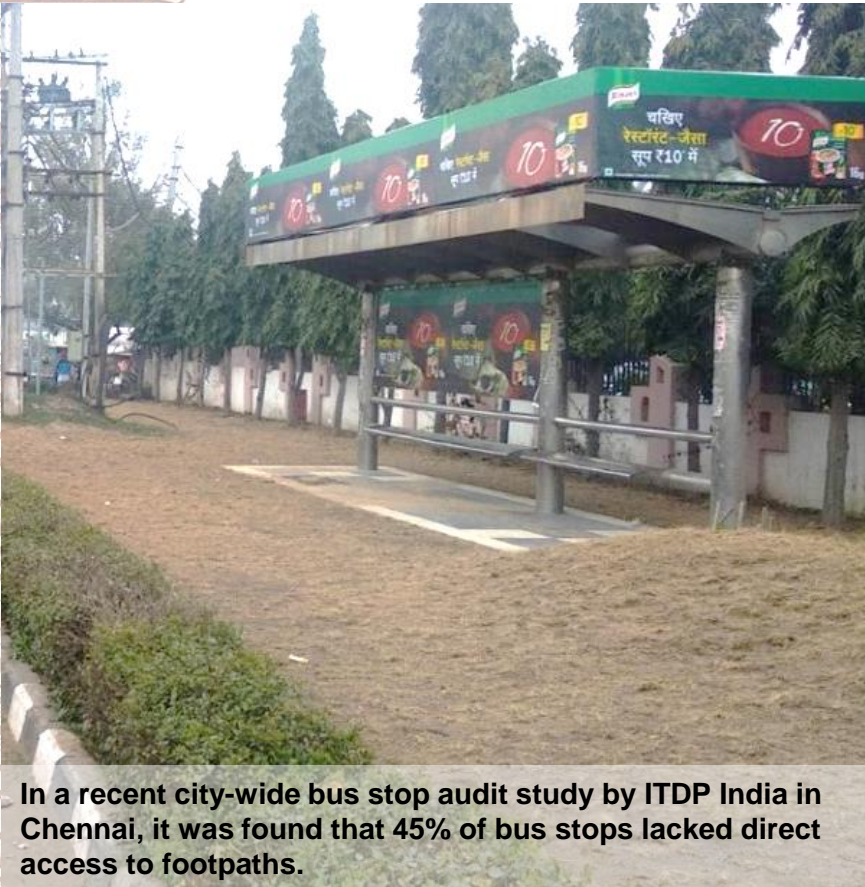
WHILE INDIAN CITIES ARE STUCK IN CONGESTION,
GLOBAL CITIES ARE IMPLEMENTING
15-MINUTE NEIGHBOURHOODS



IMPROVING THE WALKABILITY OF THE CITY BY REDUCING THE GRID SIZE



IMPROVING ACCESS TO OTHER NEIGHBOURHOODS THROUGH HIGH-QUALITY PUBLIC TRANSPORT



In a recent city-wide bus stop audit study by ITDP India in Chennai, it was found that 45% of bus stops lacked direct access to footpaths.





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URBAN MOBILITY INDIA CONFERENCE 2024

PRESENTER : MR. SANDEEP V

SENIOR ASSOCIATE | STUDIO LEAD - PLACEMAKING,
ARCHITECTURE & URBANISM

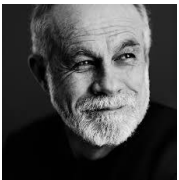
SANDEEP.V@ARCADIS.COM



WHAT DO WE UNDERSTAND?

The concept was **coined in 2010** by Mr Carlos Moreno.

He describes the **15-Minute City** as "an urban model where residents can live, work, and access essential services — like education, healthcare, and leisure—within 15 minutes of their home by walking or cycling."



Carlos Moreno
(Urbanist, Sorbonne University)



INTERPRETATIONS AND EVOLUTION



UN-Habitat defines the 15-Minute City as a "compact, walkable urban planning approach that focuses on accessibility to daily necessities such as **work, healthcare, and education within 15 minutes.**"

**Work, healthcare, and education
within 15 minutes**



The New Urban Agenda, adopted at the UN's Habitat III Conference, promotes a creation of "**inclusive and equitable cities** where daily necessities can be accessed within 15 minutes by foot or bike, contributing to social cohesion and environmental sustainability."

Inclusive and equitable cities

**Live, work, and access
essential services**



C40, a network of cities committed to addressing climate change, defines the 15-Minute City as an urban model where

"everyone, in every **neighbourhood**, can reach their daily needs within a 15-minute **walk or bike ride.**"

**Neighbourhood – walkable
and bike ride friendly**



"A **people-centered** urban vision where **compact, complete, and connected neighbourhoods** offer a higher quality of life by placing basic needs within walking or cycling distance."

**Compact, complete, and
connected neighbourhoods**

WHERE DO WE REACH IN 15 MINUTES?



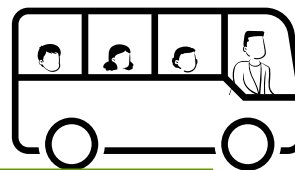
15 mins

1.2km ... to the grocery store



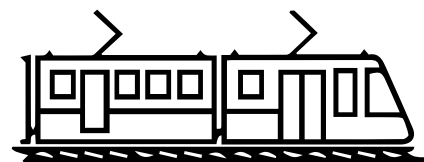
15 mins

3km ... to the school and work



15 mins

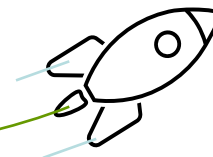
6km ... to the work, recreation



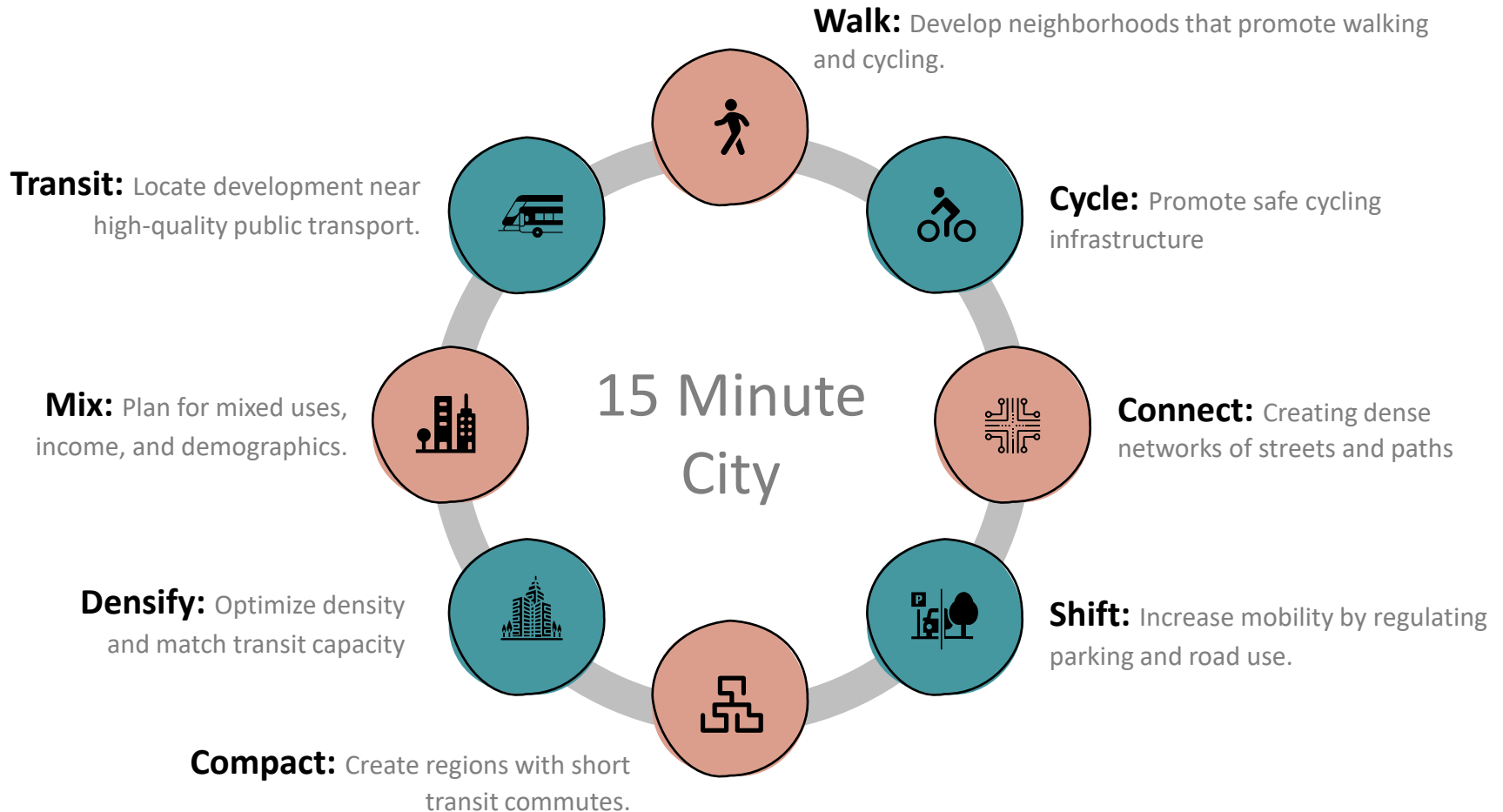
15 mins

10km ... to the school and work

Jokes apart...



PRINCIPLES OF 15 MINUTE CITIES



SINGAPORE



- The concept of **"20-minute towns"** and a **"45-minute city"** by the year 2040
- Developed by Singapore Land Transport Authority (LTA)
- The goals are set as a part of **Land Transport Master Plan 2040 (LTMP 2040)**, which envisions a more **connected, sustainable, and people-centric** transportation system.

Source: Getty Images

Location: Singapore's MRT system is the easiest and quickest way to get around the city

SINGAPORE

20-minute Towns:

Daily necessities—like schools, workplaces, supermarkets, parks, and healthcare —**within 20 minutes by walking, cycling, or using public transport.**

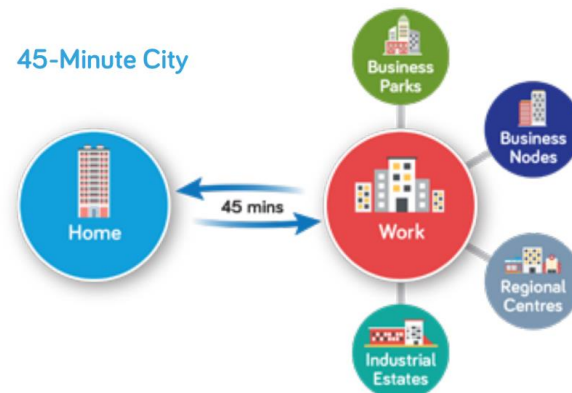
- **Mixed-use developments**
- **Transport Integration:** bus networks, cycling paths, and walking routes



45-minute City:

Traveling from one end of Singapore to another major hub or activity center should take no more than 45 minutes using public transport.

- **Public Transit Efficiency:** The focus is on improving the efficiency and reliability of Singapore's **public transport system - MRT (Mass Rapid Transit) and bus services.**
- **Seamless connectivity** between different modes of transport.

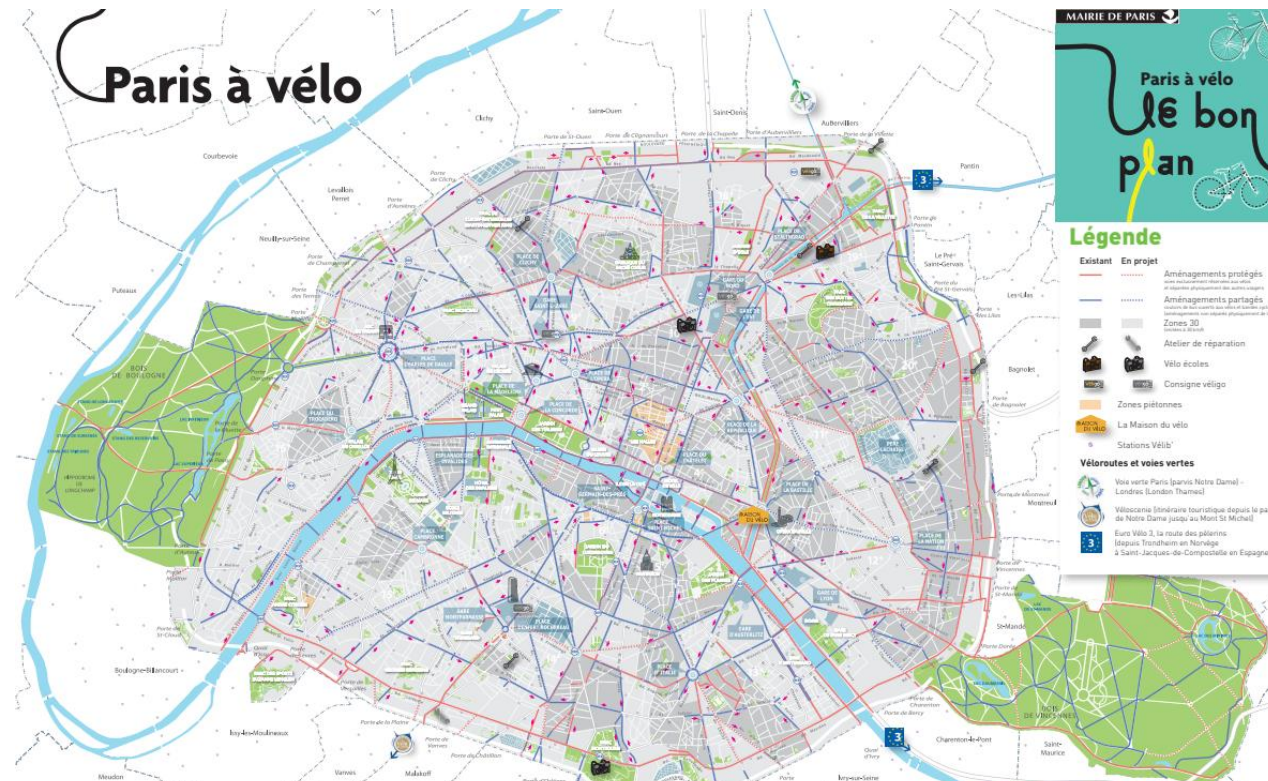


Key Considerations

Demographic Pressures: Singapore's growing population means that transport systems and amenities must not only meet current demand but also future-proof them for projected growth

Land resource: Singapore's land scarcity poses challenges in implementing the necessary infrastructure and developments for the 20-minute town concept

PARIS



Smaller interventions throughout the city
Network of Bike and walking networks carving out the neighbourhoods that promote elements of



Walk: Develop neighborhoods that promote walking.



Cycle: Promote safe cycling infrastructure



Connect: Creating dense networks of streets and paths



Shift: Increase mobility by regulating parking and road use.

Key Considerations

Affordability & Gentrification Risks:

As wealthier residents move into redeveloped neighborhoods, Potential displacement of lower-income populations.

Car dependent Neighbourhoods: Buy-in on promoting new concepts



Location: Rue de Rivoli, Paris, France.



Location: Marais District, Paris, France.

A. Our 20-Minute Neighborhood Concept plan



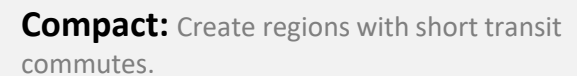
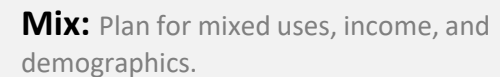
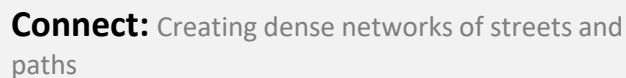
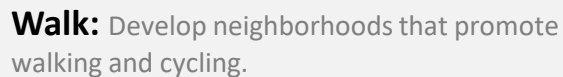
Key Considerations

- Urban Sprawl and Existing Urban Layout:** low-density neighborhoods that are car-dependent
- Public Transport Connectivity**
outer suburbs often face inadequate transport options

Urban Sprawl and Existing Urban Layout: low-density neighborhoods that are car-dependent

Public Transport Connectivity

outer suburbs often face inadequate transport options



BENEFITS

Ecology



Reduced Carbon Footprint & greenhouse gas emissions, contributing to lower air pollution.

Reduced urban sprawl, protecting natural habitats, agricultural lands, and ecosystems.

Encouraging walking, cycling, and reducing car dependency.

Energy Efficiency by minimizing transportation needs and fostering localized energy.

Economy



Prioritizes neighborhood-level economic activity, allowing small and medium businesses to thrive.

Decentralized economies with strong local networks are more resilient to economic shocks.

Reduced transportation costs for individuals.

Land used as a resource to host multiple functions.

Accommodate diverse needs

Equity



Essential services within a 15-minute radius of all neighbourhoods.

Promotes equal access for all citizens, regardless of socioeconomic status.

Decentralization of the city nodes

Diverse groups of people live and interact in shared public spaces.

Safety and security increased as a result of better stewardship.

A tool for brown field redensification and redevelopment of underserved neighbourhoods.



INITIATIVES IN THE INDIAN CITIES

CHENNAI MEGA STREETS PROJECT



Walk

Chennai was the **first city in India** to adopt a **Non-Motorised Transport Policy** prioritising it's pedestrians & also **adopted street design guidelines**. **170+km of street transformations along bus route roads are completed**



Connect

The city engaged with design consultants to create **pedestrian plazas to functional footpath networks** and has a **100km + Mega Streets scale-up plan** for the city



Transit

Alongside the public transportation improvements in the city, the Mega Streets Project will **improve accessibility across six neighbourhoods to:**

- **42 metro stations**
- **21 railway stations**
- **911 bus stops**
- **610 schools**
- **220 Economic Weaker Section settlements**

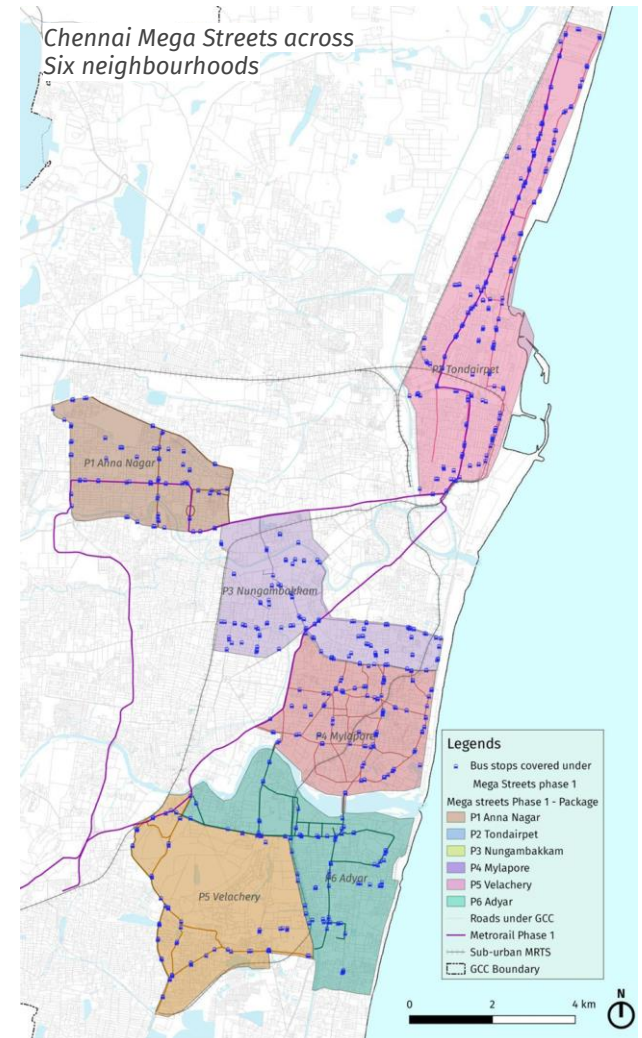


Mix



Shift

Chennai is working towards adopting a **Parking Policy** & creating **Parking Management Area Plans**



PIMPRI CHINCHWAD'S JOURNEY



Walk

Pimpri Chinchwad adopted **Non-Motorised Transport Policy** in 2021, and **Parking Policy** in 2018.



Connect

'**Harit Setu**' Master Plan aims to transform Pimpri-Chinchwad into a liveable city by 2030 by transforming it into smaller **15-minute NMT-friendly neighbourhoods**.

Implemented and operating 45 km of BRTS network to provide a high-quality public transport network to connect these 15-minute neighbourhoods



Transit

Proposed **Transit Oriented Development Provisions** in the Development Control Regulations

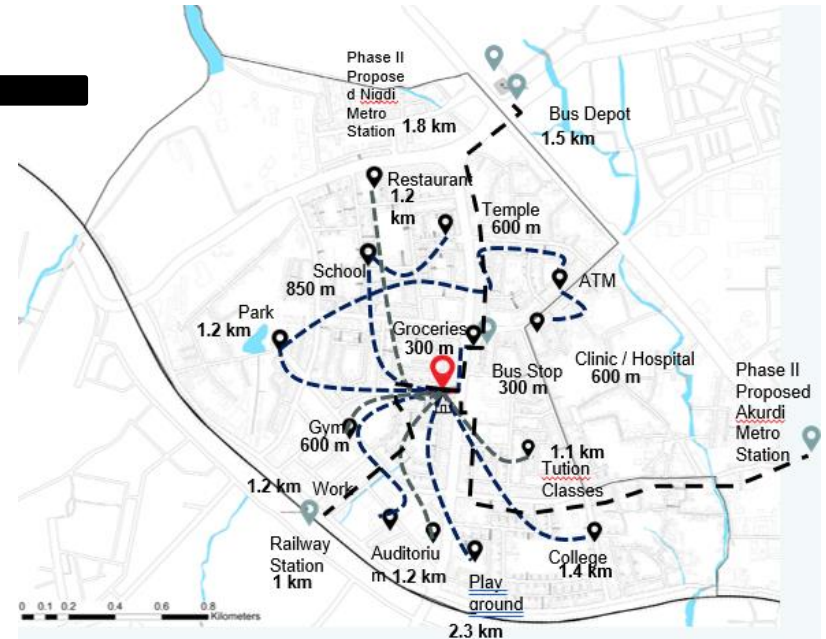


Density

Pimpri Chinchwad is currently working on **revising its parking policy**.



Shift



THE STORY OF BHUBANESWAR



Walk

Adopted **Street Design Regulations** that enforces all agencies involved in creating “Complete Streets” to follow the Guideline document. **80Km of street network** identified for implementation.



Shift

Introduced city-wide **robust public bus service** with integrated **first-last mile EV services**, champions key elements of inclusivity & accessibility through various measures



Mix

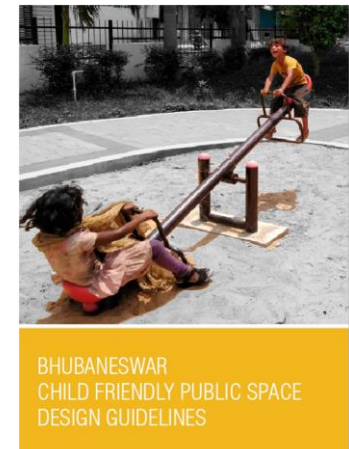
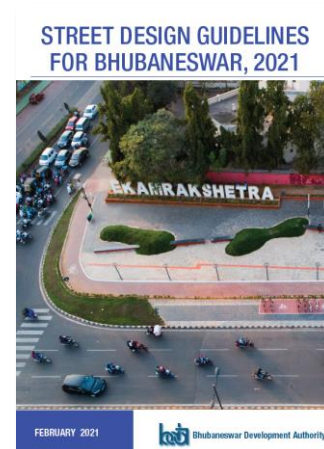
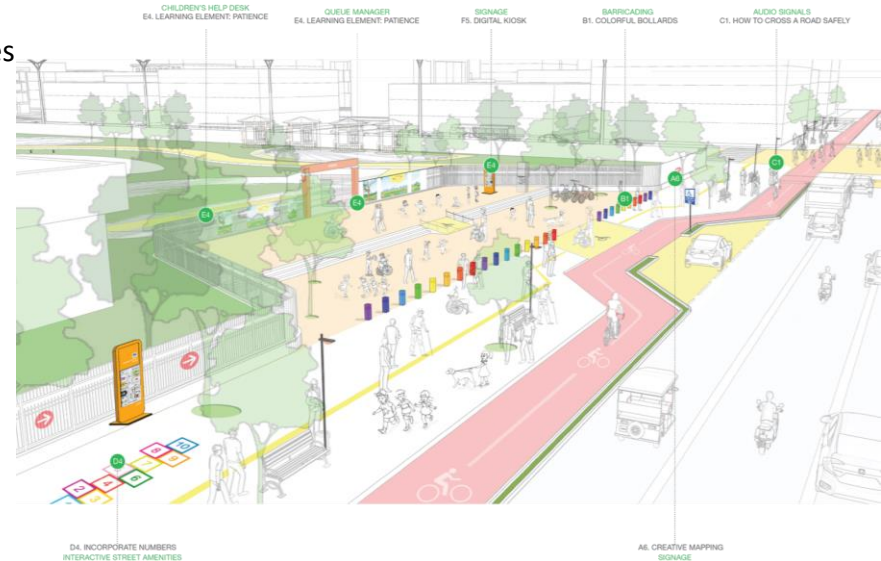
AMA BHOOMI – **Mass Access through Bhubaneswar Open Space Ownership Management Initiative**, encourages stewardship & opportunities for open spaces as shared resources



Cycle

Adopted **Child friendly City Guidelines & Regulations** that improves public spaces in the city for accessibility, legibility, safety, learning & better environment for children.

Established Bhubaneswar Urban Knowledge Centre (BUKC): Innovative governance model that acts an extended technical wing of the civic agencies to foster new concepts of planning, inter agency coordination & public participation.





WAY AHEAD

The objective of this roundtable discussion is to:

- **Discuss the challenges and solutions** in implementing 15-minute cities in India
- **Identify opportunities and recommendations** to support the transition towards 15-minute cities by 2030







Image Source: ITDP India



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THANK YOU



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