

Creating walkable cities in India



Part 1: Why invest in walkability?

In this section, you will understand the need & benefits of investing in walkability to improve access, health and economy.

Part 2: What are the elements of a walkable city?

In this section, you will learn the various elements at urban planning and street level that encourages walking.

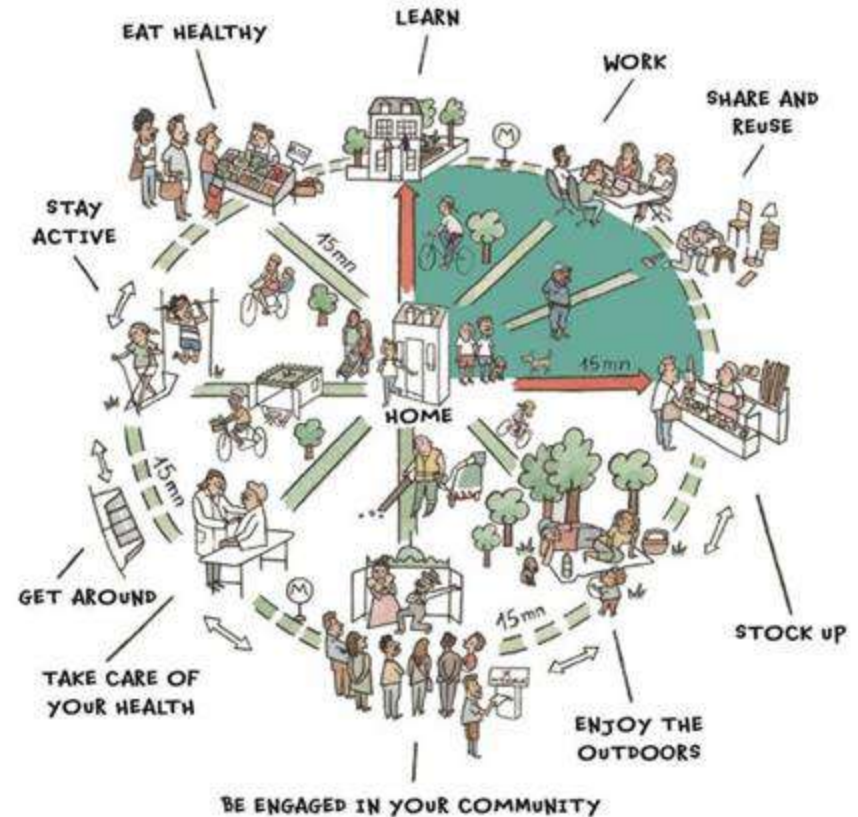
Part 3: How can we achieve a walkable city?

In this section, you will learn various actions required towards achieving walkable cities & also learn from the journey of few Indian cities.

Part 1: Why invest in walkability?

How do we define a walkable city?

A walkable city is one where **individuals prefer to walk for short distances to reach destinations or access public transport and amenities** (within 15-20 minutes) over using private motor vehicles, as **reaching their destinations by walk is convenient, comfortable and safe.**



Why we need walkable cities?

Walking is a basic human right & every citizen walks to access opportunities

50% of all urban school going children in India, walk to school*.

Kohima

Source: ITDP Documentation

*Household Social Consumption on Education in India, 2018



Why we need walkable cities?

Walkable cities improve road safety for all

In Jabalpur MR4 Road - **There has been a 15% drop in the road accidents post implementation of the project.**

Street 106 in New Town Kolkata witnessed the **improvement of personal safety in the space by 93%**, 23% reduction in fatal accident cases and 25% reduction in non-fatal accidents.

MR4 road, Jabalpur

Source: SCM & ITDP Documentation - Elements

Why we need walkable cities?

Walkable cities boosts public transport ridership through first and last mile connectivity.

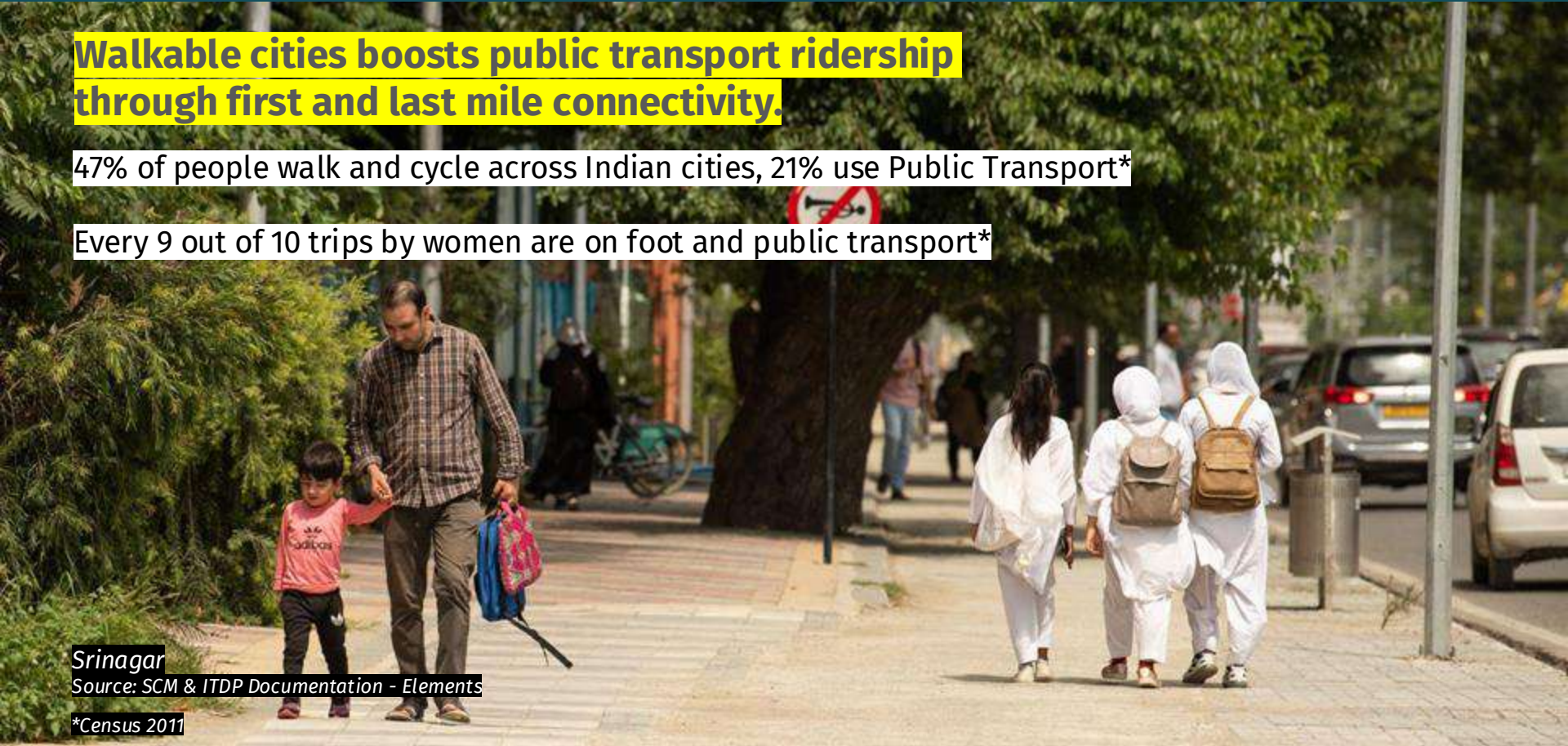
47% of people walk and cycle across Indian cities, 21% use Public Transport*

Every 9 out of 10 trips by women are on foot and public transport*

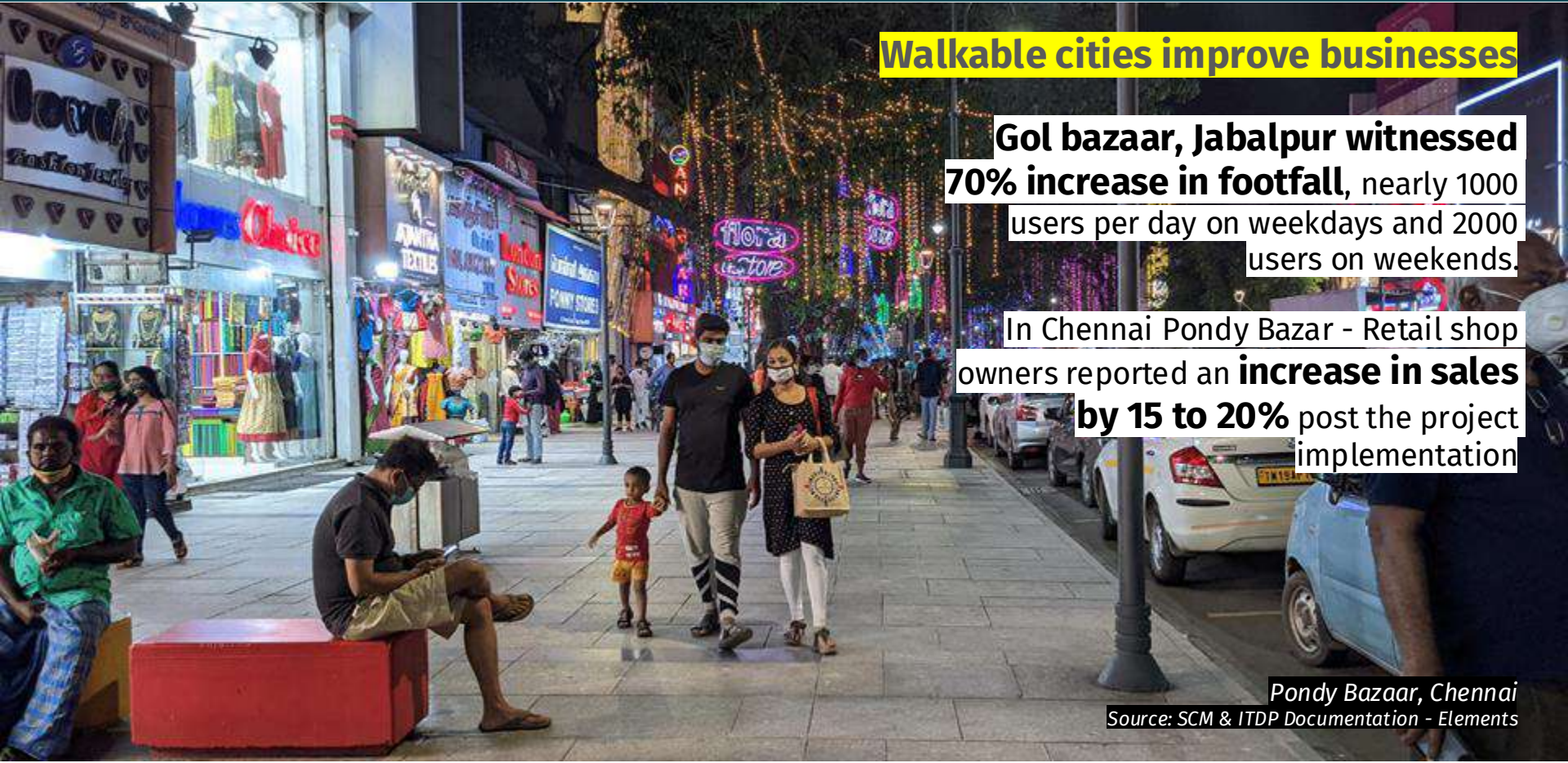
Srinagar

Source: SCM & ITDP Documentation - Elements

*Census 2011



Why we need to create walkable cities?



Walkable cities improve businesses

Gol bazaar, Jabalpur witnessed 70% increase in footfall, nearly 1000 users per day on weekdays and 2000 users on weekends.

In Chennai Pandy Bazar - Retail shop owners reported an **increase in sales by 15 to 20%** post the project implementation

Pandy Bazaar, Chennai

Source: SCM & ITDP Documentation - Elements

Why we need walkable cities?

Walking is healthy - both for one's health and environment.

30 min walk can reduce the risk of heart disease by 19%*

Physical activity can reduce the risk of depression by 45% and dementia by 10%**

Linear Garden Street, Pimpri Chinchwad

Source: SCM & ITDP Documentation - Elements

*Health line article, 2018

** WHO



Why we need walkable cities?



Walkable cities align with National & International Commitments

Mission LIFE & Viksit Bharat vision

Encourages environmentally-friendly behaviour and good health; and ambition to be a developed nation.

It will enable us to achieve Sustainable Development Goals.

Goal 3.6 under SDG 3 says - By 2020, halve the number of global deaths and injuries from road traffic accidents.

Goal 11.2 under SDG 11 says - By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport

Goal 13.1 under SDG 13 says - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters.

New Town Kolkata

Source: SCM & ITDP Documentation - Elements

Part 2: What are the elements of a walkable city?

Walkable cities need interventions at



Urban planning Level

Good urban planning reduces walking distances and brings services & amenities closer

- Small urban blocks
- Mixed land & building-use
- Humane-scale street widths



Street Level

Good street design makes walking on streets safe, comfortable and enjoyable

- Creating Healthy Streets

Urban Planning level: Small urban blocks

Urban blocks can be defined as a plot or group of plots surrounded by public streets on all sides.

High connectivity figure on the right shows that a pedestrian will be able to travel faster from Point A to B as urban block size is small.

Urban blocks should be within 150 x 150m.

Short access paths can be provided through large urban blocks such as public parks & public building premises.

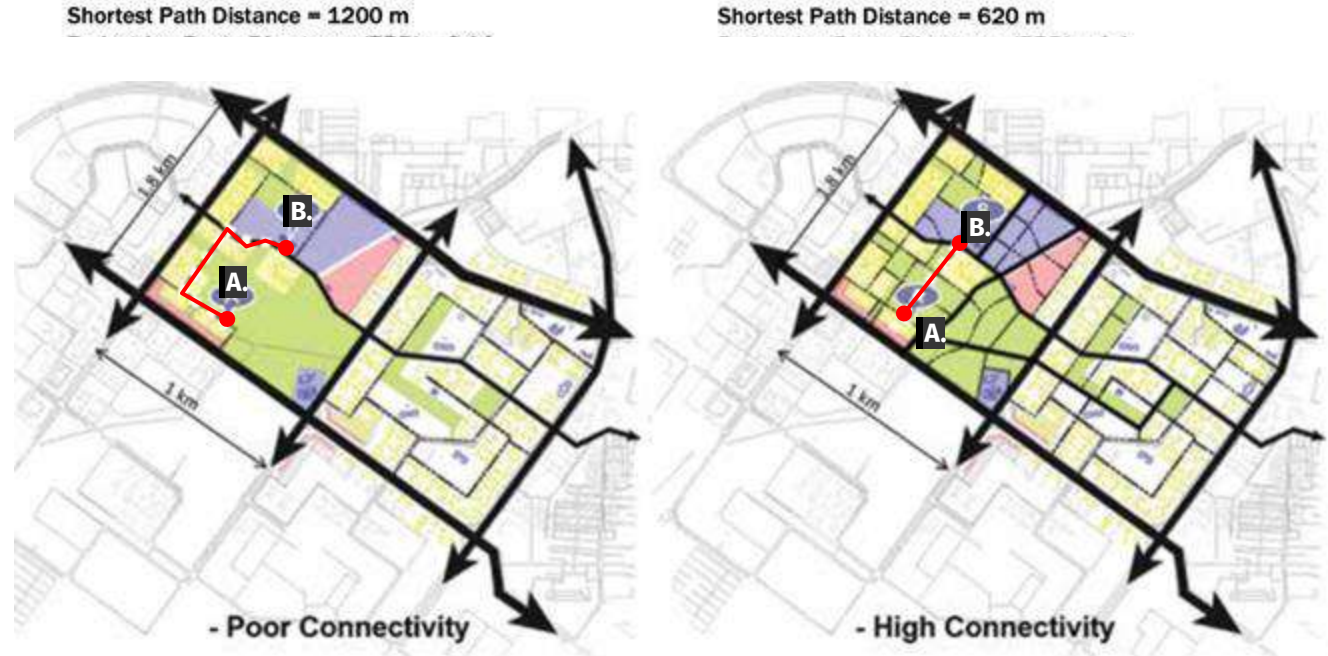


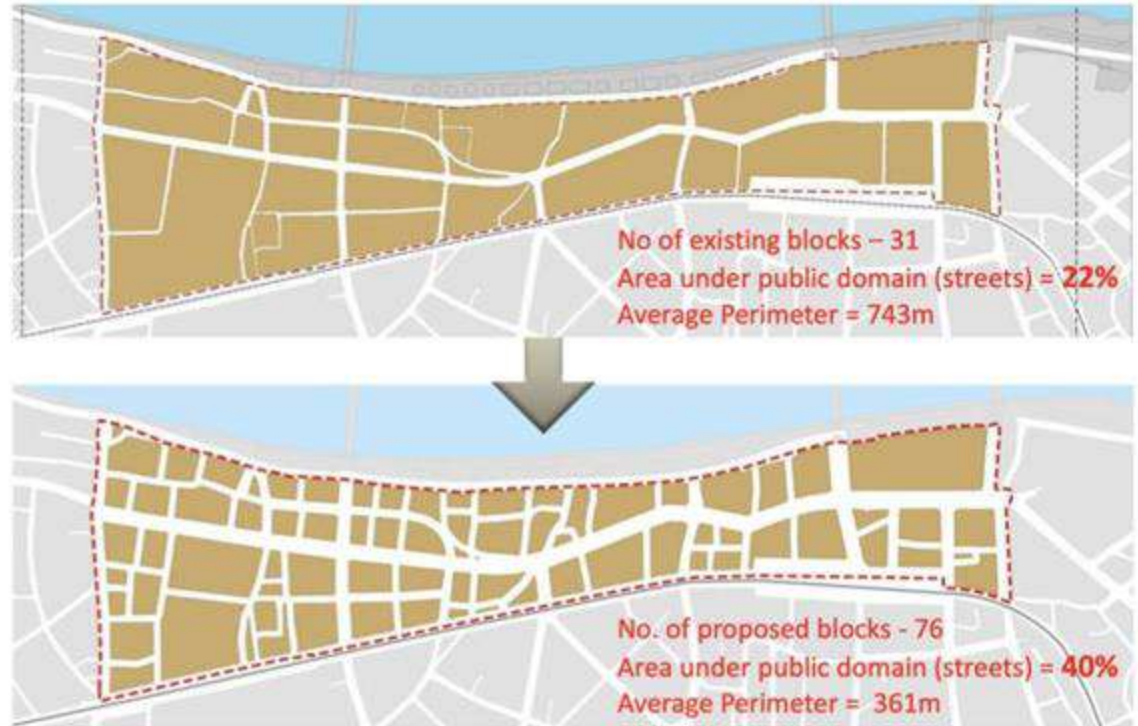
Image Source: IRC:SP:118-2018 Manual for Planning and Design of Urban Roads and Streets

Urban Planning level: Small urban blocks

In Gujarat, amendment to the State Town Planning Act has enabled cities like Ahmedabad to prepare second tier of Local Area Plans (LAP) and create denser street networks to reduce walking distances.

The new streets were created by:

- Addition of new development plan roads
- Addition of existing private roads
- New roads through margins and open spaces
- Roads through plots and requiring demolition



Street Network in Ahmedabad Central Business District;
Source: Ahmedabad Urban Development Authority (AUDA)

Making urban blocks walkable

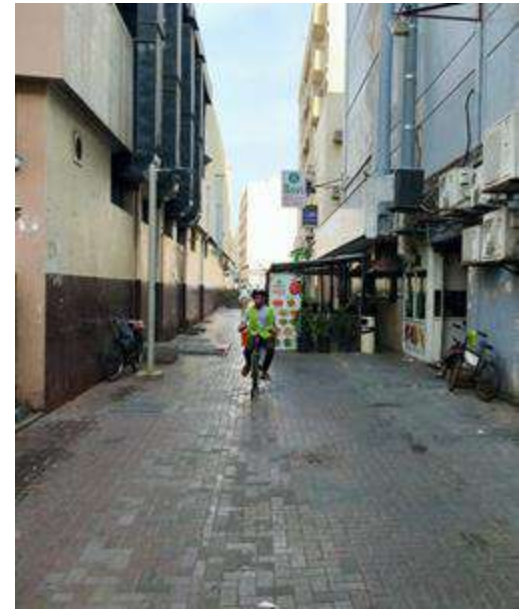
Pedestrian only links can be carved out from the building setbacks or in-between spaces of the buildings. This will require building regulation reform to make sure building setbacks are in public domain and efficiently used.



Nehru Place, Delhi
Image source: lbb.in



Pedestrian links in Dubai



Urban Planning level: Mixed land & building use



Mixed land and building use make sure that the services and amenities are available in close proximity. This increases the probability of walking.

Development plans and building regulations should encourage mixed-use developments.



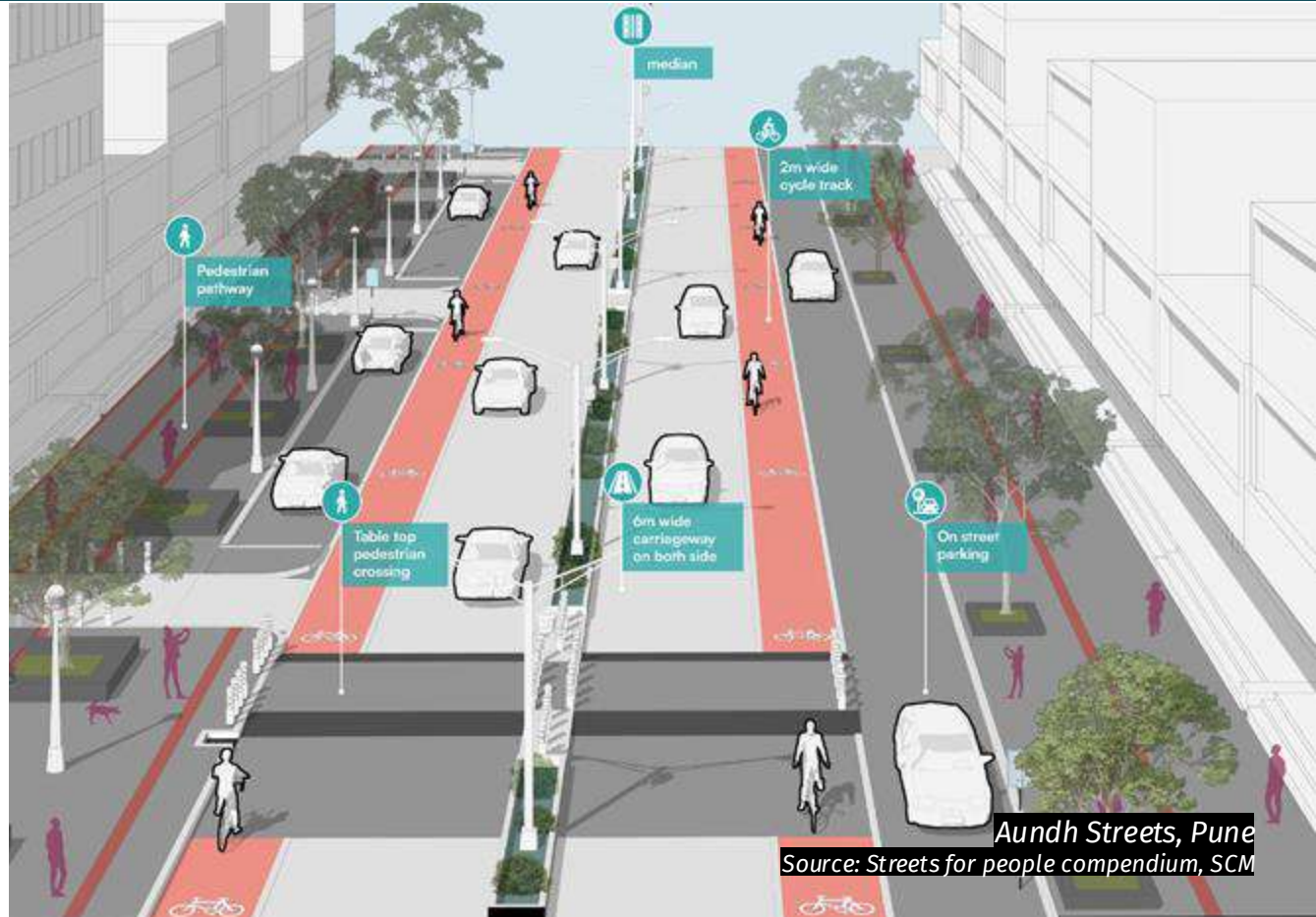
Satara Road, pune

Urban Planning level: Humane scale street widths

Wide streets make it difficult for pedestrians to cross, and hence not attractive for walking. It is recommended that street widths are within 45 meters.

Vehicle lanes should be capped at 3 lanes in one direction along with divider space for pedestrians to wait for safe crossing.

Carriageway space (driving space) should be maximum of 50% of the total street width as per [IRC:SP:118-2018](#)



Street level: Creating Healthy Streets!

1



Every citizen gets a fair share of road space

2



Everyone breathes clean air

3



Public transport is easily accessible

4



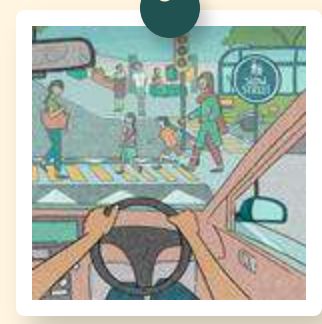
Everyone moves around the city seamlessly

5



Women, children, and the elderly feel safe at all times

6



No lives are lost

7



Walking and cycling are attractive

8



People enjoy street life

9



Local businesses flourish

10



The design adapts to climatic changes

Street level: Various elements of a Healthy street



Well-shaded, well-lit streets

Person with disabilities, elderly can move easily

Pedestrians are safe as they are protected from fast moving vehicles

People enjoy street life, as there places for them to sit & enjoy

Footpaths are encroachment-free

Crossing distance is short

Parking is organised

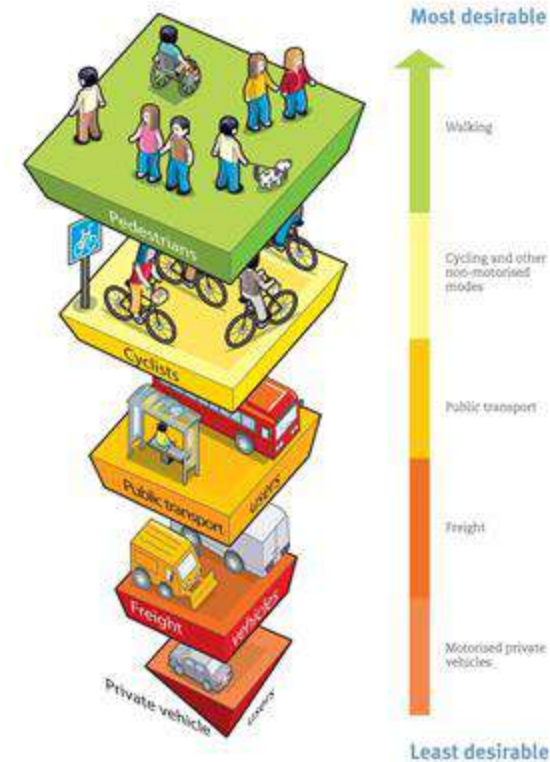
Source: Chennai Mega Streets Project Visual, Greater Chennai Corporation

Street level: Approach to creating Healthy Streets

Adopting pedestrian-first approach



Allocate street space fairly so that space is provided for walking



Street space is limited. Prioritize pedestrians in the street design first

Street level: Footpath should be continuous at one level



Continuous footpaths ensure seamless access to all, especially elderly and persons on wheelchair.

Street level: Footpath should be 150mm high



Footpaths that are 150mm high ensure elderly can climb easily and also protects pedestrians from moving vehicles

Street level: Footpath should have 3 zones



A minimum clear 2 meters pedestrian zone should be provided.

The pedestrian zone width will vary as per landuse.

Please refer IRC:103-2022 for widths of various zones.

Street level: Provide at-grade crossing



Pedestrians don't prefer foot-over bridges or subways as it requires additional effort. They are difficult to access, especially for elderly and persons with disabilities. Hence at-grade crossings should be provided as per IRC:103-2022

Street level: Compact intersections



Compact intersections reduce crossing distances, slow traffic speeds at turning, and ensure efficient through-put of vehicles

Street level: Traffic calming measures



Traffic calming elements such as speed breakers reduce vehicle speeds (below 15kmph) and ensure pedestrians can share street space safely with vehicles , when footpaths are not provided. These are recommended on local streets below 9 meters

Street level: Active frontage



Low-height and visually see-through compound walls improve pedestrian security. Building regulations should make sure that solid part of compound wall is maximum to a height of 1.5m.

Design Checklist for Healthy Streets

Healthy Streets Design Checklist

Units are in Metres

The optimal location of street elements.






- Service Utilities
- Vending
- On-street Parking
- Landscape
- Street Furniture
- Street Lights

- Landscape
- Street Furniture
- Street Lights

1 Footpaths	Frontage zone	Walking zone	Multi Utility Zone
Width of footpath zones - based on surrounding land use			
Residential Streets	min. 0.5m	min. 2m	min. 0.5m
High-intensity pedestrian footfall	min. 1m	min. 4m	min. 2m
Commercial Streets	min. 0.5m	min. 4m	min. 2m
Local streets <10m ROW	Shared Street with MUZ patches if feasible		
Kerb height	150mm		
Footpath gradient for surface runoff	1:50		
Vehicle Access Ramps	Streets with footpath > or equal to 1.5m width	Streets with footpath <1.5m width	
Tactile pavers	Slope - 1:8; Width: max 3.5m		Slope - 1:15
	To be laid 600mm from the edge of any obstacle		

2 Carriageway											
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #333; color: white;">Type</th> <th style="background-color: #333; color: white;">Carriageway Width</th> </tr> </thead> <tbody> <tr> <td>Single Lane with raised kerbs</td> <td>3 - 3.5m</td> </tr> </tbody> </table>	Type	Carriageway Width	Single Lane with raised kerbs	3 - 3.5m						
Type	Carriageway Width										
Single Lane with raised kerbs	3 - 3.5m										
3 Landscape											
Location of trees	In the MUZ										
Minimum no. of trees per km	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #333; color: white;">Right of Way (m)</th> <th style="background-color: #333; color: white;">Minimum no. of trees/km</th> </tr> </thead> <tbody> <tr> <td><35</td> <td>200</td> </tr> <tr> <td>35-45</td> <td>300</td> </tr> <tr> <td>46-60</td> <td>500</td> </tr> <tr> <td>61-120</td> <td>700</td> </tr> </tbody> </table>	Right of Way (m)	Minimum no. of trees/km	<35	200	35-45	300	46-60	500	61-120	700
Right of Way (m)	Minimum no. of trees/km										
<35	200										
35-45	300										
46-60	500										
61-120	700										
C-C distance between tree trunks	Small trees > 6m; Medium trees > 10m; Large trees > 15m										
Vertical clearance of trees for safe pedestrian movement	2.4m										
Height of shrubs planted on medians	1.5m										
Height of high-branched trees planted on traffic islands	4.5m from the carriageway level										
Size of tree pits	3.3sqm										
Height of raised tree pits	Standard seating height										
Note: Level of the green should be lower than adjacent road level											
4 Street Furniture											
4.1 Seating											
Location of seating	In the MUZ or frontage										
Orientation of seating	Streets with wide MUZ (>1.5m) Streets with narrow MUZ (<1.5m)										
Height of seaters	450mm										
Depth of seaters (excluding backrest)	450mm										
4.2 Bollards											
Location of bollards	To be provided at locations where vehicle encroachment is possible—property entrances, pedestrian median refuge, and table-top crossings.										
Height	0.7m										
Distance of the bollard from the kerb edge	0.25m										
Clear width between bollards	0.6m; For wheelchair access - 1m										
Distance of the bollard from the building edge/property boundary	0.6m										
4.3 Signage											
Location of signage	In the MUZ OR 0.25 m from the kerb edge										
Orientation of signages	Perpendicular to the line of traffic; Left side of the road										
Height of braille signages	1.4 - 1.6m from the finished footpath level										
Vertical clearance	min. 2.3m										
4.4 Street Lights											
Location of street lights	In the MUZ, frontage or median, based on context										
Height of light poles	max. 12m										
Spacing between two light poles	3 x (height of the light poles)										
Recommended light fixtures	Warm white LEDs										
Recommended light levels for footpath	25 - 30 lux										

Design Checklist For Healthy Streets

5 Bus stops		
	Location of the bus stop	Footpaths >4.5m wide In the MUZ
	Location of bus stop display information	Footpaths <4.5m wide Property edge / Frontage Perpendicular to pedestrian movement Parallel to pedestrian movement
	Size of a typical bus stop shelter	9m x 2.5m 3m clear height
	Clear width of waiting space in front of the shelter	1.2m
	Distance of bus stop from junction	25m from the pedestrian crossing edge
	Distance of bus stops from parking bay (before and after)	5m
No. of ramps - in case the bus stop is not on the same level as the footpath	2 ramps—one for boarding, one for alighting	
6 Street Vending		
	Location of street vending	In the MUZ
	Size of a typical vendor space	1.8m x 1.8m
7 Above-ground Utilities		
	Location of Utility Boxes	In the MUZ or frontage
	Location of Manholes	In the MUZ
8 On street Parking		
	Location of on-street parking	In the bulb outs, provided between carriageway and MUZ
	Location of on-street parking from Major intersection	50m
	Location of on-street parking from Minor intersection	10-20m
	Location of on-street parking from transit stops	5m before and after
	Orientation of on-street parking	Parallel parking for 4 wheelers Perpendicular parking for 2-wheelers and cycles Angular parking for narrow streets with high 2-wheeler demand
	Vehicle Type	<u>Parking bay dimension</u>
	4 wheeler	2m x 6m
	2 wheeler and cycle	1m x 2m for perpendicular parking 1.2 - 1.5m width of bay for angular parking
	Auto-rickshaw, e-rickshaw & Cycle-rickshaw	1.5m x 3m
	Maximum length of on-street parking	30m (5 ECS)
Location of on-street EV charging amenities	In the MUZ	
9 Cycle Tracks		
	Location of cycle tracks	Between the MUZ and Walking Zone OR Between the carriageway and MUZ
	Buffer between parking and cycle track	0.5m
	Width	min 2m - one way; min 3m - two way
	Vertical clearance along cycle tracks	2.4m
	Height of bollards placed on cycle tracks	0.2 - 0.4m
	Clear width between the bollards on the cycle tracks	1.2m

10 Pedestrian and Cyclist Crossings					
	Spacing/frequency of all pedestrian crossings		Every 80-150m		
	Table Top Crossing		Preferred in locations where speed needs to be reduced to 40-50 kmph		
	Location of crossing	At unsignalised crossings			
	Width of the crossing	min 2m			
	Height of table-top (same as height of footpath)	0.15m			
	Slope of table top's vehicular ramps	1:8			
	Distance between speed hump and table top	20m			
	Zebra Crossing with Pedestrian Ramp		At signalised crossings		
	Location of crossing	min 2m			
	Width of the crossing	Same level as carriageway			
Height					
Slope of pedestrian ramps from footpath to zebra crossing	1:15				
11 Traffic Calming Measures					
	Speed humps		Preferred in locations where speed needs to be reduced to 25-35kmph		
	Note: Speed humps should be preceded by rumble strips or cobble stone rumblers, cat-eyes; and signage				
12 Median and Pedestrian Refuge					
	Location of pedestrian refuge		Whenever pedestrian crossing is provided		
	Pedestrian refuge width in the median		min 1.5m		
	Pedestrian refuge length in the median		Width of the crossing (min 2m)		
	Median width		1.2m		
	Median width gradient towards/away from the pedestrian refuge		1:15 - 1:20		
13 Intersection					
	Turning Radius		max 9m for Bus Route Roads max 4m for non-Bus Route Roads		
	Height of pedestrian refuge island		150mm - same level as footpath		
	14 Public Amenities				
		Dustbins	Public Bike Sharing Stations	Public Toilets (on street)	Play/Gym equipments
Location	In the MUZ	In the MUZ	Within MUZ if MUZ >2m (or) In Parking Bays if MUZ <2m	Clear distance of 2m footpath to be left	In the MUZ or frontage zone
Height	0.8m from FFL				
Spacing	Every 50-75m		Every 300m		Buffer from kerb edge - Min 0.5m

Part 3: How can we achieve a walkable city?

What actions are required?

- 1** **Laying the foundation**
Policies, Plans & Guidelines
- 2** **Sourcing your funds**
Budgeting and financing
- 3** **Hiring a competent team**
Designers, Contractors and Project managers

- 4** **Building the team's muscle**
Conduct capacity development training
- 5** **Doing things together**
Community engagement and inter-departmental coordination
- 6** **Monitoring, Learning, and Improving**
Conduct impact assessment studies

1

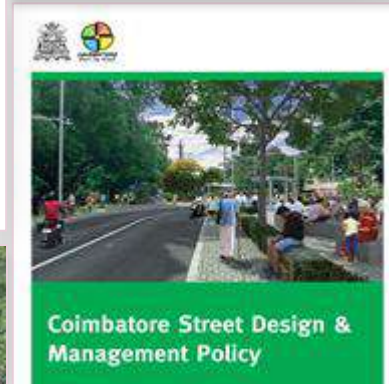
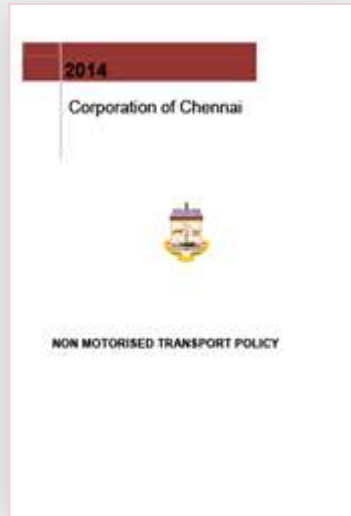
Laying the Foundation - Policies, Plans & Guidelines

Co-creating a common vision and initiating necessary institutional reforms shall ensure resilience!

Chennai, Pune, and the other frontrunner cities have been **adopting progressive policies** to further their vision **for promoting walking and cycling.**

Infrastructure works only if it is connected, not in segments! Creating a **long-term, city-wide network plan** is key to promoting walking and cycling.

Street Design Guidelines. are also being



Indian cities are adopting these!

- Healthy Streets Policy
- Parking Policy
- Healthy Streets Design Guidelines
- Walking & Cycling Network Plan

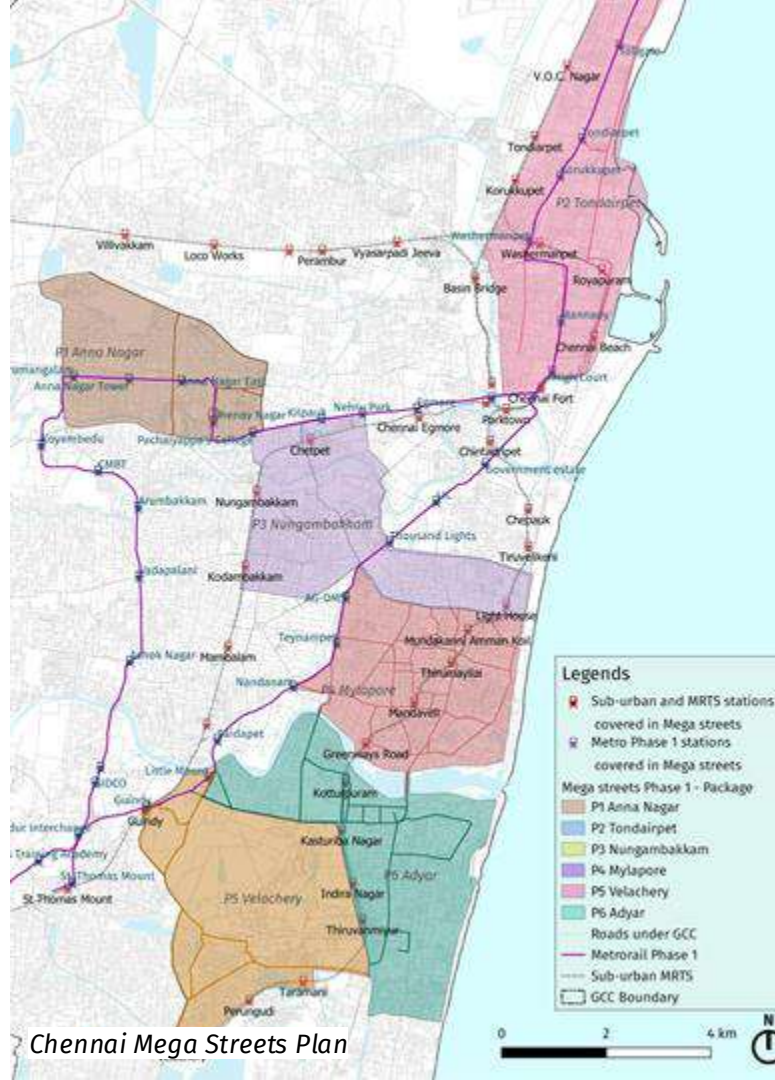
2

Sourcing your funds - Budgeting & Financing

Planning your finances, and identifying funding sources, ensures the long-term success of Healthy Streets initiatives!

Chennai has tapped into the **National Clean Air Program Funds, TURIF (state-level road infrastructure program), and Nirbhaya Funds** for their street initiatives. The city has also attracted investments from the World Bank.

Pune has been allocating **more than 50% of their annual transportation budget** for improving walking, cycling and public transport.



Indian cities
have identified
this through

- Healthy Streets Policy
- 3-year Walking and Cycling Action Plan

3

Hiring competent team - Designers, contractors, & project managers

**Embracing right design principles and
details are key to secure long-term
benefits from an urban design project!**

Coimbatore, Delhi, Ahmedabad and
many other cities have delivered on
high-quality streets and public spaces
by hiring competent designers and
training local contractors.

- ***Prioritise the value of design and designers***
- ***Prepare and publish competitive RfPs***



StudioPOD, Mumbai



Oasis Design Inc, Coimbatore

***Indian cities
have initiated
this through***

- **Healthy Streets
Design Guidelines
Adoption**
- **Robust RfPs for
Street Design
Projects**

4

Building the team's muscle- Conduct capacity development training

Team members aligned in vision and trained with necessary skills will be the backbone!

Bus Routes Road Department in Chennai and Non-Motorised Transport Cell in Pune have appointed dedicated staff with training in implementing street design and have enabled the city's vision for transformation.

- *Nurture a dedicated internal team with diverse backgrounds and skills - including urban designers, data experts, transport planners, etc.*
- *Conduct regular workshops, site visits, launch training courses, etc*



Indian cities are doing this through

- **Healthy Streets Design Department**
- **Capacity development: workshops and site visits**

5

Doing things together - Community engagement, Inter- departmental coordination

Embrace participatory processes throughout the project!

NMT subcommittee in Chennai and Coimbatore have ensured seamless inter-departmental coordination.

Mumbai's Sunday Street initiatives, Delhi's Raahgiri Days have prioritized people on streets.

- *Liaise with all primary stakeholders and line agencies regularly*
- *Get buy-in from political leaders and local champions*



*Indian cities are
doing this
through*

- **Healthy Streets
Apex Committee**
- **Campaigns to
promote Walking
& Cycling**

6

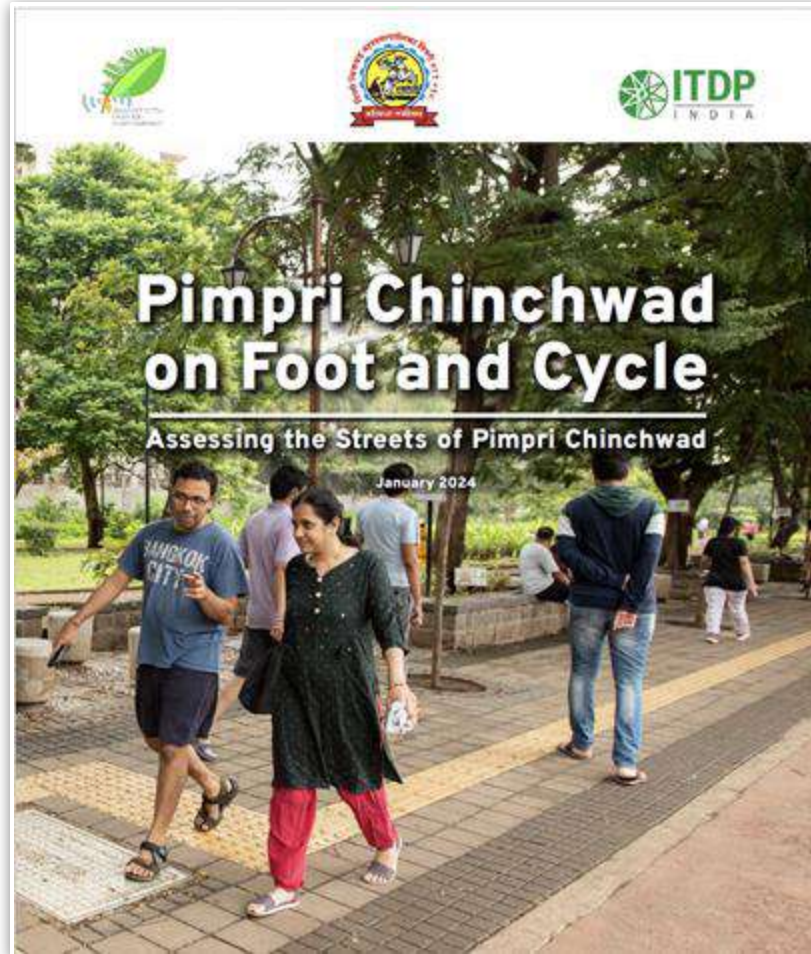
Monitoring, Learning & Improving

Conduct impact assessment studies

Implementation is not an end in itself!

Make a practise of revisiting the implemented street design projects, assess the impact, map the gaps and errors, fix them, and improve the next time.

- *Adopt a impact assessment framework*
- *Listen to the citizens and observe the usage*
- *Create a data-drive case for scaling up*



Indian cities are doing this through

- 3-year Walking and Cycling Action Plan
- Impact Assessments
- Situation Analysis

Chennai's street transformation journey



Adoption of Policies & Guidelines

Chennai became the **first city in India** to adopt a **Non-Motorised Transport Policy** prioritising it's pedestrians & also **adopted street design guidelines**

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



A hands-on studio session at SAP, Anna University (2014)



Pedestrian Plaza - Pondy Bazaar

Capacity Development

Over **80 Engineers from GCC** were trained by ITDP in partnership with School of Architecture and Planning. Site visits and learning workshops have been a recurring activity

Pilot to City-wide scale up

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



Scale-up Plan



Design Guidelines



Hands-on workshop for GCC engineers (2019)

Streets transformation journey of Pimpri Chinchwad



Adoption of Policies & Guidelines

- Pimpri Chinchwad has adopted **Non-Motorised Transport Policy in 2021**, and **Parking Policy in 2018**.
- Pimpri Chinchwad is currently working on **revising its parking policy**.

Capacity Development

- Pimpri Chinchwad conducts **regular capacity development workshops and study tours** for its engineers, and traffic police.

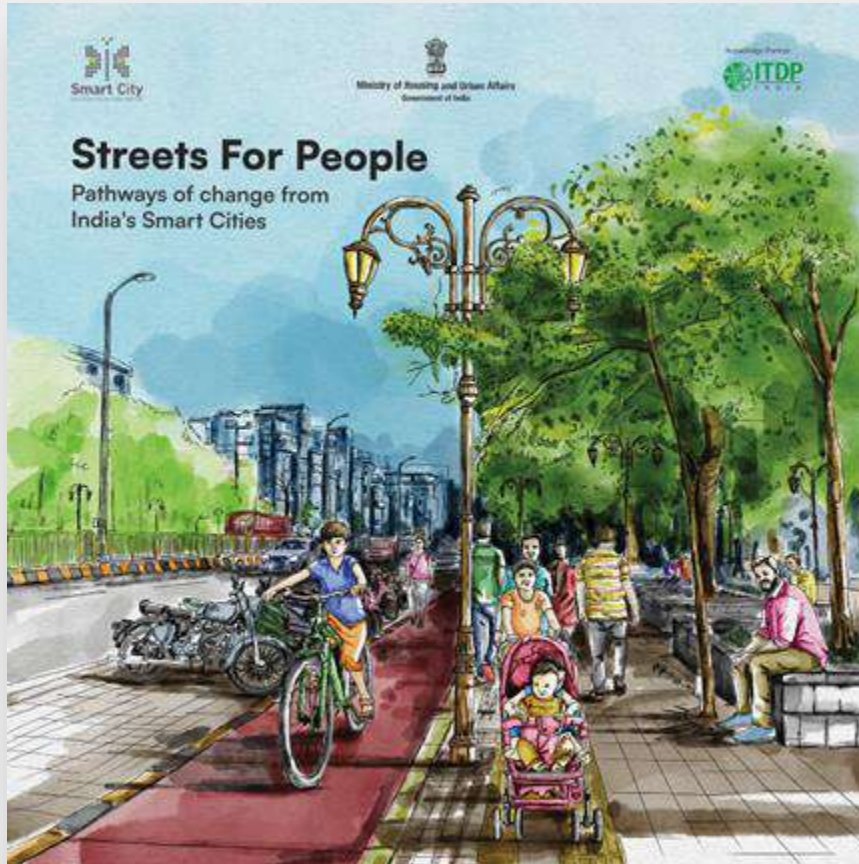
Pilot to City-wide scale up

- **'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**.

- Pimpri Chinchwad has floated tender for the pilot neighbourhood and has plans to **initiate implementation by July 2024**.



Learn from 50 projects across 35+ Indian cities



Contents

Acknowledgements	14
About the compendium	16
How to read this compendium?	18
How will this compendium help you?	20
Chapter 1: Setting the context	22
Chapter 2: 50 Case studies on streets	28
Section A: Transit Streets	30
1. Atal Path, Bhopal, Madhya Pradesh	
2. Canal Corridor, Surat, Gujarat	
3. Linear Garden Street, Pimpri Chinchwad, Maharashtra	
4. MH4 Road, Jabalpur, Madhya Pradesh	
5. Planetarium Road, Bangalore, Karnataka	
6. Smart Jangam, Dhule, Maharashtra	
7. Sangli-Kavali BRTS Road, Pimpri Chinchwad, Maharashtra	
8. Alkote Circle Road, Shivamogga, Karnataka	
9. Civil Line, Sagar, Madhya Pradesh	
10. Dal Lakefront Promenade, Srinagar, Jammu and Kashmir	
11. Dharmarth Marg, Belgaum, Karnataka	
12. Dr Radhakrishnan Road, Tumakuru, Karnataka	
13. Dedicated Cycle Track, Chandigarh	
14. Emankulam Smart Road, Kochi, Kerala	
15. Green Mobility Corridor, Hubballi-Dharwad, Karnataka	
16. Harbour Park Road, Visakhapatnam, Andhra Pradesh	
17. Iconic Road, Surat, Gujarat	
18. Iconic Road Project, Jhansi, Madhya Pradesh	
19. Jayaji Road, Thoothukudi, Tamil Nadu	
20. Mahar Road, Ludhiana, Punjab	
21. Race Course Road, Bangalore, Karnataka	
22. Smart Road, Faridkot, Haryana	
23. Smart Road Development, Ujjain, Madhya Pradesh	
24. Street 106, 106, New Town Kolkata, West Bengal	
25. Saily Police Training Road, Shivasa, DU	
26. Wardha Road, Nagpur, Maharashtra	

Section B: Neighbourhood Streets	156
1. Aurthi Street, Pune, Maharashtra	
2. Conservancy Lanes, Shivamogga, Karnataka	
3. Lanes of Old Kashi, Varanasi, Uttar Pradesh	
4. Race Course Road, Coimbatore, Tamil Nadu	
5. Street 106, New Town Kolkata, West Bengal	
6. Child Friendly Street, Dehradun, Uttarakhand	
7. Heen Mageri, Uttapur, Rajasthan	
8. Housing Board Colony Streets, Kannekera, Telangana	
9. Marina Drive Walkway, Kochi, Kerala	
10. Muli Medical Road, Aurangabad, Maharashtra	
11. Marwayyam Weethi, Thuvattapattanam, Kerala	
12. Pashan Sui, Pune, Maharashtra	
13. Peshawar Walkway, Narnath, Odisha	
14. Sangaji School Road, Davangere, Karnataka	
Section C: Market & Commercial Streets	244
1. Pata Khaw Street, Srinagar, Jammu and Kashmir	
2. Pimpri Bazaar, Chennai, Tamil Nadu	
3. Triana Station Road, Thane, Maharashtra	
4. Wankhede Street, Mumbai, Rajasthan	
5. Apara Road, Jammu, Jammu and Kashmir	
6. Changan Dukan, Indore, Madhya Pradesh	
7. Street Bazaar, Srinagar, Maharashtra	
8. Mafie Market, Solapur, Karnataka	
9. Jaw Street, Kochi, Kerala	
10. Street Street, Bhopal, Madhya Pradesh	
Chapter 3: Pillars of change for future streets	310
Chapter 4: Funding and financing of street transformations	316
Appendix	340

[View the online document here](#)

Learn more from the journey of cities

K02 Streets For People: Pathways of change from India's Smart Cities

6 Smart Janpath

Bhubaneswar, Orissa



Category
Arterial Street



RoW
60m



Length
5.8 km



Duration
Oct 2017- Feb 2022
(4 years 8 months)



Total Cost
₹79.57 Cr.



Nodal Authority
Bhubaneswar Smart City
Limited (BSCL)



Implementing Partners
M/S EGIS India Consulting,
M/S JBI India Limited, M/S
Ernst and Young.

Profile of the City

Bhubaneswar ranked 1st position among the 100 cities selected under the Smart Cities Mission of the first planned cities in the country and is renowned as a Temple City. Having a total area of 135 sq km with a population more than 8 lakhs, Bhubaneswar Smart City has undertaken projects, worth ₹910 Cr., of which 90% of the projects by value (₹809 Cr.) are already completed under Smart Cities Mission. Bhubaneswar has implemented many unique projects under the Smart Cities Mission, including the iconic Smart Road at Janpath and the Bhubaneswar Operations Center (BOCC). Further, the Bhubaneswar Smart City has introduced initiatives such as Child-Friendly Smart City and Socially Smart Project that demonstrated inclusive thinking and decision-making processes ensuring citizen participation and responsive planning.

Context of the Project

Smart Janpath Road is one of the busiest roads, connecting different parts of the city, and has a metro station and provides access to Inter-State Bus Terminal (ISBT) and airport. Being one of the longest streets in the city, it was selected as a model street and envisioned to demonstrate a people-friendly transit-oriented development. This 5.8 km long Smart Janpath is a visionary project that caters to pedestrians and cyclists with dedicated pathways, active public plazas, and improved crossings. The project's success lies in its community-friendly approach, transforming the road into a pedestrian and cyclist-friendly haven.

Vision of the Project

Revitalising urban life, the project envisioned transforming an arterial street into a vibrant community hub integrated with amenities while also ensuring its seamless connection to regions outside the city.



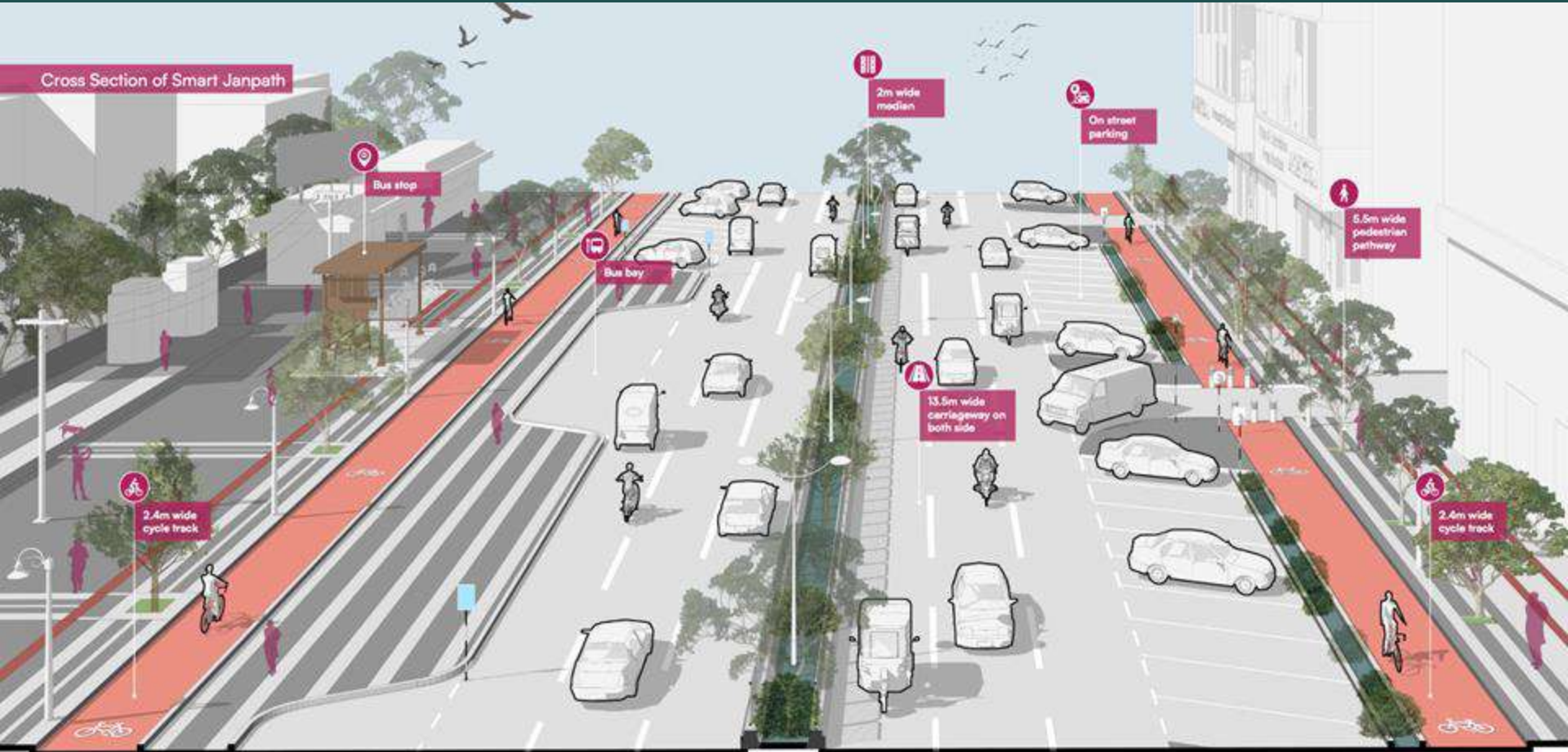
All underground utilities being integrated as per the IRC and Bhubaneswar Street Design Guidelines



A revitalised urban space integrated with segregated cycle track, footpath, and on-street parking facilities.

Learn more from the journey of cities

Cross Section of Smart Janpath



Learn more from the journey of cities

Project Journey

01 Laying the Foundation

The city has also institutionalised a Street Vending Policy to organise and manage street vendors.

✓ Completed ✗ Not yet started ● Ongoing



✓ Capacity-building workshops

02 Building the team's muscle

Peer-to-peer learning
Selected city engineers visited the street design projects in Pune and shared their observations with other team members enabling a peer-to-peer learning for the entire team.

03 Doing things together



Stakeholder engagement

All the stakeholders (including RWA, business owners, residents, NGO representing transgender community) were engaged throughout the project duration through stakeholder consultations and field visits on a regular basis for redressal and resolution of legal issues. Further, officials from Bhubaneswar Municipal Corporation, Bhubaneswar Development Authority, Public Works, Water Resources, Energy, Housing and Urban Development Department, Government of Odisha and communication agencies like BSNL, AIRTEL, TATA etc. were taken on board during the planning and decision-making process.

✓ Public Engagement

✓ Tactical Trial



24x7 Redressal Team

24x7 tracking and redressal of issues was ensured through WhatsApp groups and on-ground staff from the Bhubaneswar Municipal Corporation. The MD and CEO of Bhubaneswar Smart City received updates on a daily basis.



Media engagement

Media was engaged for the outreach and to generate awareness about stakeholder consultation sessions.



04 Monitoring, learning and improving

Monitoring

Two dedicated teams ensure proper enforcement in the area. They discourage mobile vendors, ensure symmetrical arrangements of vending kiosks, oversee proper parking of vehicles in assigned spaces, and tow vehicles. Moreover, the officials of Bhubaneswar Smart City were also entrusted with supervision duties in the Smart Janpath to monitor the same.



CCTV Surveillance

CCTV surveillance near bus stops focuses on people waiting as well as passengers boarding and de-boarding the buses to ensure safety.



Operations and Maintenance

The project contractor has been assigned a contract of four years for O&M of the street. Sanitation and street lighting is being managed by the Bhubaneswar Municipal Corporation.

Reference Documents

NIUA (2022). Transforming Urban Landscape in India, A compendium of 75 public spaces



NACTO, Global Designing Cities Initiative (2016). Global Street Design Guide



ITDP, MoHUA (2022). Institutional Setup Guide



ITDP, MoHUA (2022). Monthly Content Calendar Guide



ITDP, MoHUA (2021). Adopting the Healthy Streets Policy



ITDP, MoHUA (2022). Three-year Healthy Streets Action Plan Guide



ITDP, MoHUA (2022). Handlebar Survey Guide



ITDP, MoHUA (2022). Walking Audit Guide



ITDP, MoHUA (2022). Open Streets Campaign Guide



ITDP, MoHUA (2021). Design Competition Template



Indian Road Congress (2015-2022). Indian Roads Congress Guidelines



Ministry of Housing and Urban Affairs, GoI (2021). Harmonised Guidelines & Standards for Universal Accessibility in India



Ministry of Housing and Urban Affairs, GoI (2014). The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act



Ministry of Road Transport and Highways India, GoI (1988). Motor Vehicles Act



National Human Rights Commission, India (2022). Disabilities Act



Delhi Development Authority (2006). The National Urban Transport Policy



UTTIPEC (2012). UTTIPEC Guidelines for Street Design



As a fish needs to swim, a bird to fly, a deer to run, **we need to walk, not in order to survive, but to be happy**

Enrique Peñalosa, former Mayor of Bogotá

