

INFANT, TODDLER, CAREGIVER FRIENDLY NEIGHBOURHOOD 2.0

POLICY WORKBOOK





Ministry of Housing and Urban Affairs
Government of India



The Ministry of Housing and Urban Affairs is the apex authority of Government of India to formulate policies, coordinate the activities of various Central Ministries, State Governments and other nodal authorities and monitor programmes related to issues of housing and urban affairs in the country. The Smart Cities Mission was launched by the Ministry in 2015 to promote sustainable and inclusive cities that provide core infrastructure and give decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions.

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The Nurturing Neighbourhoods Challenge is hosted by the Smart Cities Mission, Ministry of Housing and Urban Affairs, Government of India, in collaboration with Van Leer Foundation and with the technical support of WRI India. This Challenge aims to incorporate a focus on neighbourhood-level improvements that promote healthy early childhood development (0-5-year-old children) in the planning and management of Indian cities.

<https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/>

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Abbreviations

ABD	Area Based Development
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
AWC	Anganwadi Centre (Early childhood care and learning centre in India)
AWW	Anganwadi Worker
BRT	Bus Rapid Transit
CDP	City Development Plan
CFN	Child Friendly Neighbourhood
CPCB	Central Pollution Control Board
CPWD	Central Public Works Department
ECD	Early Childhood Development
EWS	Economically Weaker Section
ECBC	Energy Conservation Building Code
FAR	Floor Area Ratio
FBC	Form Based Codes
GoI	Government of India
GTPUD Act	Gujarat Town Planning and Urban Development Act
ICDS	Integrated Child Development Services
IGBC	Indian Green Building Code
IRC	Indian Road Congress
ITC	Infants Toddlers and Caregivers
ITCN	Infant Toddler and Caregiver-Friendly Neighbourhood
ITDP	Institute for Transportation and Development Policy
LAP	Local Area Plan
MoEF	Ministry of Environment and Forests
MoHUA	Ministry of Housing and Urban Affairs
MoUD	Ministry of Urban Development
MPD	Masterplan Delhi
MRTS	Mass Rapid Transit System
NBC	National Building Code
NDMC	New Delhi Municipal Council
NGO	Non-Governmental Organisation
NPC	National Policy for Children
NMT	Non-Motorised Transport
PHC	Primary Health Centre
PWD	Public Works Department
RWA	Residential Welfare Association
SCM	Smart City Mission
SCP	Smart City Proposal
SLB	Service Level Benchmark
SPV	Special Purpose Vehicle
SWM	Solid Waste Management
TCPO	Town and Country Planning Organisation
TPS	Town Planning Scheme
TOD	Transit-Oriented Development
ULB	Urban Local Body
URDPFI	Urban and Regional Development Plans Formulation and Implementation
UTTIPEC	Unified Traffic and Transportation, Infrastructure Planning and Engineering Centre

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01 Introduction

WHY IS A POLICY WORKBOOK NEEDED?

Given the traditional practice of city planning which happens with technical and professional stakeholders, the needs of children have been often ignored. Cities have begun to realise this planning gap and are now looking at addressing these needs in a holistic manner by building child-friendly aspects into city planning. To date, India has not adopted any urban policy focused on the well being of a child, such as Unicef's Child Friendly Cities Initiative. There is nothing focused on the youngest children, what we term infants, toddlers, and caregivers or ITC. And nothing again that works specifically at the neighbourhood level for this group.

To advocate ITC friendly practices it is imperative to review the existing policies and norms in relation to child friendliness and extract gaps in them to cover the welfare of ITCs holistically. Other major areas of concern are the processes of implementation of these regulations. We need to understand the implementation processes through the public/private agencies available in the Indian governance system. There is also a prerequisite requirement to educate and guide the stakeholders about the benefits of such initiatives and their impact on the quality of lives of people.

HOW TO USE THIS WORKBOOK

This workbook links the design guidelines to policy, providing an analysis of current spatial policy frameworks and guides, identifying opportunities to integrate the ITCN principles in the existing frameworks. The workbook then provides an institutional framework which can serve as a guide to cities, along with potential policy proposals which maybe taken up to adopt and integrate the ITCN lens effectively in the current policy frameworks.

It guides the urban local bodies, local stakeholders and citizens to answer the following questions:

- **Which policy framework has the potential to be used for creating an ITC friendly neighbourhood?**
- **What are the existing guidelines and do they provide enough ITC friendly norms?**
- **What institutional framework will help in applying these guidelines?**
- **Which stakeholders need to be involved in implementation process?**
- **What roadblocks may need to be faced in the implementation of these guidelines and how to address them through live examples?**
- **What kind of policy and implementation framework may be used for application of ITC guidelines?**



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EXISTING POLICIES AND GUIDELINES

The identification of children as the target group is very well understood and taken as a priority at the National level policy-making process. The critical impact areas of these policies are health and education. They form the basis for most initiatives related to children in India nowadays.¹

There are some existing laws on built environment for ITCs like the Factories Act, 1948 and [The Building and Other Construction Workers' \(Regulation of Employment and Conditions of Service\) Act, 1996](#). These acts provide some basic norms, like crèches shall provide adequate accommodation, be adequately lit and ventilated, be maintained in a clean and sanitary condition, be under the charge of women trained in the care of children and infants. Similarly, in the Amended [Maternity Benefit Act 1961](#), [Rajiv Gandhi National Creche Scheme](#) provides some provisions for built environment for ITC.

The generic built environment related policies and frameworks are stated in Table No 4.1. As we are looking at young children and a neighbourhood, we need to look at the policies formulated for them at State and local level.

Notes:

¹ [National Plan of Action for Children 2016](#)

Of the 128.5 million children residing in urban areas, close to 7.8 million children are between 0-6 years.

EXISTING ITC WELFARE POLICIES AND GUIDELINES		
National Level Policies - ITC Welfare		
<ul style="list-style-type: none"> • The National Policy for Children (NPC) • National Plan of Action for Children (2016) • Midday Meal • Right to Education • Kishori Shakti Yojana • Integrated Child Development Scheme (ICDS) • National Commission for Protection of Child Rights - Regulatory Guidelines for Private Play Schools • Rajiv Gandhi National Creche Scheme 		
State and Local level Policies - ITC Built Environment		
Statutory Physical Plans	<ul style="list-style-type: none"> • Masterplan (MP) • City Development Plan (CDP) • Zonal Development Plan • Local Area Plans (LAP) • Layout Plans of Plotted Development • Group Housing Plans • Town Planning Schemes (TPS) • Comprehensive Mobility Plan (CMP) 	
Guidelines and Codes	<ul style="list-style-type: none"> • Urban Regional Development Planning, Formulation and Implementation (URDPFI) • National Building Code (NBC) • Indian Road Congress Guidelines (IRC) • Unified Traffic and Transportation Infrastructure (Planning Engineering) Centre Guidelines (UTTIPEC) • Institute for Transportation Development Policy (ITDP) Guidelines • Indian Green Building Code (IGBC) • Building Bye laws 	
Implementation Mechanisms - Management and Finance	<ul style="list-style-type: none"> • Ward Level Plan • ULB Annual Budget 	
Special Programs	<ul style="list-style-type: none"> • Smart City Initiative (SCM) – Area Based Development or ABDs • Atal Mission for Rejuvenation and Urban Transformation (AMRUT) • Pradhan Mantri Awas Yojana – Housing for All • Swachh Bharat Mission 	From an urban development perspective, several programmes developed by the Ministry of Housing and Urban Affairs have highlighted some aspects that are relevant to children
Special Implementation Mechanisms - Management and Finance	SPV Annual Plan	

Table 4.1 Existing ITC welfare policies and guidelines

The National Policy for Children (NPC), 2013, has been one such national level policy. It affirms the government's commitment to addressing the challenges faced by children. In line with the government's earlier commitments towards rights of children, the NPC recognises that childhood is an integral part of life with a value of its own and that children are not a homogenous group and their different needs require different responses, especially the multidimensional vulnerabilities experienced by children in different circumstances. NPC also acknowledges the need for a long-term, sustainable, multi-sectoral, integrated and inclusive approach for the overall and harmonious development and protection of children. NPC's priority areas are survival, health, nutrition, development, education, protection and participation.¹

The Ministry of Women and Child Development, responsible for executing the NPC, has also drafted the National Plan of Action for Children 2016 to provide a road map linking the policy objectives to actionable strategies under the four key priority areas. The action plan aims to establish effective coordination and convergence among all stakeholders, including government ministries and departments as well as civil society organisations. Among various other child-friendly objectives, the action plan focuses on creating child-friendly spaces at disaster rescue sites, saving them from abuse and violence, provide child-friendly toilets, drinking water and hand washing facilities, and provide child-friendly transport systems.¹

Many programmes and missions related to children, developed by the Central government, are being implemented by State governments at the city level. These programmes respond to specific physiological needs of children like nutrition (Midday Meal), education (Right to Education), and health, and they focus on a particular demographic of children such as adolescent girls (Kishori Shakti Yojana), street children and young children (Integrated Child Development Scheme or ICDS).²

Notes:

² NIUA, 2016, Indicators for Child Friendly Local Development I-CHILD, page 17

02 Policy Framework Review

POTENTIAL POLICY FRAMEWORK FOR ITCN

Urban development process involves the preparation of policies to achieve various stipulated goals. It is clear that the current planning procedures used since many years take time to see the light of the day, in most cases. In developing quality solutions for neighbourhood planning, there needs to be a more realistic approach to see applicable, quicker results. An alternative is to create a roadmap that focuses on the short and long-term potentials in the existing policy framework for sustainable, smart development at a local scale. A time based approach is also critical as the statutory nature of prevalent urban planning policies at National and State level are not tailor made for the application of ITC Guidelines yet.

It is therefore crucial to understand the approach of existing policy framework (short and long term) in the Indian context to leverage these towards ITC-oriented urban development. Figure 4.1 presents the various existing frameworks in the Indian context which maybe adapted to incorporate the ITCN lens into the urban development. These include special programmes initiated at the National level (Smart Cities Mission guidelines for Area-Based Development and Retrofitting of Parks through AMRUT), State level Statutory plans (Masterplan, Town Planning Schemes, Local Area Plan and Layout plan for Plotted Development), as well as City level guidelines (Development Control Regulations / Building bye laws).

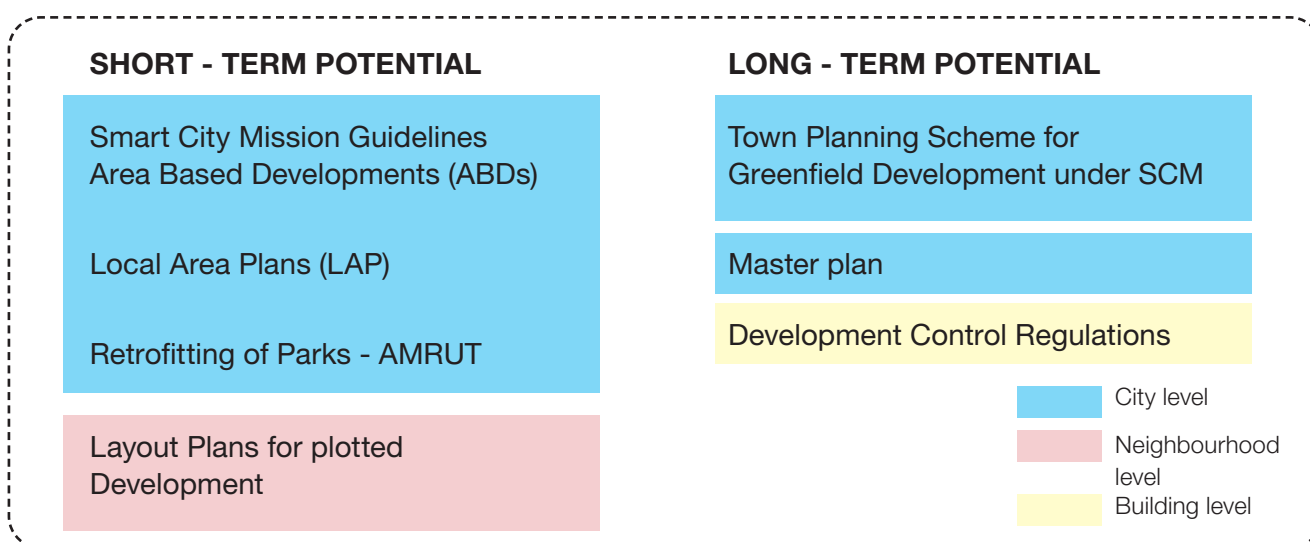


Figure 4.1 Existing policy frameworks in the Indian context at various levels

SHORT-TERM POTENTIALS

Short-term potentials should cover a period of 1-2 years for implementation of projects.

Smart City Mission Guidelines (SCM)

Area Based Developments (ABDs)

The purpose of projects under the Smart Cities Mission is to drive economic growth and improve the quality of life of people by enabling local area development and harnessing technology especially that leads to smart outcomes. Area Based Development will transform existing areas (retrofit and redevelop), including slums, into better planned ones. New areas (greenfield) will be developed around cities to accommodate the expanding population in urban areas. Area Based Development in a city may contain one or more neighbourhoods which could be retrofitted or redeveloped, by adopting smart initiatives for child-friendly development.

Some of the components of Area Based Development include: ²

1. Holistic development of existing and new areas
2. Citizen's expectations are met by the quality of life
3. Walkable localities
4. Accessibility to park, preservation and development of open spaces
5. Last mile connectivity to public transport
6. Citizen friendly and cost effective governance

The ABD approach in the SCM gives a clear opportunity to apply these ITC guidelines to a local area. Place-making could be taken up with the objective to provide theme based facilities, which would be innovative and dynamic than those of typical obsolete solutions. Each place-making site would have design elements, furniture, and spaces designed suitable to the ITC theme of activities, and create a platform for public participation. Such projects could be replicated in other neighbourhoods in the city.

Strategic components of Area Based Development in the Smart Cities Mission are

- City improvement (retrofitting)
- City renewal (redevelopment)
- City extension (Greenfield development)

Area Based Developments will transform existing areas.

- Smart City Mission ³

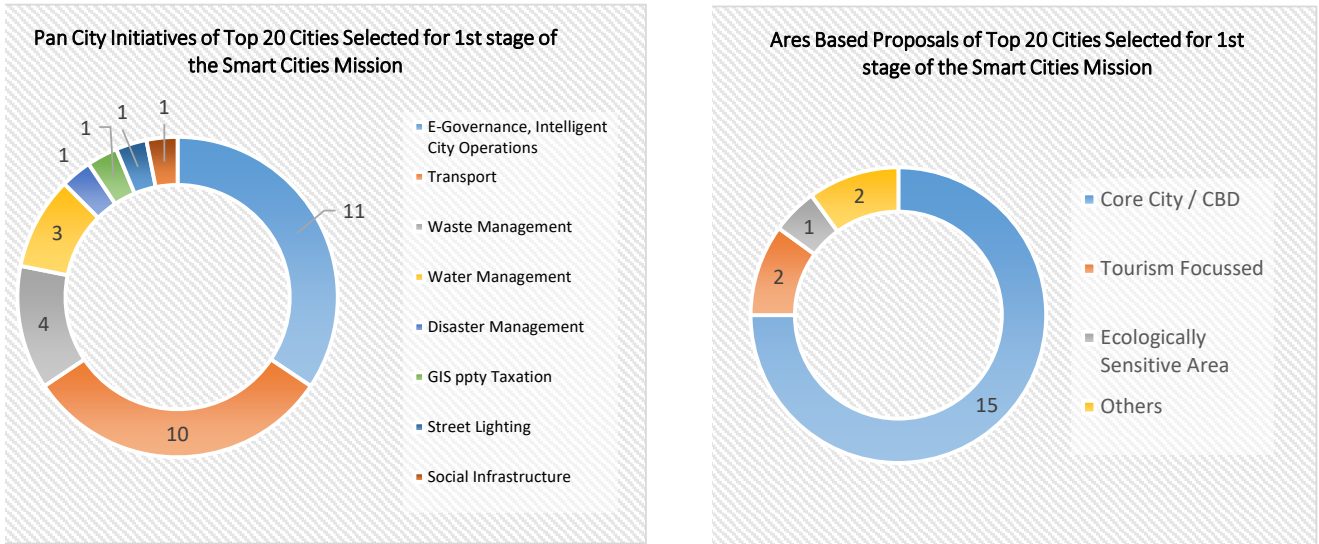


Figure 4.2 Pan city and Area Based Development projects of Top 20 cities under SCM ⁴

Local Area Plans (LAP)

URDPFI Guidelines recommends that the thrust of micro-planning should shift to Local Area Plans, which could encourage decentralisation and improve implementation of Development Plans. Because of the 73rd and 74th Constitutional Amendment Act 1992, planning decision and implementation of plans were disaggregated to bring the process closer to the local people. This enhanced the significance of Local Area Plans.

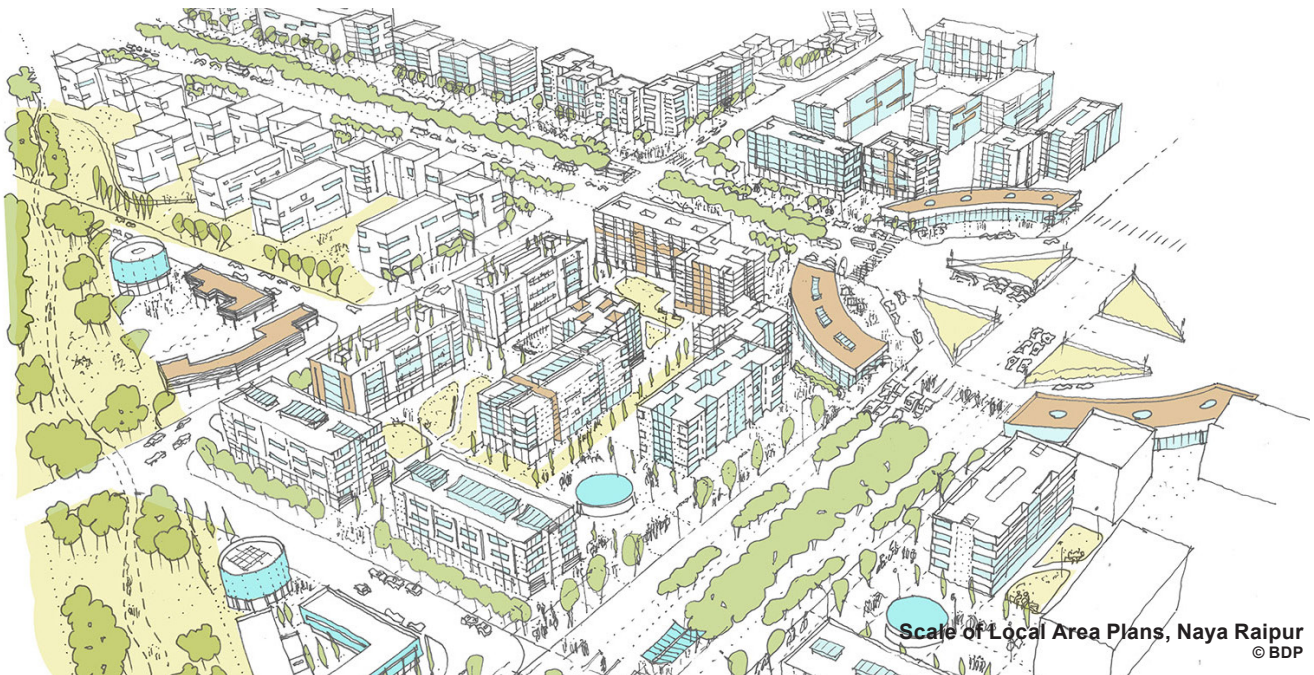
Indian cities are expanding at a very fast rate, which entails rising demands in infrastructure. Redevelopment of existing city areas and in-situ upgradation of existing areas in the city is very significant in such a scenario. Local area planning is a planning tool which predominantly focuses on redevelopment of existing areas in the cities and in-situ upgradation, where there is demand for redevelopment. The mechanism helps to:

- Enhance the existing street network
- Ensure new construction is compliant with building regulations
- Enable infrastructure enhancements that can be upgraded in future

Preparation of LAPs is necessitated for selected cities under the SCM. LAPs are being looked to as a valuable tool to create a framework for enhancing public spaces, and streets by enabling redevelopment of the existing built environment and preparation of a new layout with enhanced infrastructure provision.

Local Area Planning process and its integration with ITCN approach

A Local Area Plan can be initiated either by the Urban Development Authority or the Municipal Corporation, with the support of experts and professionals. The existing areas in the city that need redevelopment or in-situ upgradation through LAP maybe mentioned in the Development Plan or Master Plan of the city, and is based on future projections of population, infrastructure and land use required.



LAP features:

- **Applicable for brownfield development**
- **The area under LAP is 50 - 500 hectares or more.**
- **Prepared within one year.**
- **Specify implementation details to comply with the Government Policies.**
- **Framework for recovery of the associated costs for public projects, by mechanisms such as levying betterment charges, charges on additional development rights, and appropriate user charges. ⁴**

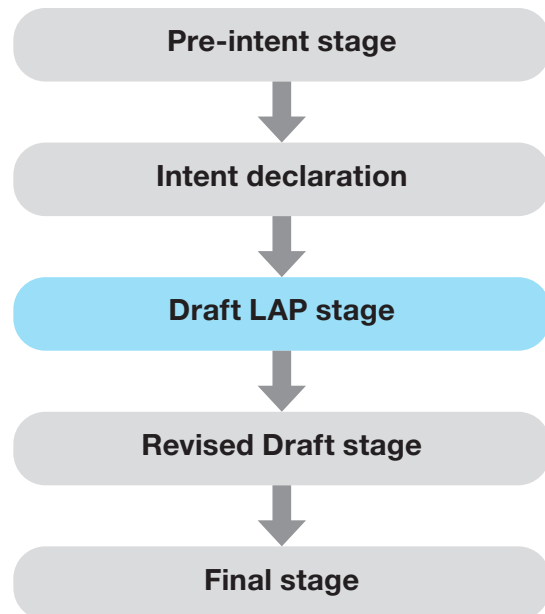


Figure 4.3 Process for Local Area Plan

The various stages of preparation and implementation of a Local Area Plan (with reference to GTPUD Act, 1976 and its amendments) are shown in the Figure 4.3.

The preparation of a Draft LAP consists of the following stages:

1. Existing condition analysis
2. Overarching visioning, prepared with stakeholders
3. Proposals, recommendations, and Design guidelines for improvement of the area
4. Use of Development Control Regulations for improvement of the area

To place this in conjunction with the ITCN approach, city officials may follow the steps to prepare a Draft LAP, with the consideration that infants, toddlers and caregivers will be one of the primary stakeholders to experience the

changes in the redevelopment/ upgradation process. Figure 4.4 is a process diagram that shows how the ITCN approach can be used to support the preparation of an LAP.

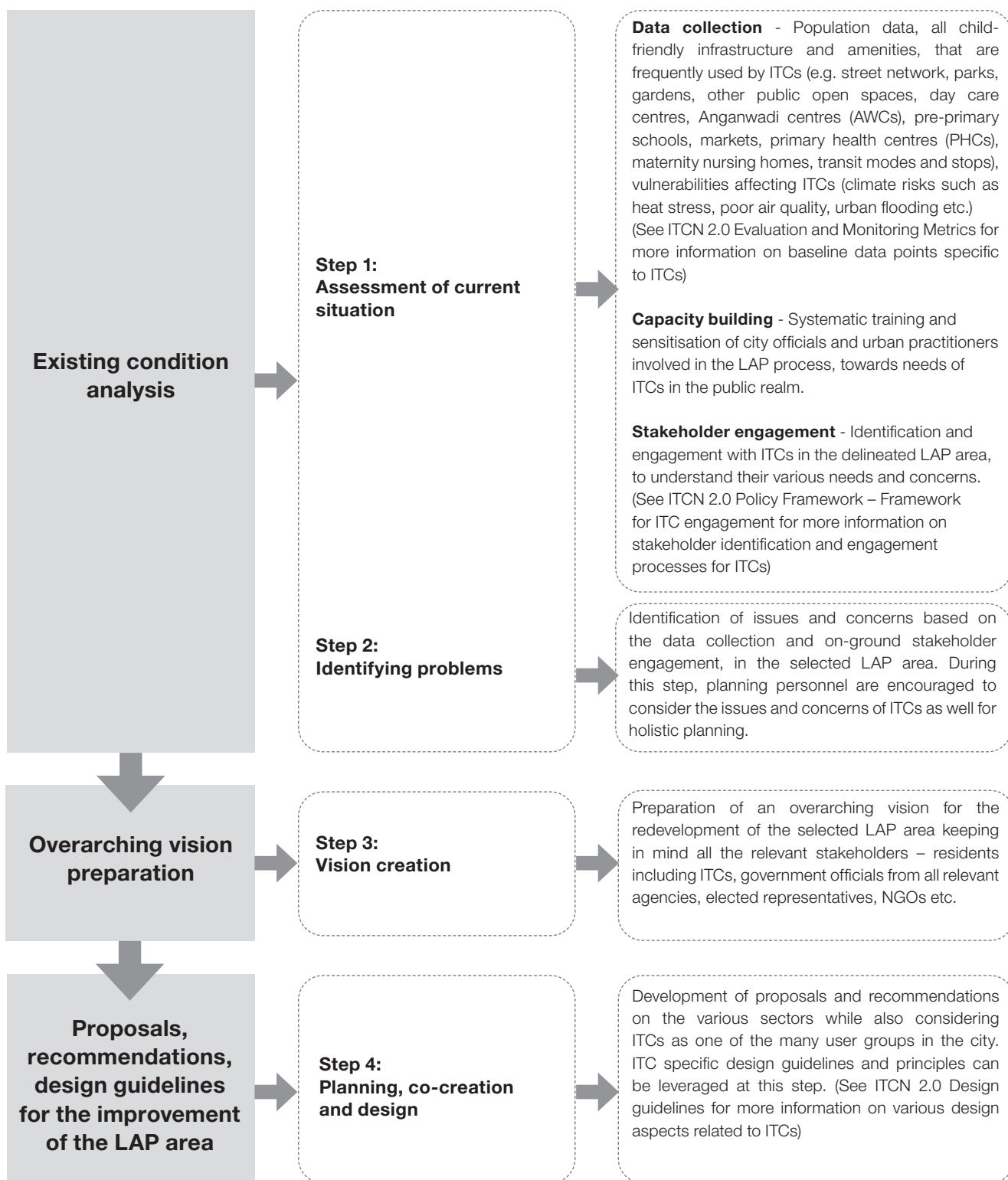


Figure 4.4 Incorporating the ITC-oriented lens in the LAP process

The preparation of a Draft LAP entails the following:

- Defining and designing of the street network and street infrastructure
- Assessment and augmentation of existing amenities and infrastructure (social and physical infrastructure, open spaces, services and utilities)
- Use of development control regulations to improve the built form in the selected area

Figure 4.5 is a process diagram that demonstrates a suggested approach for the assessment and possible scope of augmentation for public open spaces which can be taken up in a selected LAP. A similar methodology can be used for the assessment and augmentation of other amenities, infrastructure and services in the LAP.

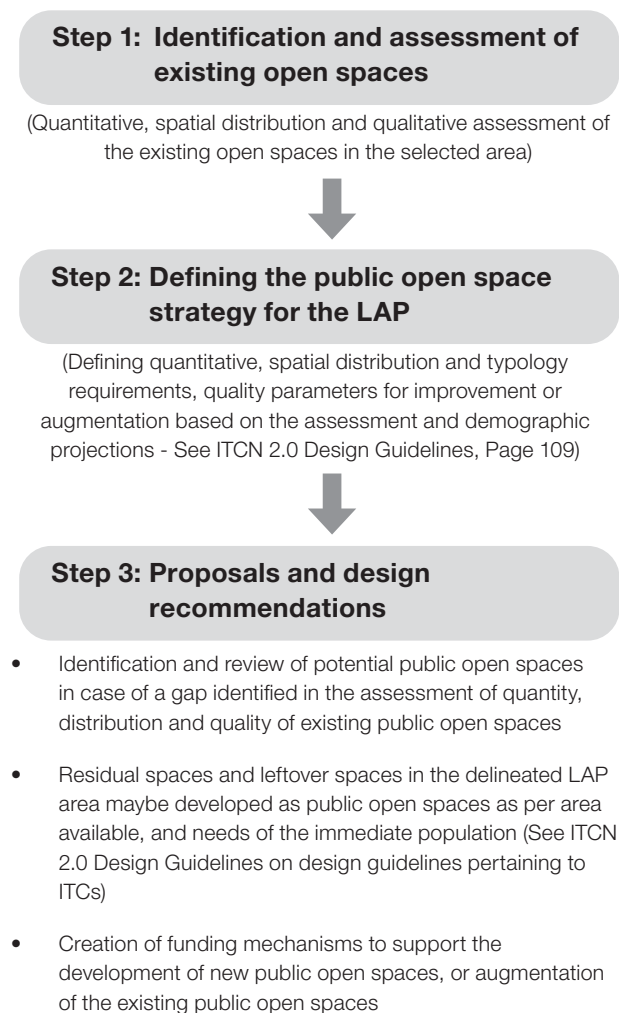


Figure 4.5 Methodology for the assessment and augmentation of public open spaces in LAP

Guiding concepts for design and planning recommendations in LAP

The ITCN approach is also applicable as a guiding concept while making planning and design recommendations of an LAP. While it is important to include infants, toddlers and caregivers in the process of redevelopment or upgradation of a neighbourhood, it is equally important to consider them while designing and planning the redevelopment. The ITCN approach is derived from the basic needs of infants, toddlers and caregivers in a city, which are as follows –

- The need to feel safe (both caregiver and child)
- The need to spend quality time outdoors (amidst greenery), on a regular basis
- The need to have supportive behaviour (from caregivers, community and service providers) on a regular basis

ITC oriented urban development is visualised with the five objectives – **Safe, Green, Accessible, Inclusive, and Playful.**

Some guiding concepts based on these five objectives, which can be adopted in the design and planning of LAPs in Indian cities are given on page 17.

Safe –

- Prioritising pedestrian safety on streets and intersections
- Safety of ITCs in public open spaces and other destinations which are frequently visited by them (e.g. AWCs, PHCs, day care centres, markets etc.)

Green –

- Calm and quiet environment in the neighbourhoods
- Tree-lined and well-shaded streets, adequate green cover in public spaces
- Exposure to biodiversity (including native plants, animals, insects and birds) and nature-based play opportunities
- Green infrastructure (such as bio-swales along streets, flood control berm to absorb excess rainwater, etc.)

Accessible –

- Easy accessibility to various public facilities and other destinations which are frequented by ITCs (e.g. AWCs, day care centres, markets etc.) by foot or cycle (5-10 minute walking distance)
- Co-location or clustering of various public facilities and other destinations
- Supporting street and transportation infrastructure

Playful –

- Introducing play in every possible element of the public realm (streets and intersections, open spaces, transit stops, schools, AWCs, PHCs, etc.) in various forms
- Introducing unstructured play and natural mediums for play

Inclusive –

- Equal access to public amenities and facilities to all in the neighbourhood
- Collaborative localised actions and engaged communities towards solution building.

Guiding concepts for design and planning recommendations in LAPs

Retrofitting of Parks under AMRUT

The purpose of [Atal Mission for Rejuvenation and Urban Transformation \(AMRUT\)](#) is to

- Increase the amenity value of cities by developing greenery and well maintained open spaces (eg. parks);
- Reduce pollution by switching to public transport or constructing facilities for non-motorised transport (eg. walking and cycling); and
- Ensure every household access to a tap with assured supply of water and a sewerage connection.

These outcomes are valued by citizens, particularly women, and the Ministry of Housing and Urban Affairs (MoHUA) has prescribed indicators and standards in the form of Service Level Benchmarks (SLBs).

Besides provision of physical infrastructure, one of the thrust areas of the Smart Cities Mission is enhancing amenity value of cities by **creating and upgrading green spaces, parks and recreation centres, especially**

for children. The AMRUT components also consist development of green spaces and parks with special provision for child-friendly components. The milestones to be achieved stipulate development of **at least one children’s park every year in AMRUT cities.**

The Urban Local Bodies (ULBs) may establish a system for maintenance with local resident participation for parks and open spaces. The public open spaces, parks and playgrounds can be developed / retrofitted with ITC neighbourhood guidelines under the AMRUT scheme and can be replicated across the city.



Layout Plans for Plotted Development

- **Applicable for brownfield development**
- **Perfect places for applying retrofit solutions**
- **Needs a string community support and public participation process**

Layout plans are seen most commonly in residential schemes in Indian cities. They are logically arranged in a systematic manner to give a regular pattern of development in the form of row houses, detached and semi-detached houses and, if necessary, the regular bungalow type sites. The size of the plot depends upon the number of dwelling units to be permitted on each plot and the type of housing needed for a particular city based on general affordability of the people. Retrofitting these layout plans is critical today as many of them have surpassed the capacity of infrastructure they were planned for originally. Local community based groups are very active in these developments and may give ITC infrastructure its due importance. If explicit funding for retrofitting these layouts is provided then they can become interesting pilot areas for application of ITC guidelines.

LONG-TERM POTENTIALS

Long-term potentials should cover a period of 5-10 years for the implementation of projects.

Town Planning Scheme for Greenfield Development under SCM

With the rapid urbanisation in India, urban peripheral expansion is inevitable. Town Planning Scheme (TPS) is a planning tool that emphasises on micro level planning for peripheral urban expansion, where there is demand for new development. The mechanism helps to:

- Expansion of the existing street network
- Provision of basic infrastructure, both physical and social
- Ensuring that the new areas develop in conformity with regulations and creating desirable urban character

TP Schemes are being suggested to be prepared and implemented for planned urban expansion in Greenfield areas for selected cities under SCM. The planning process consists of merging existing land holdings and redistribution of land parcels in a planned manner after making deductions for road right-of-ways and land for public facilities in the urban expansion zone. Land owners derive benefits in the form of developed plots within an organised layout, along with all urban services like roads and other urban infrastructure.

Applicable for greenfield development

- The area under TPS - 50 hectare to 500 hectare or more.
- Prepared within one year period. Implementation may take longer time.
- The cost for providing urban infrastructure and amenities under such TPS can be financed through Value Capture Financing (VCF) tools such as betterment charges and sale of reserved plots. The Ministry of Housing and Urban Affairs has already formulated a Value Capture Policy Framework and started its implementation. ⁵

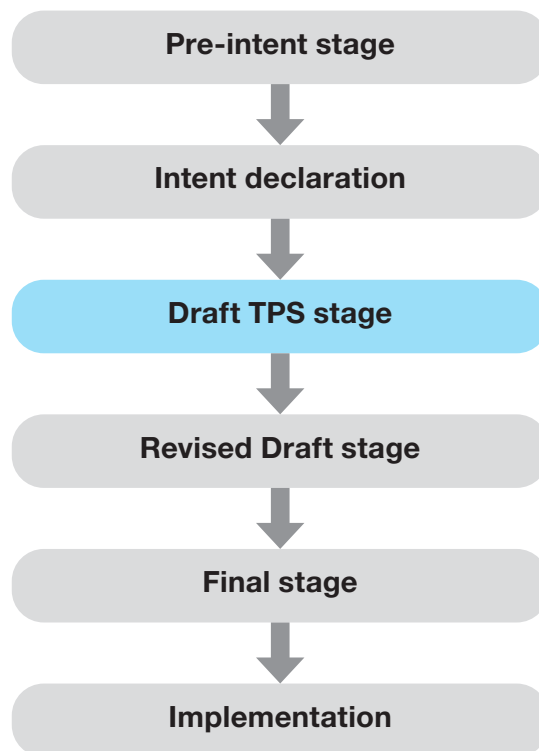


Figure 4.6 Process of preparation and implementation of a Town Planning Scheme

TPS process and its integration with ITCN approach

A TP scheme can be initiated either by the Urban Development Authority or the Municipal Corporation, with the support of experts and professionals. The areas in the periphery of the city which need to be developed through TPS are mentioned in the Development Plan or Master Plan of the city, and is based on future projections of population, infrastructure and the landuse required.

Figure 4.6 illustrates the process of preparation and implementation of a TPS (prepared with reference to GTPUD Act, 1976 and its amendments).

The process of preparing a Draft TPS consists of the following stages:

1. Consultations and meetings with landowners
2. Condition analysis and projections for population, infrastructure, amenities and landuse
3. Overarching visioning, prepared with stakeholders

4. Land use proposals and distribution and allocation of land for public amenities and social infrastructure, sale of land
5. Use of Development Control Regulations

To place this in conjunction with the ITCN approach, city officials can follow the steps in preparation of the draft TPS with the consideration infants, toddlers and caregivers will be one of the primary stakeholders to experience the new development. Figure 4.7 is a process diagram that shows how the ITCN approach can be used to support the preparation of a TPS.

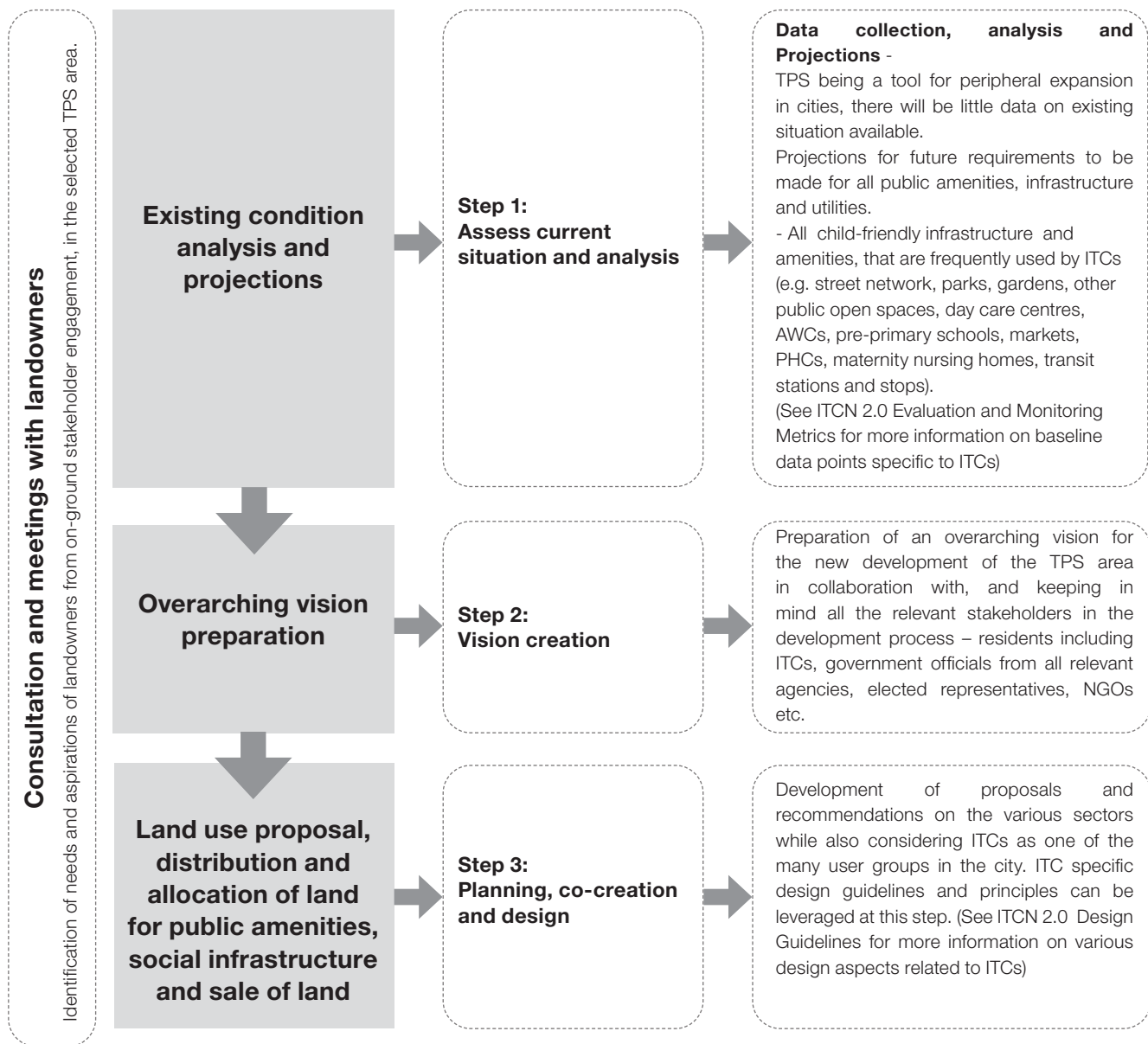


Figure 4.7 Incorporating the ITC-oriented lens in the TPS process

The preparation of a Draft TPS entails the following:

1. Design of the street network and basic street infrastructure
2. Distribution and allocation of land for public amenities and social infrastructure, sale of land (for residential and commercial purposes), housing for Economically Weaker Sections (EWS)

Figure 4.8 and 4.9 illustrate a suggested process that demonstrates spatial distribution, typology identification and land allocation for public open spaces and AWCs in the TPS. A similar methodology can be used for distribution and allocation of land for other amenities and social infrastructure in the TPS.

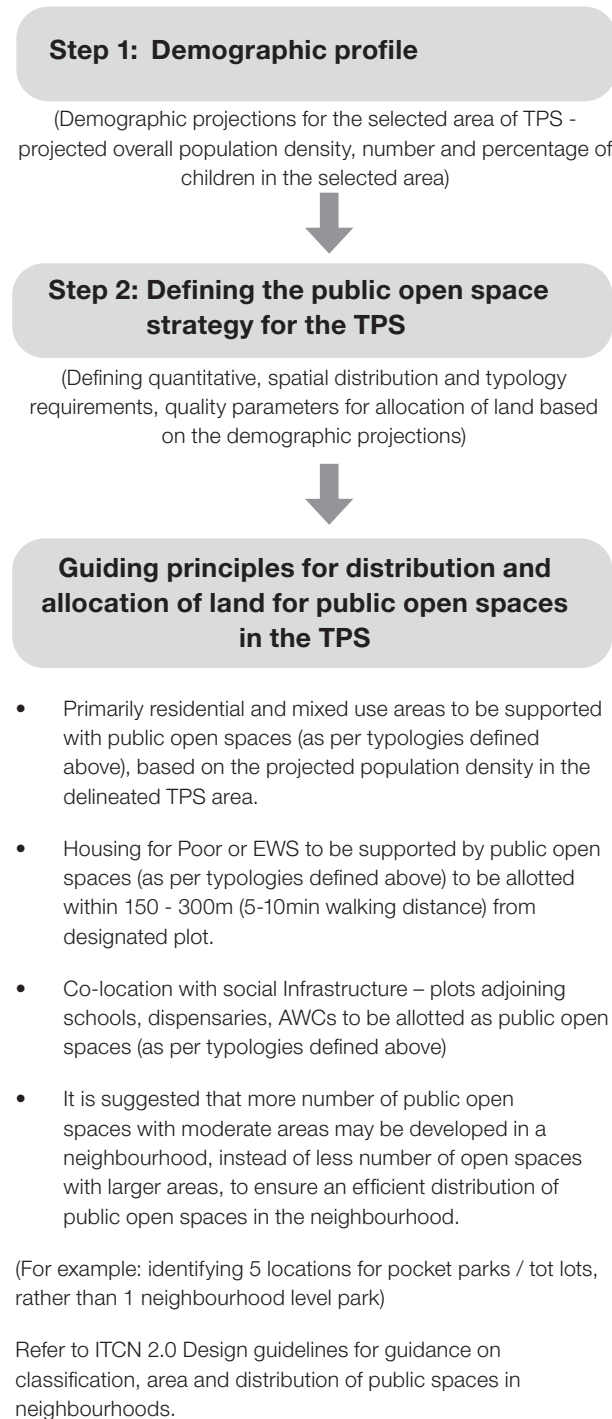
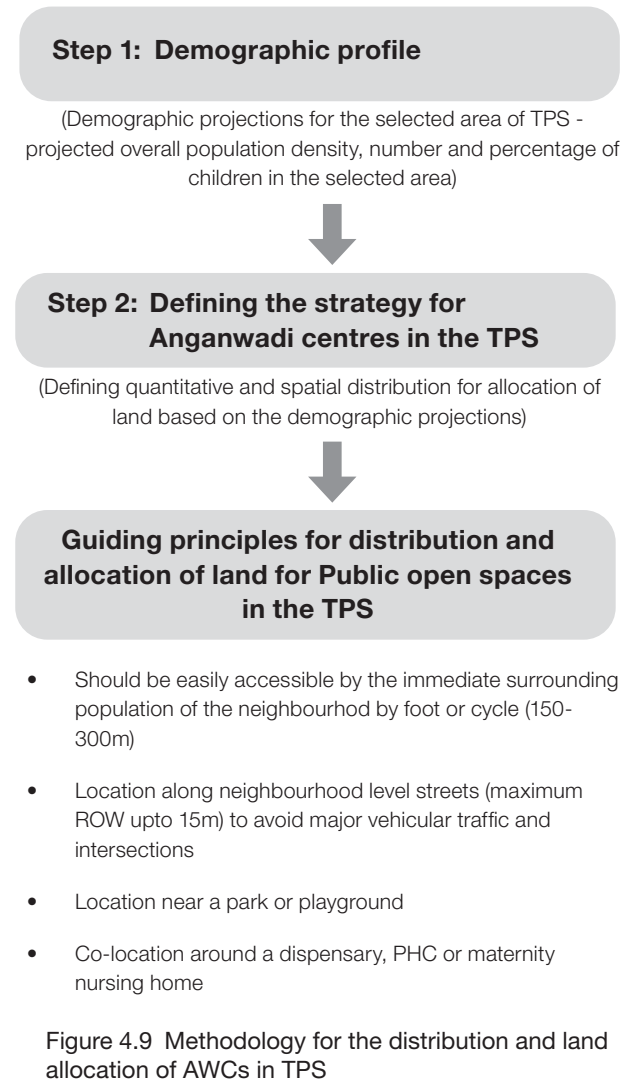


Figure 4.8 Methodology for the distribution and land allocation of public open spaces in TPS



Guiding concepts for design and planning recommendations in TPS

The ITCN approach is also applicable as a guiding concept while making planning and design recommendations of TPS. While it is important to include infants, toddlers and caregivers in the process of developing a new neighbourhood, it is equally important to consider them while designing and planning stages. The ITCN approach is derived from the basic needs of infants, toddlers and caregivers in a city, which are as follows –

- The need to feel safe (both caregiver and child)
- The need to spend quality time outdoors (amidst greenery), on a regular basis
- The need to have supportive behaviour (from caregivers, community and service providers) on a regular basis

ITC oriented urban development is visualised with the five objectives – **Safe, Green, Accessible, Inclusive, and Playful.**

Some guiding concepts based on these five objectives, which can be adopted in the design and planning of TPSs in Indian cities are given below.

Safe –

- Prioritising pedestrian safety on streets and intersections
- Safety of ITCs in public open spaces and other destinations which are frequented by ITCs (e.g. AWCs, day care centres, PHCs, markets etc.)

Green –

- Calm and quiet environment in the neighbourhoods
- Tree-lined and well-shaded streets, adequate green cover in public spaces
- Exposure to biodiversity (including native plants, animals, insects and birds) and nature-based play opportunities
- Green infrastructure (such as bio-swales along streets, flood control berm to absorb excess rainwater, etc.)

Accessible –

- Easy accessibility to various public facilities and other destinations which are frequented by ITCs (e.g. AWCs, day care centres, PHCs, markets etc.) by foot or cycle (5-10 minute walking distance)
- Co-location or clustering of various public facilities and other destinations frequented by ITCs
- Supporting street and transportation infrastructure

Playful –

- Introducing play in every possible element of the public realm (streets and intersections, open spaces, transit stations and stops, schools, AWCs, PHCs, etc.) in various forms
- Introducing unstructured play and natural mediums for play

Inclusive –

- Equal access to public amenities and facilities to all in the neighbourhood
- Collaborative localised actions and engaged communities towards solution building.

Guiding concepts for design and planning recommendations in TPS



Master Plan

Master Plan is a long-term plan prepared under the provisions of respective Town Planning Acts / Development Authority Acts with the purpose of planned development of the city. It is a statutory instrument for guiding planned development and regulating improvement of city for 20 years to cater to the needs of the projected population. The implementation of Master Plan facilitates the orderly and planned development of a city in a sustainable manner, which would ultimately result in good governance.

It is essential to consider infants, toddlers and caregivers as one of the primary stakeholders in the process of creating a Master Plan that delivers to suit their needs in the future. Implementation of a City Master plan is an investment of the city for its future. So it is of utmost importance that young children and their needs are given priority in the urban development of the city for the long-term. Urban development planned for the infants, toddlers and caregivers automatically ensures a holistic development for all citizens.

Cities are encouraged to mandate and enable micro-level planning to detail out the master plan and its implementation through various

mechanisms to ensure all-inclusive urban development with required essential facilities for education, health and recreation and services at all levels (city level, neighbourhood level and building level)

Master Plan for Delhi 2021, for example, envisages planned city for an environment of convenience with a hierarchical cellular structure with nuclei to contain essential facilities and services at different levels. Accordingly, the pattern of **Community Module, the Master plan proposes a residential area of 10000 population**, containing a neighbourhood, with a senior secondary school and shopping facilities for daily needs. Higher levels of additional facilities are to be provided at Community / District and Zonal / Sub Zonal levels. Provision of requisite social infrastructure for the neighbourhood planning is governed by the norms and standards prescribed in the Master Plan. It stipulates that

- Community facilities to be provided @ 7.0 sqm / person (2.5 sqm for Public and semi-public facilities and 4.5 sqm for open spaces).
- Provision of 20 tot-lots of minimum size of 125 sqm. each, and Housing Area Park and

Play Ground of 5000 sqm each.

- Anganwadi centres (Early childhood care and learning centre in India) at Housing Area level of 5000 population. The location of schools and Anganwadi centres should be made in the layout plan in cluster form to facilitate sharing of common parking space and playground.

However, since most residential areas were developed during earlier plan periods, these lack adequate ITC-centric facilities. Further, Master Plan 2021 does not prescribe specific provision of child friendly infrastructure in neighbourhoods.

In order to meet the needs of increasing population of Delhi, provisions in Master Plan have been amended from time to time by regularising enhancement in building areas by increasing permissible Floor Area Ratio (FAR), and permitting non-residential activities in residential plots / flats, which has severely affected the built environment in residential neighbourhoods. This has resulted in substantially higher densities in most of the residential areas than planned for, overcrowding and reduction in open areas and public facilities, particularly child related infrastructure. Mixed use regulations stipulated in the Master Plan legally permit commercial and other activities in residential areas.

In the present scenario, it is observed that most of the open areas / parks in residential neighbourhoods are either not maintained or have been encroached upon for parking cars and other activities, with little or no space for play, particularly for the young children. The ITC Neighbourhood Guidelines can be implemented by the ULBs in planned areas by initiating awareness programmes and involving RWAs, NGOs, Local Counsellors and public participation.

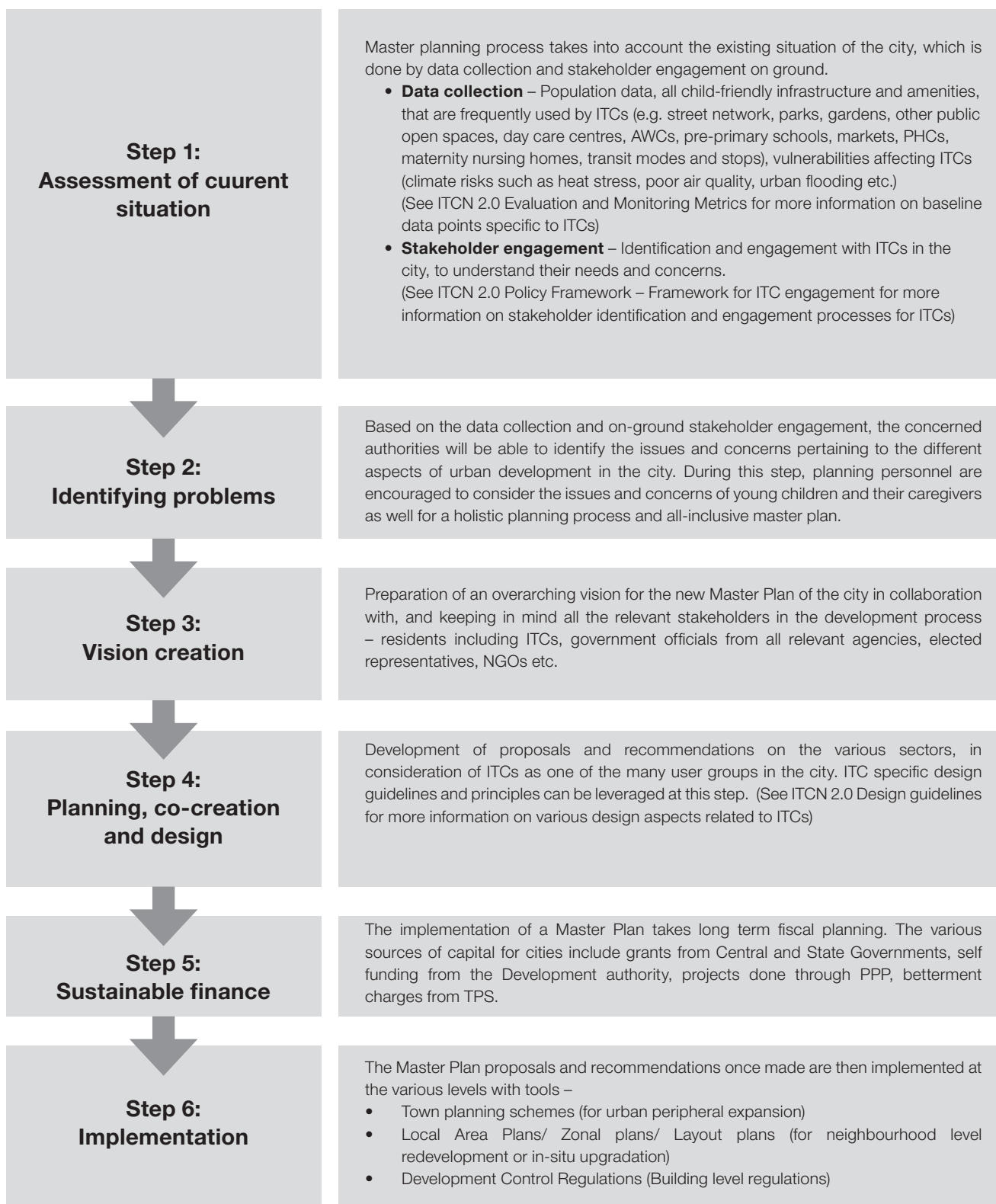


Figure 4.10 Incorporating ITC-oriented lens in the preparation of Master Plans for cities

Suitability of existing policy frameworks for applying ITCN Guidelines

As per the review of the policies affecting the built environment, the following are some key findings about their suitability in relation to ITCN guidelines application:

	Most Suitable	Moderately Suitable	Least Suitable
Smart City Mission Guidelines Area Based Developments (ABDs)	●		
Local Area Plans (LAP)	●		
Retrofitting of Parks - AMRUT	●		
Layout Plans for plotted Development		●	
Town Planning Scheme for Greenfield Development under SCM		●	
Masterplan			●
ULB Annual Budget		●	
SPV Annual Plan	●		

Figure 4.11 Suitability of existing policy frameworks for applying ITCN guidelines

Notes:

³ Ministry of Urban Development, 2015, Smart City Mission Statement Guidelines, page 8

⁴ <http://samuchitenvirotech.blogspot.com/2016/05/>

⁵ Ministry of Urban Development, 2018, Pilot on Formulation of LAP TPS for Selected Cities, page 9 - 12

03 Guidelines Review

The statutory physical plans mentioned in previous section are made as per some norms and codes that are set at the National level. Some of these codes are mandatory to follow and some are recommendatory in nature. It is important to understand whether these guidelines have norms on ITCs and how thorough they are in relation to ITC-friendly neighbourhood development. The following guidelines are provided with a brief description and a detailed review in this section -

- URDPFI Guidelines
- National Building Code of India 2016
- Building Bye-laws
- IRC Guidelines for Urban Roads
- UTTIPEC Guidelines
- Institute for Transportation and Development Policy
- Indian Green Building Council
- Urban Greening Guidelines 2014

URDPFI GUIDELINES

Planning for development is an envisioning process, which requires a sound assessment of the ground realities and providing options for sustainable development within the bounds of the demographic, physical, socioeconomic, jurisdictional and financial aspects. It is a continuous process and must incorporate a regular evaluation of implementation.

The [URDPFI Guidelines, 2014](#) were formulated by the Ministry of Urban Development, keeping in view the emerging scenario in the planned development of cities and towns in India and were intended to be comprehensive for promoting balanced and orderly regional and urban planning, and development. These Guidelines provide the framework, necessary

techniques, norms and standards, options for resource mobilisation including land assembly approaches, and development promotion regulations. They may not be uniformly applicable to all situations and places, since conditions vary from place to place and even within a settlement. The Guidelines would need to be modified and adopted depending on local conditions, felt needs and technological innovations so that the planning process may serve as an efficient and dynamic instrument.

The Guidelines stipulate that a planned city for an environment of convenience should have a hierarchical structure, with each unit planned for basic self-sufficiency. The smallest planning unit is conceived as a Housing Area for 5000 population with convenience shopping, open area, Anganwadi centre (AWC) and milk booth as the minimum infrastructure provision. The higher level of additional facilities is to be provided at the Neighbourhood, Community, District, Zonal, Sub-city and Regional levels. The Neighbourhood is to be planned for a population of 15,000 with the provision of requisite facilities as stipulated in the Guidelines. Design considerations for urban roads, footpaths, cycle tracks are provided in the Guidelines.

NATIONAL BUILDING CODE OF INDIA 2016

The National Building Code contains regulations which can be immediately adopted or enacted for use by various departments, municipal administrations and public bodies. It lays down a set of minimum provisions designed to protect the safety of the public with regard to structural sufficiency, fire hazards and health aspects of buildings. The

Code also covers aspects of administrative provisions, development control rules and all general building requirements and landscape planning and design and asset and facility management.

Over a period of time, the importance of providing an environment which is conducive to younger and elder population and persons with disabilities alike has been highlighted. The Code covers the provisions on accessibility to facilitate implementation of this important aspect in all public buildings and sustainable built environment. The Code, besides prescribing various provisions, also allows freedom of action to adopt appropriate practices and provides for building planning, designing and construction for absorbing traditional practices, as well as latest developments in knowledge in various disciplines relevant to buildings. The Code has endeavoured to meet the requirements of different regions of the country, both urban and rural, by taking into consideration factors such as climatic and environmental, geographic terrain, protection and improvement of local environments and socioeconomic considerations towards the creation of sustainable human settlements.

BUILDING BYE-LAWS

Building Bye-laws are legal tools used to regulate the coverage, height, building bulk, and architectural design and construction aspects of buildings, so as to achieve orderly development of an area. They are mandatory in nature and serve to protect buildings against fire, earthquake, noise, structural failures and other hazards. In India, there are still many small and medium-sized towns which do not have Building Bye-laws and in the absence of any regulatory mechanism, such towns have excessive coverage, encroachment and haphazard development resulting in chaotic conditions, inconvenience for the users, and disregard for building aesthetics, etc. [Modern Building Bye-laws 2016](#) were formulated by the Town and Country Planning Organisation (TCPO), Ministry of Urban

Development, and Govt. of India.

All mandatory Master Plan/ Zonal Plan regulations regarding use, land use, coverage, FAR, set- back, open space, height, number of stories, number of dwelling units, parking standards etc., for various categories of buildings including modification therein made from time to time shall be applicable mutatis mutandis in the Building Bye-laws regulations under this clause. All amendments / modifications made in the aforesaid regulations shall automatically stand deemed to have been included as part of these Bye-laws.

Building Bye-laws shall apply to building activity in the State/Urban Centre/Town for which they are framed and the same shall be unambiguously specified in the bye-laws. These Bye-laws shall be applicable to all building activities and read in conjunction with any Master Plan/ Development Plan/ Regional Plan/any other statutory plan in force, and any notifications with regard to the same, and as amended from time to time; and they shall be applicable for a period of five years after which they shall be reviewed. Existing Building Bye-laws will continue to be in force till such time the reviewed Bye-laws are notified.

IRC GUIDELINES FOR URBAN ROADS

[Guidelines for Pedestrian Facilities were published by the Indian Road Congress in 1989](#) and were revised in 2012. The guidelines identified walking as an important mode of transport, considering in urban areas a significant proportion of trips up to 1-2km length is performed on foot. Pedestrian facilities ensure social equity and enhance the liveliness of urban environment making both business districts and residential neighbourhoods safe and interesting.

Developing a pedestrian environment means more than laying down a footpath or installing a signal. Accessible design is the foundation and primary concern of pedestrian design hence all pedestrian facilities need to be planned, designed, operated and maintained

so that they are usable by everyone, including persons with disabilities or those using mobility aids. Pedestrian facilities need to be provided not only along roads and intersections but in the areas like workplaces, access to transit areas, markets, schools, etc. Pedestrian facilities should be planned in an integrated manner to ensure a continuous pedestrian flow. Pedestrian needs for an area should be looked at as a whole, and an overall strategic plan should be prepared with the basic aim to reduce pedestrian conflict with vehicular traffic to the minimum.

Pedestrian facilities are a critical element in producing a pedestrian-friendly environment. Engineering solutions to improve quality of pedestrian network should take into account the children, families with young children, elderly persons, persons with disabilities and people carrying heavy luggage. Mobility and safety of all the pedestrians including those with disabilities and reduced mobility should be ensured to promote inclusive mobility and universal accessibility.

UNIFIED TRAFFIC AND TRANSPORTATION, INFRASTRUCTURE (PLG. AND ENGG.) CENTRE (UTTIPEC) GUIDELINES

The Governing Body of Unified Traffic and Transportation Infrastructure (Plg. and Engg.) Centre (UTTIPEC), established in the Delhi Development Authority under the Chairmanship of Hon'ble Lt. Governor approved the '[Pedestrian Design Guidelines](#)' in 2009 as per the recommendation of the Working Group for immediate implementation, enforcement and uniform adoption by all the road owning agencies. The Guidelines aim to work towards augmenting and strengthening the identified city level targets and frameworks. The goals identified are i) Mobility and Accessibility ii) Safety and Comfort, and iii) Ecology. The Design Toolkit prescribes the components of road infrastructure, pedestrian design guidelines, improvements, etc. Approval from UTTIPEC is mandatory for proposals of Roads,

Flyovers and related infrastructure in Delhi.

UTTIPEC Street Design Guidelines are slightly different from pedestrian design guidelines. It promotes principle of human safety, climate comfort, universal accessibility, reducing heat island effect etc. It is already adopted by PWD, CPWD, MCD, NDMC, etc.

Streets are valuable public spaces as well as the movement of corridors. Design of streets is a function of street hierarchy, and adjacent land uses. While recognising that certain design components are non-negotiable, the guidelines outline these components and additional 'world class streets' for pedestrians. Increased pedestrian design considerations in streets would provide an increase in comfort for the walking population, comfortable last mile connectivity from MRTS stations, reduced dependency on cars for short trips, and more equity in the provision of comfortable public spaces and amenities to all sections of society.

Current IRC Guidelines for Pedestrian and Cycle track design provide the base standards for pedestrian and cycle oriented design but need more augmentation. The goals to be achieved by the implementation of these guidelines are: i) Mobility and Accessibility - that maximum number of people should be able to move fast, safely and conveniently through the city; ii) Safety and Comfort - make streets safe, clean and walkable, create climate-sensitive design; and iii) Ecology - reduce impact on natural environment and reduce pressure on built infrastructure. The Guidelines stipulate detailed provisions for making streets pedestrian friendly.

INSTITUTE FOR TRANSPORTATION AND DEVELOPMENT POLICY (ITDP)

The Institute for Transportation and Development Policy works around the world to design and implement high-quality transport systems and policy solutions that make cities more livable, equitable, and sustainable.

ITDP is a global non-profit organisation at the forefront of innovation, providing technical expertise to accelerate the growth of sustainable transport and urban development around the world. Through the transport projects, policy advocacy, and research publications, they work to reduce carbon emissions, enhance social inclusion, and improve the quality of life for people in cities. In short, ITDP aims to deliver a higher standard of living and quality of life for citizens of cities around the world.

ITDP's publications on BRT, TOD, and Bike Sharing serve as in-depth, technical resources for governments, developers, and industry professionals, but are often helpful to a wider audience in understanding the concepts and requirements associated with these projects. The concepts and tools provided in these resources can be tailored and applied to programmes throughout the world.

ITDP's manual on '[Better Streets, Better Cities](#)' aims to facilitate the design of beautiful, safe, walkable, and liveable streets. The manual identifies the different functions of streets and emphasises the need to design complete streets that provide space for all users. Through the street and intersection templates one can get a sense of how the different elements come together for different types and sizes of streets.

This manual is intended for planners, urban designers, landscape architects, civil engineers, and, most importantly, government officials and citizens who are interested in improving the quality of urban environments and the character of streets in our cities.

Eight principles which guide approach to sustainable transport and development are:

- 1. Walk - Develop neighbourhoods that promote walking**
- 2. Cycle - Prioritise non-motorised transport networks**
- 3. Connect - Create dense networks of streets and paths**
- 4. Transit - Locate development near high-quality public transport**
- 5. Mix - Plan for mixed use**
- 6. Density - Optimise density and transit capacity**
- 7. Compact - Create regions with short commutes**
- 8. Shift - Increase mobility by regulating parking and road use**

INDIAN GREEN BUILDING COUNCIL (IGBC)

Green New buildings can have tremendous benefits, both tangible and intangible. The most tangible benefits are the reduction in water and energy consumption right from day one of occupancy. Energy savings could range from 20 - 30 % and water savings around 30 - 50%. The intangible benefits of Green New Buildings include enhanced air quality, excellent daylighting, health and well-being of the occupants, safety benefits and conservation of scarce national resources.

The IGBC Green New Buildings rating system addresses the most important National priorities which include water conservation, handling waste, energy efficiency, reduced use of fossil fuels, lesser dependence on usage of virgin materials, and the health and well-being of the occupants. The rating system requires

the application of National standards and codes like the NBC, ECBC, MoEF Guidelines, CPCB Guidelines, and several others. The overarching objective is to be better than the national standards so as to create new benchmarks.

[IGBC Green New Buildings rating system](#) is a voluntary and consensus-based programme. The rating system has been developed based on materials and technologies that are presently available. The objective of IGBC Green New Buildings rating system is to facilitate a holistic approach to create environment-friendly buildings, through architectural design, water efficiency, effective handling of waste, energy efficiency, sustainable buildings, and focus on occupant comfort and well-being. The rating system evaluates certain mandatory requirements and credit points using both a prescriptive approach and a performance-based approach. The rating system has evolved to be both comprehensive and user-friendly.

URBAN GREENING GUIDELINES 2014

[Urban Greening Guidelines](#) were formulated by the Town and Country Planning Organisation (TCPO), Ministry of Urban Development, Govt. of India, in 2014 to facilitate integration and preservation of green spaces and improve the quality of life in cities. Urban greening is an integrated approach for the planting, care and management of vegetation in cities, towns, townships and informal settlements in urban and peri-urban areas.

Urban green spaces provide safe play space for children, contribute to children's physical, mental and social development and play an important role in the basic education of school children with regard to the environment and nature. Well-managed and maintained green spaces create opportunities for people of all ages to interact, enhance cultural life by providing venues for local festivals and civic celebrations, besides meeting varying needs.

The objectives of the Guidelines are:

- **to highlight the impact of urbanisation on urban greenery;**
- **to suggest practices and methods for protecting and enhancing urban greenery in a sustainable manner;**
- **to identify the key stages in planning and development where urban greenery may be integrated with the built environment; and**
- **to recommend suitable guidelines for enhancing urban greens.**

The Guidelines also stipulate criteria for selection of tree species for roadside plantation and parking areas, methods of plantation and maintenance of plant material.

Urban Greening Guidelines will act as a model for States and Cities particularly the State Town Planning Departments, Urban Development Authorities and Urban Local Bodies who are responsible for managing them.

GAPS IN EXISTING GUIDELINES

The current system of codes and guidelines does not reflect a cohesive understanding of ITC specific requirements. Some of them have touched upon them through:

- Pedestrian friendly design guidelines
- Barrier free design guidelines
- Traffic calming guidelines

However, none of these guidelines identify ITCs as a specific user group in the urban realm and thus, do not have specific guidelines for them. Integrating ITC-centric lens in the urban development implies looking at public spaces beyond the streets, parks and gardens, onto various other destinations related to their health, education and overall wellbeing.

This requires specific guidelines that can support cities in developing young children and caregiver-friendly spaces across streets, parks and gardens, ECD facilities such as AWCs and healthcare centres, daycare centres, market spaces, transit stations, and other destinations frequented by ITCs.

Thus, integrating the ITCN principles in planning, management, and development of Indian cities requires a multi-sectoral approach that involves stakeholders from various government agencies and departments as well as non-governmental stakeholders and communities. This will help ensure that institutional measures are in place, policies and guidelines are implemented, thus enabling the scaling of the ITCN lens in a holistic manner.

Gaps that exist in Existing Guidelines					
	Safe	Green	Accessible	Playful	Inclusive
URDPFI	○	●	○	●	●
NBC	✓	●	○	●	○
IRC	●	●	●	●	●
UTTIPEC	✓	○	✓	○	○
ITDP	○	○	○	●	●
IGBC	●	✓	●	●	✓

● No Guidelines on ITCs ○ Some Guidelines on ITCs ✓ Detailed Guidelines on ITCs

Figure 4.12 Gaps in existing guidelines

As part of the Nurturing Neighbourhoods Challenge, 10 Indian cities worked towards scaling neighbourhood level improvements for young children and their caregivers, by seeking convergence with existing government programmes, strengthening institutional capacities, adopting conducive policies and guidelines, and fostering partnerships with various departments, agencies, non-

governmental organisations (NGOs) and local communities to cocreate solutions. This has catalysed actions in cities towards adopting a multisectoral approach by fostering collaborations across urban planning, early childhood development and community engagement, creating holistic and child-friendly urban environment.

Learn more about adopting a multi-sectoral approach in planning for children in Jundiaí, Brazil: <https://earlychildhoodmatters.online/2021/making-every-child-feel-that-the-city-genuinely-cares/>

04 Institutional Framework

ITC guidelines and their implementation is a novel system for the current urban governance system. There is a need to institutionalise the framework of implementation through a multi-sectoral approach to effectively apply the potentials mentioned in the earlier section.

Figure 4.13 demonstrates the strategies that can help ULBs integrate the ITCN approach into their planning, design, and management processes, enabling cities to mainstream urban development, that responds to needs of young children and their caregivers.



Figure 4.13 Strategies towards ITC-oriented development
Source: WRI India

INSTITUTIONAL SETUP

The SCM timeline for implementation is definitive, therefore the structure within Special Purpose Vehicle is being suggested for short-term potentials application. The Urban Local Body (ULB) as an institutional setup is being looked at for long-term potentials application as it may require some statutory approvals and changes.

URBAN LOCAL BODY (ULB)

Municipal Corporations are created for the administration of big cities like Delhi, Mumbai, Hyderabad and others. A Municipal Corporation has three authorities namely,

- The Council (legislative wing of the corporation)
- The Standing Committee (to facilitate the working of the council)
- The Commissioner (chief executive authority of the corporation)

The council consist of councillors directly elected by people and is headed by a Mayor while the Commissioner is appointed by the state government and is generally an IAS officer (a bureaucrat). The Corporation, with a Mayor and his Councillors transact business in meetings, and its decisions are termed as resolutions for implementation.

Out of the many functions of a ULB, some functions make it mandatory for a ULB to look at the ITC guidelines integration in the implementation resolutions.

- **Urban planning including town planning;**
- **Provision for urban amenities such as parks, gardens and play grounds;**
- **The laying out and maintenance of public parks, gardens;**
- **Public amenities including street lighting, parking lots, bus stops and public conveniences;**
- **Provision for urban amenities such as parks, gardens and play grounds**
- **The construction, maintenance, alternation and improvements of public streets, bridges, culverts, cause ways and the like;**
- **The lighting, watering and cleaning of public streets and other public places.**

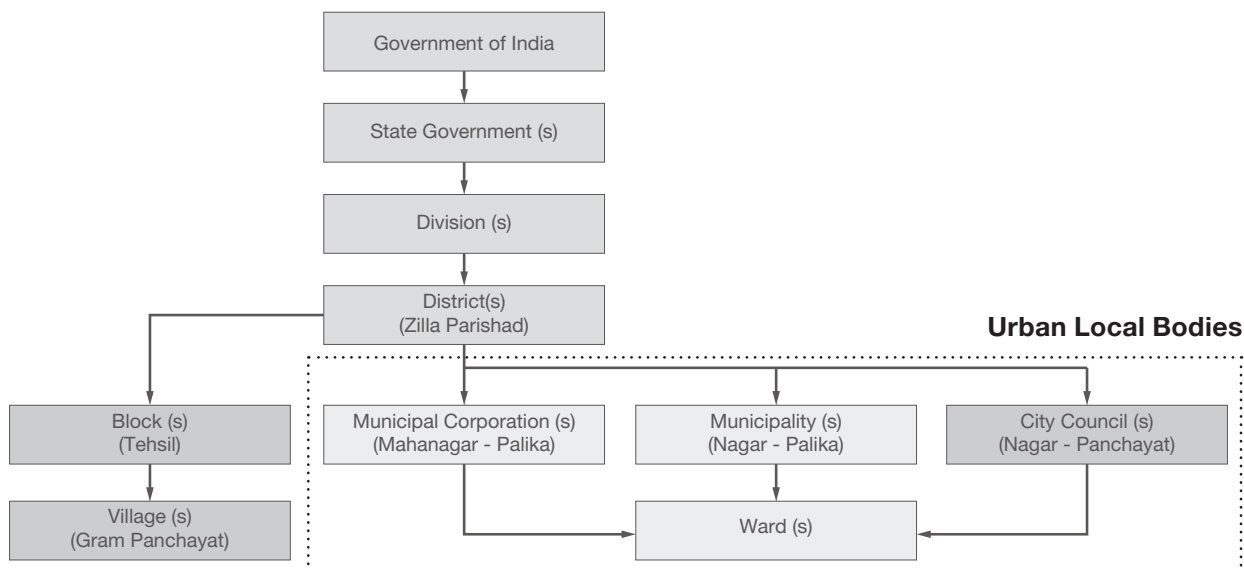


Figure 4.15 Administrative structure of Indian governance system

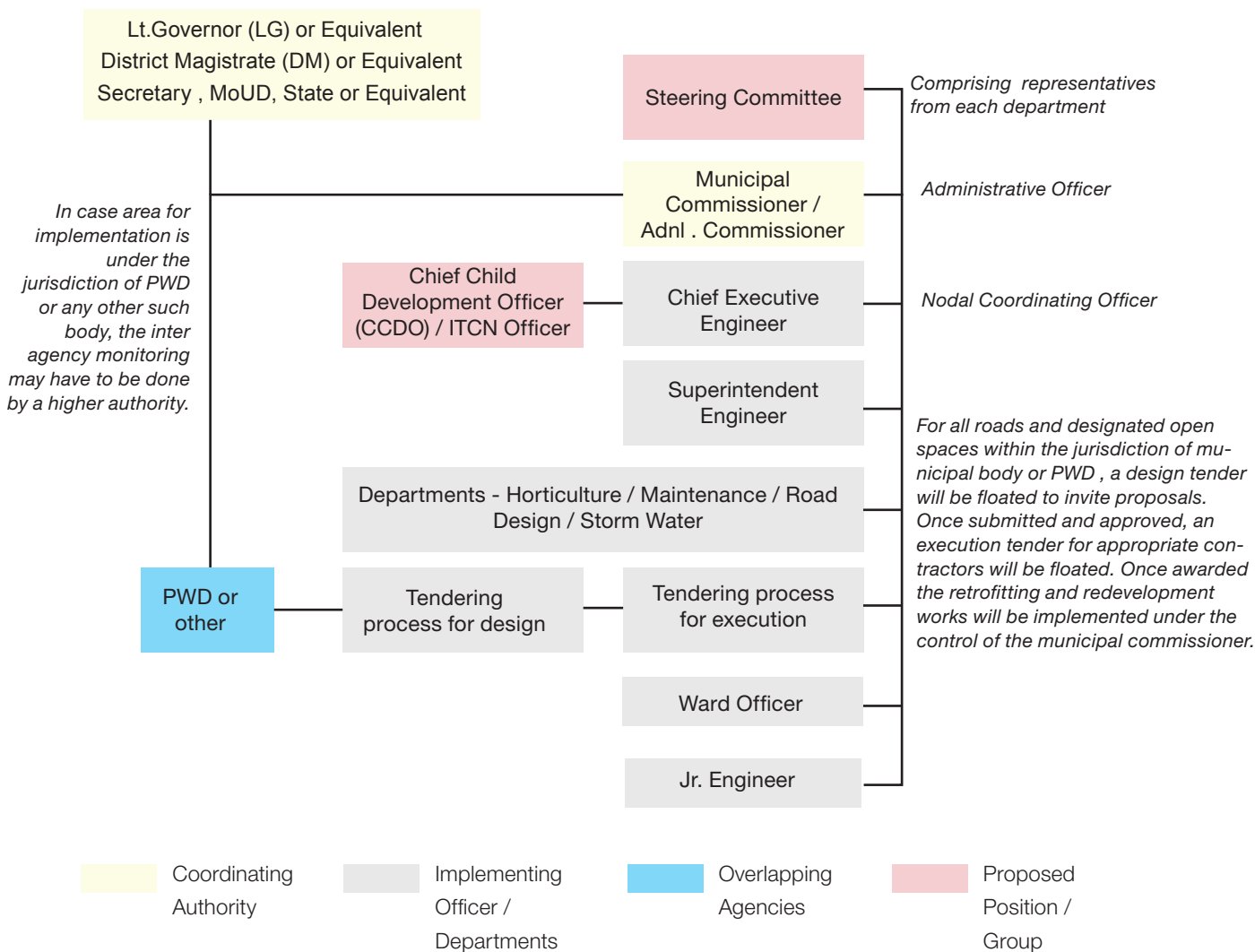


Figure 4.14 Institutional framework suggestion at ULB level for implementation of ITCN guidelines

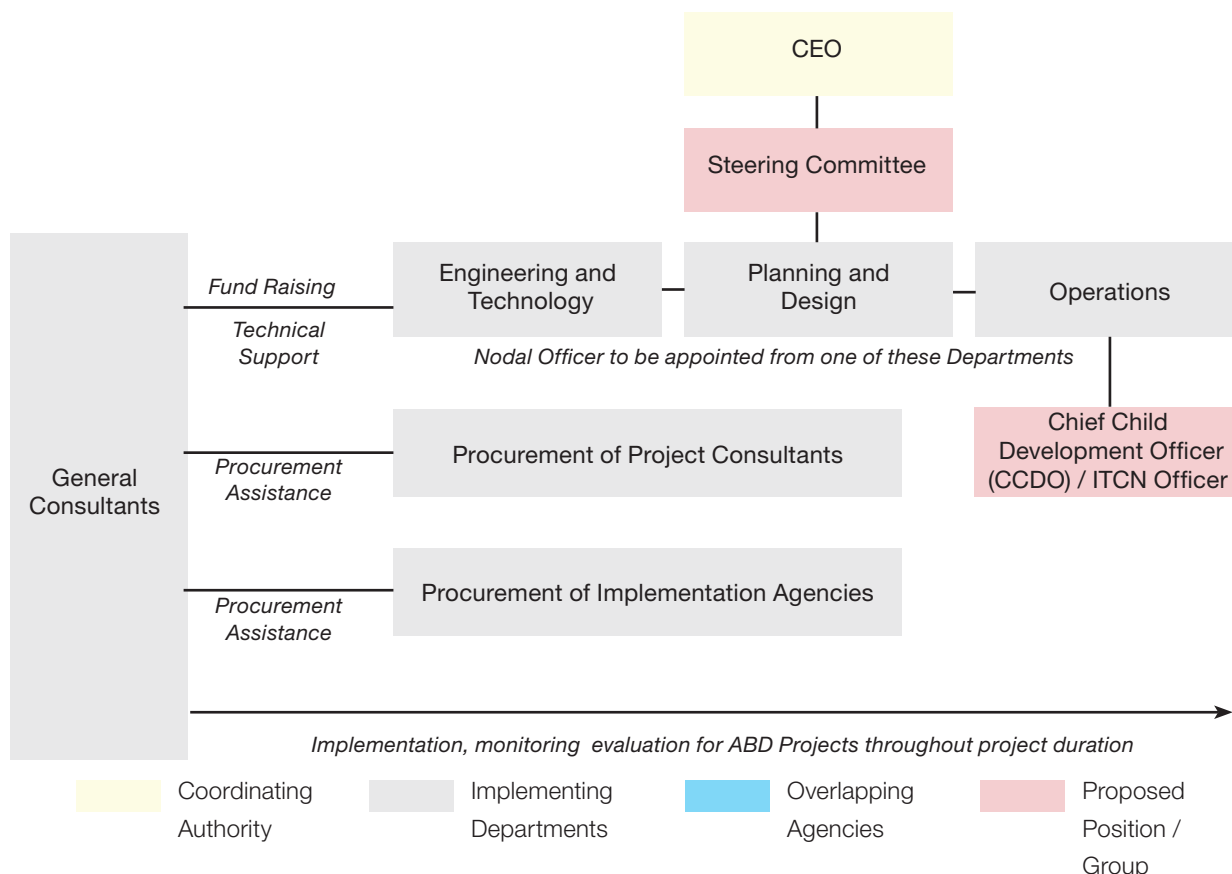


Figure 4.16 Institutional framework suggestion at SPV level for implementation of ITCN guidelines

SPECIAL PURPOSE VEHICLE (SPV)

The implementation of the Smart Cities Mission at the city level will be undertaken by a Special Purpose Vehicle (SPV) created for the purpose. The SPV will plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate Smart City development projects. The SPV can act as a key institution to manage the implementation of the ITC guidelines.

Each Smart City will have a SPV which will be headed by a full time CEO and have nominees of Central Government, State Government and ULB on its Board. The State/ULBs shall ensure:

- (i) A dedicated and substantial revenue stream is made available to the SPV to make it self-sustainable and so that it could evolve its own credit worthiness for raising additional resources from the market
- (ii) Government contribution for Smart Cities is used only to create infrastructure that has public benefit outcomes. The execution of

projects may be done through joint ventures, subsidiaries, public-private partnership (PPP), turnkey contracts, etc., suitably dovetailed with revenue streams.

The SPV will be a limited company incorporated under the Companies Act, 2013 at the city-level, in which the State/ UT and the ULB will be the promoters having 50:50 equity shareholding. The private sector or financial institutions could be considered for taking equity stake in the SPV, provided the shareholding pattern of 50:50 of the State/ UT and the ULB is maintained and the State/ UT and the ULB together have majority shareholding and control of the SPV.

It is important to understand the relevance and importance of a Chief-Child Development or ITCN Officer for a city and neighbourhood. There are various aspects related to governance, policy-making and political agenda while a city is tried to be made an ITC-friendly one. These elements and further

cross-sectoral collaborations amongst various governmental and private organisations gain a greater momentum, when the whole approach and execution is led by someone already part of the city municipal team. Henceforth, it successfully creates a platform to review the data and act on it efficiently.

Chief-Child Development Officer (CCDO)⁶ / ITCN Officer

Role

- The CCDO/ITCN Officer is a full-time position within city government dedicated to managing the coordination of early childhood policies across city agencies.
- The CCDO/ITCN Officer reports directly to the Municipal Commissioner's or equivalent's office. This is important for the CCDO/ITCN Officer to have significant impact over city department heads.
- CCDO/ITCN Officer has experience in team-management, cross-sectoral work, mediation, policy change, communication if possible. She/He does not necessarily have a deep ECD knowledge, but it is preferable to have some. For technical ECD knowledge requests, the CCDO/ITCN Officer should be able to reach out to experts or expert organisations.

Responsibilities

- Organises regular meetings on early childhood with relevant department heads.
- In charge of following-up with them about their respective commitments.
- Sharing progress reports to the Mayor's office.
- Acts as contact person and coordinator for all early childhood related policies.
- Coordinates city communication on early childhood.
- May represent the city government in community engagement processes related to early childhood development/families with young children.
- Organises knowledge training on ECD for relevant city staff.
- Acts as trusted intermediary with external organisations supporting ECD (such as VLF)
- Pro-actively supports the integration of early childhood development principles in municipal planning processes, laws.
- Acts as internal subject matter expert within municipality and provides early childhood perspective and review on major city projects and policies.

Notes:

⁶ <https://vanleerfoundation.org/publications-reports/urban95-starter-kit/>

Case example: Multi-stakeholder NN Cell in Rourkela

As part of the Nurturing Neighbourhoods Challenge, Rourkela has set up a multi-sectoral NN cell headed by Municipal Commissioner (Rourkela Municipal Corporation) and includes members such as Deputy Commissioners (Rourkela Municipal Corporation), Town Planner (Rourkela Development Authority), Architect - Nodal officer (Rourkela Smart City Limited), Data experts and engineers, City Mission Manager, Child Development Project Officers (Integrated Child Development Services) and Anganwadi workers (Integrated Child Development Services). The cell facilitates scaling of young children and caregiver centric projects across the city in partnership with diverse stakeholders.

BUDGETING AND FUNDING

In India, ULBs are the agencies responsible for local governance. Budgets of ULBs are debated and approved official and legal documents. Budgets are short-term plans (typically covering a period of one year), expressed in financial terms that have been used for a long time by governments. Budgets include revenues and expenditures and are prepared at the end of a financial year for the coming year.

In India, every city follows a different format, with varied accounting and budgeting codes, to report revenues and expenditures. Further, coupled with the lack of financial resources, municipal budgets continue to suffer from lack of transparency, inclusivity, and target or outcome-based allocations. ITC related expenditure is negligible and often absent in the case of urban infrastructure. Hence, it is imperative to formulate an effective municipal budget statement that is inclusive of the needs and challenges of all citizens, including vulnerable populations such as children. Although gender-responsive budgeting has been adopted by many countries around the world, child-responsive budgeting is nascent. Nevertheless, child-responsive budgeting is pertinent to accelerate the adoption of ITCN-oriented approach in Indian cities.

UNICEF developed the Public Finance for Children (PF4C) framework in 2017, to provide guidance to cities on the mobilisation, allocation, and utilisation of domestic public financial resources, for greater, more equitable, and sustainable results for children. It is a comprehensive framework that focuses on all levels of the government. Some of the key strategies mentioned in the framework are:

- 1. Increase spending on children:** Cities are encouraged to increase expenditure on children, especially towards developing children-friendly urban infrastructure, in consultation with the respective State departments.
- 2. Improved transparency and accountability (track child-specific expenditure):** Budget items pertaining to children in the documents of ULBs are not standardised and hence, classification of many of the items is not uniform across municipal corporations. Moreover, the absence of a separate account head for child-specific expenditure makes it difficult to track child-specific expenditure. To improve accountability, a separate account head and budget code may be considered for allocation of expenditure on children.
- 3. Facilitate impact evaluation and guide decision-making:** Child perspective mainstreaming requires rigorous impact evaluation of urban and infrastructure services. For example, men tend to have more predictable routines, while women's routines often vary, to care for elders and children. Public transport timetables may not always be effective at giving options to women. Hence, cities are recommended to consider conducting child and women-specific impact assessment to ascertain the challenges faced by children and their caregivers and address them through efficient urban services.
- 4. Capacity building, awareness, and partnerships:** Along with additional technical and financial capacities, it is essential to bring stakeholders to work towards child rights and ensure the effective implementation of child-friendly budgets. Several organisations such as UNICEF, Save the Children, and Van Leer Foundation, have done significant work in the area of public finance for children. ULBs may work closely with these partners and leverage their expertise to accelerate the adoption of the ITCN approach in cities.

Funding

Scaling and sustaining the ITCN approach requires infrastructural development, as well as promoting positive behaviour change among all stakeholders, including caregivers, local communities, city agencies, and service providers. Integrating urban infrastructure development with social and behavioral initiatives that respond to the needs of young children and caregivers, maximise positive interactions and connections at different levels, impacting early childhood development outcomes.

It is, therefore, crucial for ULBs to consider financing and provisions in budgets for both infrastructural development as well as various activities and interventions focused on promoting social and behaviour changes.

The total revenue of all ULBs in India amount to less than INR 1,50,000 crores, approximately 1% of India's GDP. There are various ways of augmenting the resources of the municipal bodies in the country, such as the following:

- Essential reforms in the property tax system
- Adequate exploitation of user charges and fees for various services delivered
- Strengthening and improving Central and State transfers to urban local governments
- Judicious use of development charges and effective collections from public lands in general
- Development of the municipal bond market for financing capital expenditure
- AMRUT reforms by the Government towards financial strengthening of ULBs

There are various approaches to mainstream public financing for children in ULBs, such as the following:

1. **Re-allocation of current public expenditures:** This includes assessing ongoing budget allocations through public expenditure reviews and thematic budgets and cost-benefit analyses to replace high-cost, low-impact investments with those

with larger socio-economic impacts, for vulnerable populations such as women and children. It is recommended that cities undertake rapid cost-benefit analyses of programmes to ascertain the impact on different groups.

2. **Incorporating young children-friendly elements through existing municipal budgets:** Every year, ULBs allocate funding in the municipal budget to develop and maintain physical and social infrastructure such as roads, parks, gardens, AWCs, public toilets, and health facilities, etc. These developments can be made holistic by following the ITC-specific design guidelines at the project level, eventually utilising the budget allocated for them. For example, Warangal has allocated 10% of its annual municipal budget for a Greening fund, which is combined with funds from other programmes, and is being used to expand parks and open spaces for young children and their caregivers across the city.
3. **Finding opportunities of convergence with various National and State level missions and programmes:** Apart from tax collection, ULBs receive revenue in form of grants as part of various National and State level programmes. Many such programs are targeted towards the development of infrastructure in the public realm. Such grants can be leveraged to develop infrastructure integrated with the ITCN approach. For example, Rourkela has leveraged grants from 15th Finance Commission, AMRUT, JAGA Mission (land titling and slum upgrading programme), Mukhyamantri Karma Tatpara Abhiyan (MUKTA), Mission Shakti (women self-help groups or SHGs), and Urban Transformation Initiative (UNNATI), and city level funds, such as District Mineral Funds (DMF) for young children and caregiver-friendly development in the city.
4. **Percentage allocation of budget and tracking child-specific expenditure:** A targeted percentage allocation is an

important reporting mechanism for Ministries/ departments to review their programmes from a child's lens and is an important tool for presenting information on budgetary allocation for children. In India, the National Plan of Action for Children, 2016 recommends investing at least 5% of the total Union budget towards schemes and programmes directly related to children. Cities may consider a similar percentage allocation of budget to resolve the lack of budgetary focus on children.

challenges in the overall economic and social development policy. In fact, because children neither have voting rights nor own assets, their perspectives and needs are often ignored. For example, in India, it is difficult to measure the use of public transport by children and their caregivers because caregivers do not have to buy a ticket for infants travelling with them.

5. Integrating child perspectives into performance-based budgeting: It is recommended that a thorough qualitative and quantitative impact assessment be conducted to ascertain the impact of particular policies/programmes on children. Line-item based budgeting usually suffers incrementalism and lack of efficiency. There are two alternative approaches to line-item based budgeting.

Programme-based budgeting: Allocation to programmes is done based on cost-benefit analysis. First, the objectives of programmes are established. Then, different means to achieve these are delineated based on costs and benefits. With **zero-based budgeting**, the starting point is not the budget of the previous year but 'zero' and all activities need to be justified on their effectiveness and efficiency.

6. Adaptation of gender-responsive budgeting (GRB) principles for Child responsive budgeting (CRB): Many aspects of a GRB such as focused social expenditures on maternal care and nutrition, focus on gender-sensitive infrastructure, and safety and accessibility are applicable to a large extent for child-responsive budgeting (CRB) as well. The only aspect in GRB not applicable to CRB is the principle of economic equality. Whilst GRB incorporates many levels of perceived economic equalities in employment and ownership of assets, CRB does not focus on economic equality but rather works towards inclusivity of children's needs and

Innovative methods of funding

Although it is recommended that the funds for child friendly development comes from own revenues of municipal budget, ULBs can also explore and utilise of innovative revenue mobilisation methods such as municipal bonds, value capture financing, public-private partnerships (PPP) and corporate social responsibility (CSR).

Public private partnership (PPP) model

The PPP model encourages collaboration between the public and private sectors in order to leverage their respective strengths. Public sector strengths include the provision of capital and risk sharing, while the strengths of the private sector include technical expertise and/or managerial efficiency. The PPP model may increase access to finance, increase transparency, and allow usage of efficient and innovative skills from the private sector. It also has the potential to reduce the full life-cycle costs.

Types of PPP models

- **Capital intensive PPP models (BOO, BOOT, DBFO):** The private sector is heavily involved in the development and execution of such projects. This model is usually amenable for large infrastructure projects, such as construction of roads, bridges, and ports. The private party may earn through fixed annual fees, or fees based on usage. In India, given the higher cost of capital for the private sector, this model is still nascent and growing slowly.
- **Service/ performance based management /maintenance contracts:** This model involves the private sector, mainly to improve efficiency and maintain existing assets. It provides a relatively low-risk option for expanding the role of the private sector, with the additional risk of keeping the facility up to certain technical standards. Since there is limited infusion of private capital, this model has potential to be adapted widely in India.

For example, Amul has partnered with the Ahmedabad Municipal Corporation to maintain public parks in Ahmedabad in exchange for setting up Amul stalls in their premises. The revenue from the kiosks contribute towards garden maintenance.

- The **CSR model** is based on a fixed percentage of profit donated by corporates, as per law. Although CSR spending in India has mostly focused on health and education, there is an increased interest in investing on quality urban services such as parks. For example, the Mahindra Foundation developed The Shivaji Garden (near Gateway of India) in Mumbai. Additionally, the Traffic Island garden was completely renovated by the Mahindra Group at a cost of INR 6 Lakhs and INR 1 Lakh. The garden now has pathways for pedestrians as well as new stretches of lawns and flowers.

PROCUREMENT STRATEGY

One of the stages in project implementation is the procurement of materials. Quite often, ITC oriented design solutions at the neighbourhood level are short-term action-oriented projects (besides being long term projects) to mobilise change at the community level. Such projects require materials and elements that are beyond the traditional materials, used for standard public projects in India. These include materials for creating physical elements such as seating, and shade, as well as collaterals such as posters, IEC materials, mobile application, community radio spots, and audio-visual aid, for social and behavioral change communication (SBCC) interventions. These materials and elements are often not present in the standard Schedule of Rates (SoR) documents that various ULBs follow. In such a scenario, the procurement of materials for such projects becomes a technical issue in the implementation of these short-term design solutions.

It is, thus, evident that for ease in the procurement process during project implementation, inclusion of these materials and elements in the SoR can be considered, that help in the implementation and mobilisation of short-term action-oriented projects in the neighbourhood. The Central Public Works Department publishes a SoR for Delhi, which is often considered a model for the SoR in most other states in the country. The existing list of materials be expanded to include various other materials that can be used in infrastructure works and SBCC interventions that are temporal in nature but help to bring the community together and create awareness of the need of ITC-oriented projects at all levels in the city.

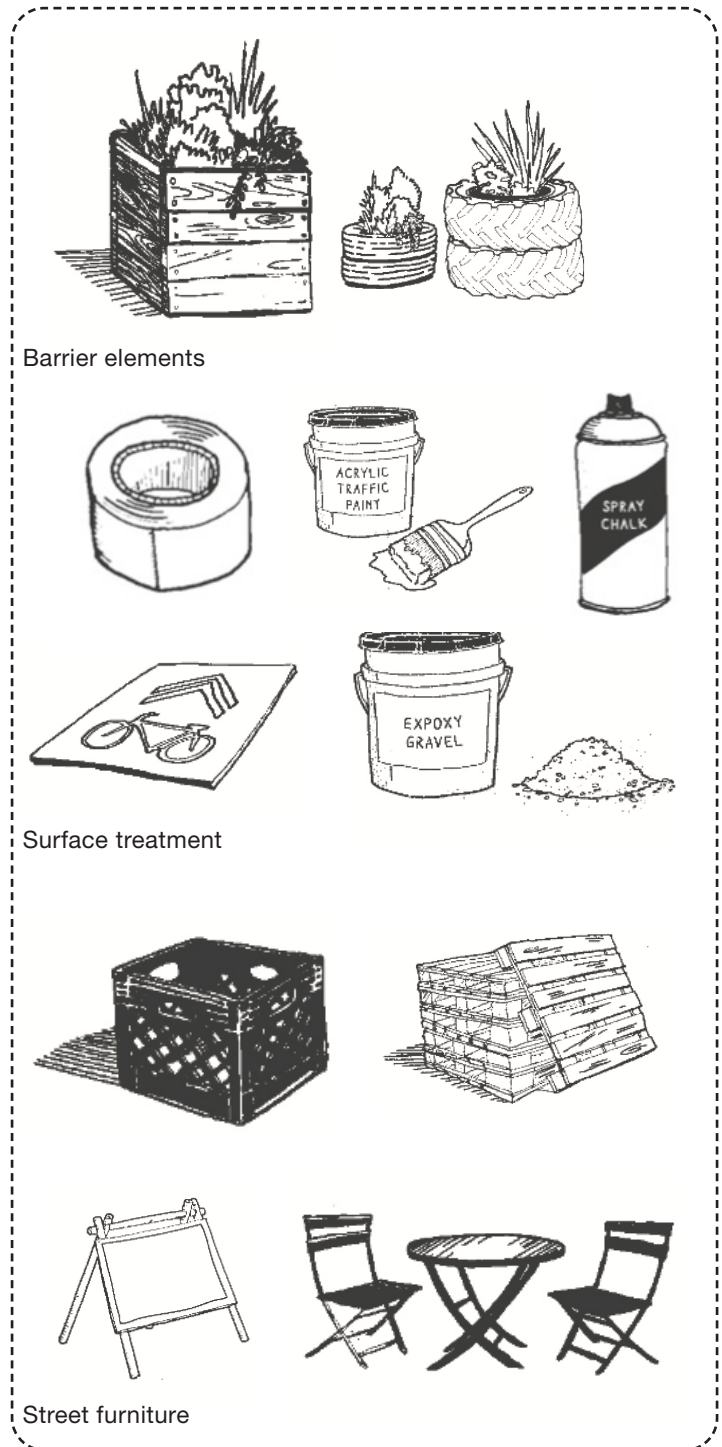


Figure 4.17 Examples of some unconventional materials and elements that are used in short-term action-oriented design projects for ITCs

Source: Tactical Urbanist's guide to material and design, Version 1.0, December 2016, Street Plans Collaborative

Learn more about various available materials/ items and their applications in ITC-oriented projects in the [ITC Master Checklist](#) developed under the Pune Urban95 program.



STAKEHOLDERS RELEVANT TO ITC WELFARE

The limited success of Ward Development Committees (WDCs) institutionalised through the 74th CAA to usher in decentralised governance has led to the growth of middle class activism through Resident Welfare Association (RWAs) as partners in the development process of cities. While being non-existent in many cities, WDCs have not succeeded in ushering peoples' participation in local government in cities where they are functional.

Partnerships between different organisations including civil society organisations (CSOs) such as NGOs and neighbourhood associations (NAs) like RWAs, have been perceived as an effective participatory model, as people in a locality or belonging to a group with common views can see their interest being served by these organisations. Establishing champions within both government and civil society ecosystem can help in enabling long-term sustenance of ITC-centric urban development.

The stakeholders can be brought together at a neighbourhood level in form of

- ITC awareness programmes
- ITC-friendly activities initiatives
- ITC group needs workshop
- Benchmarking meetings to ascertain Surviving, Striving Thriving status of the neighbourhood.

Public Sector Stakeholders

- ULB
- Municipal Commissioner
- Mayor
- Municipal departments (such as Public Works, Town Planning, Health, Education, etc.)
- Elected representatives
- Local Councillors
- Ward Level Committees
- Public Transit Agencies
- City Police Department and Traffic Police
- Frontline Workers (such as Anganwadi workers and ASHA workers)

Private Sector Stakeholders

- Developers
- Investors
- Knowledge institutions

Non-Profit Groups

- Caregivers
- Community Based Organisations (CBOs)
- Civil Society Organisations (CSOs)
- Neighbourhood Associations (NAs)
- Resident's Welfare Associations (RWAs)
- NGOs

Built Environment Professionals

- Urban planners
- Urban designers
- Architects

Stakeholder actions and opportunities



Figure 4.18 Stakeholder actions and opportunities

Figure 4.18 sets out a sample of actions that maybe adapted by stakeholder groups for an enhanced ITCN development process.



Capacity building session with Anganwadi workers (AWW), Rourkela
©WRI India

PROCESS MANAGEMENT

Capacity Building

One of the main challenges for implementing the ITCN approach for urban development is the lack of appropriate capacity at the State and local level. Decision-makers, including city government officials, are often unfamiliar with the 0-to-5-year demographic.

Systematic capacity building of city officials across all levels (senior officials, mid-level staff such as engineers, planners and architects, frontline workers and their supervisors) on a regular basis is essential to enable a sustained integration of the ITCN lens in the development, planning, and management of our cities. This can be done through trainings, study tours, sharing guidelines and resources with multi-sectoral representatives, including officials from the road, garden and health departments and the Integrated Child Development Scheme (ICDS) and all other relevant stakeholders.

As part of the Nurturing Neighbourhoods Challenge, Rourkela has mobilised monthly capacity-building programmes for frontline workers in AWCs to sensitise them towards the importance of 'outdoor play' and use of 'play' as a learning aid in their teaching curriculum, converging with the ICDS training.



Stakeholder engagement sessions led by Ward Corporator, Kochi
©Cochin Smart Mission Limited

Public Participation

At the neighbourhood level, the local community is generally the most powerful group of stakeholders. It is very critical to understand their participation in the design process. Any addition to the neighbourhood design should be able to respond to all the residents equally without impinging on their basic services and needs.

Residents and caregivers in the community can be engaged through various methods, such as focused group discussions, co-creation workshops, community events and capacity building workshops, throughout the process of project planning, design, and implementation. This enhances a sense of ownership amongst the community and caregivers towards young children centric development in their neighbourhoods, helps in activating the public spaces through public participation and enables demand generation of young children-friendly public spaces on-ground. Local champions such as ward councillors, RWA members, civil society representatives can also support effectively in addressing concerns from the community, and generating buy-in.

As part of the Nurturing Neighbourhoods Challenge,

- **Various RWAs and local community groups in cities** are actively supporting the development of young children-centric projects in their neighbourhoods by enabling consensus building, support during site inspections and forming partnerships with authorities for maintenance and upkeep of implemented projects.
- **Residents and local community groups in Indore and Bengaluru** have started to activate project locations by organising events such as storytelling sessions.
- **Ward councillors and corporators in Kochi and Warangal** have helped in promoting a young children-centric lens, and build participation and consensus on ground by conducting events such as plantation drives, drawing competitions.



Jabalpur Smart City Limited partnering with RWAs for maintenance of neighbourhood parks
©Jabalpur Smart City Limited

Diverse Partnerships

For the sustained integration of young children-oriented development, it is crucial to form multisectoral partnerships with governments and non-governmental agencies, academia, ECD experts, RWAs, and local leaders to collaborate and share responsibilities. This also helps in identifying and enabling champions on-ground who can endorse and advocate young children-centric development for the community. In India, informal governance structures often fall outside formal planning processes. To ensure inclusivity, cities may identify and engage community champions and leaders, community-based organizations, in these areas, who can support in enabling a co-creative process and generating community buy-in, especially for the most vulnerable population.

Inter-departmental Coordination

In the governance system, different parts of urban development are built and maintained by different departments. Holistic plans that include interventions in all these parts may create a 'passing the buck' scenario. It is, therefore, of utmost importance that a nodal or special agency take ownership of execution or maintenance in consultation with all the departments. A system of maintenance can be decided upon, which may involve inter-departmental coordination and assistance.

As part of the Nurturing Neighbourhoods Challenge,

- **Kohima**, a hilly city where most of the land is owned by private stakeholders, is forging partnerships with the city ward panchayats, to identify pocket parks in each ward. This has also led to on-ground demand generation for public spaces within communities.
- **Jabalpur** has partnered with RWAs for daily operation and maintenance of parks in several neighbourhoods.
- **Warangal and Rourkela** have partnered with SHGs for daily operation and maintenance of parks in several neighbourhoods.

Insights from Van Leer Foundation country representatives and Urban95 local partners on the different initiatives supporting inter-agency collaboration within Urban95 partnerships.

Main examples of inter-agency coordination in Urban95:

- Tel Aviv - Yafo and Tirana: Chief Child Development Officer (CCDO)
- Recife: Inter-agency committee on early childhood at mayor level, and municipal legislation for early childhood.

Learnings on inter-agency coordination for Urban95:

- Early childhood is backed at political leadership level, which means the support of the mayor (or relevant political leader) is clear and expressed through official city communication channels as an inter-sectoral and overarching topic. This is the case in Tel Aviv, Tirana and Recife. In Recife, the city has passed a municipal law enshrining early childhood as an intersectoral topic of priority.
- The coordination mechanism relates directly to the mayor, preferably with a full-time coordinator (CCDO) dedicated to organising meetings and following-up with each department head. The CCDO reports to the mayor and has the power to hold department heads accountable.
- The departments involved include health and education (traditional early childhood sectors) but also transportation, planning, parks and gardens and social services.
- Meetings on early childhood are regular and not convened only in exceptional circumstances. The meeting can be integrated into larger issues but there is a dedicated time to address early childhood. In Recife, such meetings happen every two weeks, as part of a larger meeting with all department heads.

- The head of departments are presented with data connecting early childhood development and their respective departments. In Recife, a screen shows a picture of the intervention or area being discussed, while another one displays early childhood data from the city dashboard, and a third tracks commitments and discussions made during the meeting by each department head.
- ECD knowledge training is provided to head of departments and their teams' key implementers to help them identify how they are effectively brain-builders. This can take the form of one-off training sessions, workshops, study tours, etc.

EXAMPLES OF IMPLEMENTATION WORKS

Bhagidari Scheme, Delhi

Bhagidari was a 'program of partnership' between government agencies and the citizens of Delhi. The 'government agencies' include the Government of Delhi and its departments, local municipalities (Municipal Corporation of Delhi and New Delhi Municipal Council), Delhi Development Authority, and utility agencies and companies (Delhi Jal Board and Power Distribution Companies). Citizens were represented by neighbourhood associations called Resident Welfare Associations (RWA); Market and Trader Associations (MTA), Industrial Associations, Village Groups and NGOs. The main focus of the program however had been on RWAs, especially those from the planned parts of the city.

Although Bhagidari scheme had diversified to other sectors like education, health, industry etc., RWAs continued to be the only institutions that represented neighbourhoods. The program started with 20 RWAs in 2000 and had grown to more than 1900 RWA. The implementation of the program was carried by a professional organisation called Asian Center for Organisational Research and Development (ACORD) that specialised in change management in large organisations.

Implementation mechanisms included workshops with RWAs and government agencies, and the institution of special cells within each participating government agency.



RWAs were chosen for implementation of the program for two reasons. The first concerns the issue of scale; the second is based on legality. RWAs were the only institutions that represented citizens at the neighbourhood level. Since these organisations were already involved in civic issues of their respective neighbourhoods, it gave a common entry point to begin this process.

Raahgiri Event

Raahgiri is India's first sustained car-free citizen initiative that began in Gurgaon on Nov 17, 2013. The movement was conceived and is trademarked with the [Raahgiri Foundation](#), consisting of local inhabitants from five organisations – EMBARQ India, I Am Gurgaon, Pedalyatri, Heritage School Gurgaon, Duplays Gurgaon.

It was not long thereafter that this weekly event, that closes streets to cars in the name of sustainable and active transport, arrived in the world's second largest city – New Delhi. The New Delhi Municipal Council (NDMC) together with the New Delhi Police Department took the lead in hosting car-free Sundays in the inner circle of New Delhi's Connaught Place each week, beginning 13th July 2014. Expanding the movement from Gurgaon (population 800,000 people) to New Delhi (population 22 million), has definitely been a huge leap, one that reminds us that reorienting cities around people – not cars – is achievable.

On 12th July, 2015, this movement completed one year in Connaught Place. Moving from a turnout of 5000 people, at the first Raahgiri in Connaught Place, to 20,000 people today, the movement has shown tremendous growth. This has also started New Delhi on an important path towards combating air pollution and improving public health, and moved all of India one step closer towards being an exemplar of sustainable urban development for other emerging economies.

Paramarathi, Dwarka

[Parmarathi](#) is a cleanliness NGO in Dwarka, Delhi. Parmarathi adopts spaces like foot paths, open spaces, roads etc. which are lying in a state of dereliction and cleans them for effective utilisation by the locals.



05 Possible Policy Proposals for ITCNs

POLICY LEVEL RECOMMENDATIONS

The analysis of the existing policies and frameworks can be summed up in some key recommendations listed below:

Institutionalising ITC Provisions

- Institutionalising provision for Chief Child Development Officer / ITCN Officer at ULBs
- Inclusion in annual budget allocation at ULBs for ITC-friendly infrastructure development

Integration of ITC guidelines with existing policies

- Adopt National strategy for child-friendly neighbourhoods development
- Provision of ITC friendly spaces in all new and brownfield park development under AMRUT Mission
- Provision to incorporate ITC aspects in City Development Plan
- Provision to incorporate ITC aspects in City Mobility Plan
- Application of ITCN approach for redeveloping existing neighbourhoods through Local Area Plans
- Application of ITCN approach for planning and design of new neighbourhoods through Town Planning Schemes
- Application of standards, guidelines for ITCs in new and old neighbourhood development
- Amendment or additions of specific ITC infrastructure to existing built environment norms like URDPFI etc. Refer Neighbourhoods Section of Design Guidelines for specific recommendations.

Data Management of ITC Indicators

- ITC based data indicators for Spatial analysis
- Use of ITC based indicators to monitor performance of the ULBs wrt ITC oriented projects in the city at regular intervals of time
- Regular assessment of the progress made by the neighbourhood - from surviving to thriving benchmark levels.
- Development of ITC Dashboard - The ITC dashboard moves measurements into management by providing a visual and comprehensive comparison of performance between neighbourhood, wards, zone, cities and time series data for evidenced based planning.

Application of ITC Guidelines

- Build more learning environment in the neighbourhood
- Integrated playable space throughout the public realm
- Support and promote street play – promoting temporary street closure projects like Raahgiri
- Mandatory child day care centres with outdoor play facilities
- Mandatory traffic calming design for local street and collector streets
- Promote safe roads to pre-primary school, parks and play spaces, ECD facilities such as anganwadis and PHCs
- Promoting multi functional spaces in neighbourhoods – opening school playgrounds after school hours

The impact of these policy recommendations for ITCs will gradually create a climate for neighbourhood level improvements and subsequently pan city atmosphere for families. The implementation flow of these recommendations has been illustrated in Figure 4.19.

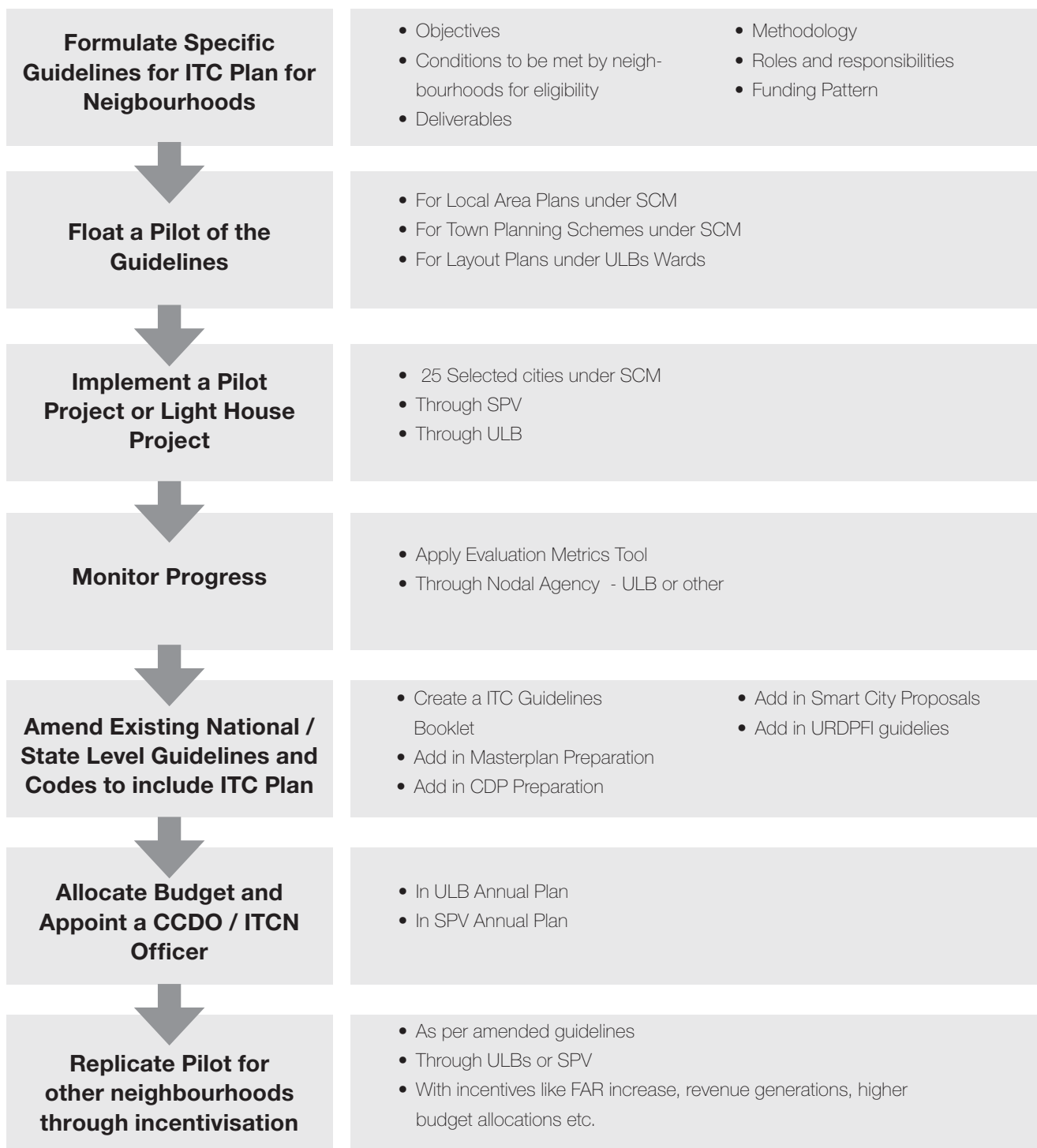


Figure 4.19 Policy proposal

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