







# ITCN PLANNING & IMPLEMENTATION TOOLKIT







#### **Disclaimer:**

While every effort has been made to ensure the correctness of data/information given in this toolkit, NIUA does not accept any legal liability for the accuracy or inferences drawn from the material contained therein or for any consequences arising from the use of this material. No part of this document can be reproduced without prior information or intimation to NIUA. References from this document can be mentioned provided the source is acknowledged.

The toolkit is developed under the Infant, Toddler and Caregiver-Friendly Neighbourhoods (ITCN) Capacity Building Programme of NIUA, supported by Bernard van Leer Foundation (BvLF).

#### **Publisher:**

National Institute of Urban Affairs, New Delhi

Copyright @ NIUA (2023)

#### **Contributed by:**

ITCN Team- Sonali Mahamna, Shivangi Dhingra and Krishna Kant Pandey

### **Advisor:**

D. Ajay Suri

#### Supported by:

BvLF Team - Rushda Majeed and Prakash Paul

### **Graphic Design:**

Graphic Design Team, NIUA

#### Contact:

National Institute of Urban Affairs, 1st and 2nd floor Core 4B, India Habitat Centre, Lodhi Road, New Delhi 110003, India Write to us: itcn-cb@niua.org



National Institute of Urban Affairs (NIUA), an apex institute of Ministry of Housing and Urban Affairs (MoHUA) is tasked to bridge the gap between research and practice on issues related to urbanization, suggest ways and mechanisms to address urban challenges and strive to develop sustainable, inclusive, and productive urban ecosystems in the country. The institution has been actively working on bringing forth key areas of concern for urban India to build the urban discourse at various urban scales by utilizing its competencies in research, knowledge management, policy advocacy, and capacity building. NIUA imparts these responsibilities through five major themes: Urbanization & Economic Growth, Urban Governance & Finance, Urban Infrastructure & Built Environment, Environment, Climate Change & Resilience, and Social Development.

https://www.niua.org/





Founded in 1949, the Bernard van Leer Foundation (BvLF) is a private foundation focused on developing and sharing knowledge about what works in early childhood development. It provides financial support and expertise to partners in government, civil society and business to help test and scale effective services for young children and families. Urban95 is the Bernard van Leer Foundation's 30-million-euro initiative to make lasting change in the landscapes and opportunities that shape the crucial first five years of children's lives. BvLF has supported programs in India since 1992. Urban95 seeks to improve two critical factors in early childhood development - the quality and frequency of interactions between young children and their caregivers, and the well-being of these caregivers - through the provision of early childhood services, public space, transport, planning, land use and data management in cities.

https://bernardvanleer.org/



# **Foreword**

Hitesh Vaidya
Director



Children are an important stakeholder in a city and there is the urgent need to create urban spaces for the young children to interact with the urban environment. This requires urban planning processes to take cognizance of their development needs and plan beyond provisioning of play facilities in neighbourhood parks.

There is the pressing need to strengthen research and build knowledge and it's timely translation to impactful actions. The ITCN Planning and Implementation Toolkit, third in the series of the three toolkits developed by the NIUA-ITCN team, efficiently transforms the knowledge into actionable steps. The focus on actionable tools and precise checklists is a commendable way to create on-ground awareness in developing ITC-centric neighbourhoods.

I am positive that the Toolkit will encourage city stakeholders to understand the urgency of the deliberated topics and contribute actively to weave the needs of ITC group in India's urban realm.

My sincere compliments to Ajay Suri for providing overall support and guidance to the ITCN team at NIUA for developing this knowledge product. Congratulations to the ITCN team led by Krishna Kant Pandey for splendid efforts in preparation of this much-needed actionable toolkit to help create ITC-centric projects.

I would like to acknowledge the support received from BvLF in developing the toolkit.



# Message

Ipshita Sinha
India Representative
Bernard van Leer Foundation



Urban spaces that foster nurturing connections for infants, toddlers and their caregivers (ITC) is the key to a child's healthy development in cities that requires a rigorous commitment from a lot of different stakeholders.

I am happy to share this Implementation Toolkit by our partner NIUA. This toolkit is aimed to streamline and successfully converge the efforts all those involved in the implementation of ITC centric initiatives. The Bernard van Leer Foundation is happy to support the National Institute for Urban Affairs to visualise our goal for making our cities ITC friendly.



# Contents

FOREWORD	VII
MESSAGE	IX
ABBREVIATIONS	XV
1. INTRODUCTION	3
1.1 Background	3
1.2 How To Use This Toolkit?	4
1.3 Objective	4
2. WHO CAN USE THIS CHECKLIST?	
2.1 The Stakeholders	7
2.2 Data Management Systems	8
2.3 Roles and Responsibilities of Each Group	9
3. PROGRAMME CYCLE	13
3.1 Awareness On The Importance Of ITC Group	14
3.2 Baseline Assessment	14
3.3 Strategic Planning	14
3.4 Feasibility Studies	20
3.5 Detailed Project Report	23
3.6 Implementation	28
3.7 Operation & Maintenance (O&M) And Activation (Programming)	
3.8 Monitoring, Evaluation, And Learning	33
4. CASE EXAMPLES	38
Case Examples	38
5. CASE STUDY LODHI COLONY, NEW DELHI	41
6. ANNEXURE	47
6.1 Annexure 01	49
6.2 Appevire 02	5.8



# List of Tables

Table 1: Typical Components and Contents of RfP Instructions to Consultants for ITCN Projects	19
Table 2: Critical consideration for ITC centric projects	26
Fable 3: Planning a young child friendly park	27
Table 4: Evaluation Thematic areas, possible project types and Evaluation Metrics (indicative list, not exhaustive)	34
Table 5: Checklist 01 (life cycle of the ITC-friendly project)	59
Table 6: Checklist 02 (ITC-friendly design elements consideration)	59
Fable 7: Checklist 03 (ITC-friendly project efficiency assessment)	61

# List of Figures

i igui e 1. identined stakenoiders	/
Figure 2: Schematic data management system (referenced from data baseline toolkit)	8
Figure 3: Programme cycle	13
Figure 4: Process of strategic planning	15
Figure 5: Flow chart for feasibility studies	21
Figure 6: Diagram for SWOT analysis factors	21
Figure 7: Stakeholders Actions and Opportunities and actions relevant to stakeholders that can provide funding	24
Figure 8: Satellite image of Lodhi colony, New Delhi, India	42
Figure 9: Entry to one residential block	43
Figure 10: Open complex in a residential block	43
Figure 11: Accessibility of residential blocks through street	43
Figure 12: Informal vendors along the street	44
Figure 13: Wide buffer space along most streets	44
Figure 14: Broken footpath forcing young children on the carriageway	44
Figure 15: Active facades on the arterial road	44
Figure 16: Age-wise zoning of play areas	45
Figure 17: Provision for caregivers adjacent to play area	45
Figure 18: Library within the park premises	45
Figure 19: Landscaping in the park	45
Figure 20: Caregivers wating with young children	46
Figure 21: Parameters to analyse ward in Udaipur	51
Figure 22: Development Process in Udaipur	52
Figure 23: Engaging wall paintings	54
Figure 24: Neighbourhood children actively participating	54
Figure 25: Selected site and its surroundings	55
Figure 26: Step by step process of the Sambhaji Garden Project	55



# Abbreviations

AMRUT	Atal Mission for Rejuvenation and Urban Transformation	
AQI	Air Quality Index	
ASHA	Accredited Social Health Activist	
AWC	Anganwadi Centre	
AWW	Anganwadi Worker	
BIS	Bureau of Indian Standards	
BvLF	Bernard van Leer Foundation	
CARA	Central Adoption Resource Authority	
СВО	Community Based Organisation	
CCI	Child Care Institutions	
CFSC	Child Friendly Smart Cities	
СМР	Comprehensive Mobility Plan	
СРСВ	Central Pollution Control Board	
CSO	Civil Society Organisation	
cwc	Child Welfare Committee	
DCR	Development Control Regulations	
DTCP	Directorate of Town and Country Planning	
ECD	Early Childhood Development	
ECCE	Early Childhood Care & Education	
I-CHILD	Indicators for Child friendly Local Development	
ICDS	Integrated Child Development Services	
ICPS	Integrated Child Protection Scheme	
IMR	Infant Mortality Rate	
ITCN	Infant, Toddler and Caregiver-Friendly Neighbourhood	
LOS	Level of Service	

MEL	Monitoring, Evaluation and Learning
МоНА	Ministry of Home Affairs
MoHUA	Ministry of Housing and Urban Affairs
MoSPI	Ministry of Statistics and Programme Implementation
MoWCD	Ministry of Women and Child Development
NBC	National Building Code
NCRB	National Crime Records Bureau
NGO	Non-Governmental Organization
NIUA	National Institute of Urban Affairs
NMT	Non-Motorised Transportation
NSSO	National Sample Survey Organisation
PwD	Person with Disability
RBM	Rapid Behavioural Assessment
RSPM	Respirable Suspended Particulate Matter
RTE	Right to Education
RWA	Resident Welfare Association
SDGs	Sustainable Development Goals
SLB	Service Level Benchmarks
SWM	Solid Waste Management
ТоС	Theory of Change
ULB	Urban Local Body
UDA	Urban Development Authority
UNICEF	United Nations Children's Fund
WHO	World Health Organisation





# 1. Introduction

## 1.1 Background

Young children, a very specific vulnerable group within communities, have a unique set of development needs for which they depend upon their caregivers. It is essential for the implementing agencies in the urban realm to comprehend the importance and various facets of Early Childhood Development and its relation to the urban environment. Early childhood refers to the formative stage of first six years of life, with well-marked sub-stages (conception to birth; birth to three years; and, three to six years) having age-specific needs. It is the period of most rapid growth and development and it is critical for healthy survival.

Often left unseen, young children and their caregivers, struggle to have their specific needs met in their neighbourhood. Children witness a completely different world from their height and absorb thins in a different manner. They remain curious, explore more and are often restricted due to inaccessibility to most services. This restriction carries forward to the caregivers as they are bonded by the special attention required for young children in a public space. ITC makes a large group of population and important stakeholder to be considered while planning cities. There is a strong need to raise public awareness on the specific development needs of young children (age less than 6 years). This awareness is required to bring wider societal change through changed behaviour of individuals. The institutional framework of urban local bodies in India is such that the key departments work in siloes with little understanding of their critical role in inclusive transformation of the city. There is the need for a holistic narration on inclusive cities and the important role of the marginalised demography in city transformation and national growth, emphasizing on the importance of Infant, toddler and their caregivers (ITC) in nurturing the future generation through spatial planning interventions in neighbourhoods at city-wide scale.

The ITC-friendly Neighbourhood (ITCN) Framework and Guidelines have been prepared under the Smart Cities Mission by BvLF and NIUA to help develop infant, toddler and caregiver-friendly neighbourhoods. The comprehensive set of five publications include ITCN Policy Framework, ITCN Policy Workbook, ITC Design Guidelines, ITCN Evaluation and Monitoring Metrics and ITCN Best Practices Compendium.

ITC advocacy can be the stepping stone for the foundation of the long journey towards building ITC-friendly neighbourhoods. The Knowledge needs assessment, as part of the Programme, of the city officials to promote

ITC-friendly neighbourhoods revealed the need for a comprehensive ITC database. In this perspective, the National Institute of Urban Affairs (NIUA) have developed a set of three toolkits, with support from Bernard Van Leer Foundation(BvLF). First in the series, the 'Toolkit for creating Data Baseline for Young Children in Cities' highlights the significance of a robust ITC-related database, and provides the methodology for data collection, cleaning and analysis. Data collection is suggested at two levels - rapid assessment and in-depth assessment. Rapid assessment adopts the 'indicators-based approach' for quick diagnostics of the ITC development needs and enumerates 34 city level indicators. The in-depth assessment suggests detailed analysis focused on the selected priority areas of the city. The database can then be put in the public domain, using city dashboard, for inter- and intra-city comparative analysis. Lately, cities are adopting city dashboard for data aggregation across state departments and non-state institutions to promote evidence-based planning. Second in the series is the 'Toolkit to Create an ITC-Centric City Level Dashboard' which highlights the importance of dashboard, how to use dashboard as an effective medium for data aggregation and diagnostics. The last in the series is the 'ITCN Planning and Implementation Toolkit', which is a binding document bridging the various city stakeholders through detailed verse of actions to be taken for achieving ideal ITC neighbourhoods at citywide scale. A comprehensive implementation checklist, added as annexure to this toolkit, is prepared by ITCN team to assist the officials in effectively simplifying the implementation process requirements.

### 1.2 How to use this toolkit?

The Implementation Toolkit demonstrates the inclusive cycle of events in a programme - starting from design stage till evaluation stage. Cities can consult this toolkit solely to embark upon the journey towards creating an ITC friendly neighbourhood or move ahead further up their efforts towards the same. Executable actions are listed in a sequential manner whereas implementation checklists added as an annexure would help to quickly diagnose the position of the city on a scale of ITC developments. The Toolkit has adopted the 'learning while doing' approach as it simultaneously trains institutions to implement a live project while reflecting back with necessary iterations from the parallel learnings.

# 1.3 Objective

Sensitizing urban planners on the importance of acknowledging the specific development needs of young children and their caregivers is the foundation for building an ideal neighbourhood for them. Incoherent and dispersed ITC-focused initiatives by various city agencies are adopting surface level interventions such as installing conventional play equipment and make claims to adherence to ITC norms. A holistic and integrated approach is required to plan and install the young children and their caregivers friendly infrastructure.

Advocacy efforts will help in nudging city governments to direct its focus towards development of ITC-friendly initiatives but they need the need technical and knowledge support to adopt a well-informed process for developing ITC-friendly neighbourhoods at city-wide scale. Curated knowledge products and 'how to' manuals/ toolkits need to be made available to them to guide them on the design and planning of independent public spaces such as parks, play spaces, streets, among others. It would also help immensely if the cities are provided with a consolidated document, providing A-Z of the entire process of developing ITC-friendly neighbourhoods, covering all aspects of the programme cycle from conceptualization stage to evaluation stage. This Toolkit is a step in this endeavour and intends to be a stand-alone guiding document which will help ULBs to take up the ITC projects with ease.

Toolkit will prove useful in creating an in-built ITC centric approach in the narrative of projects. Broad objectives of the toolkit are:

- To be the 'go-to document' and reference guide for city officials to adopt an inclusive city planning approach with a focus on developing ITC-friendly neighbourhoods.
- To break-down the transformation process in to implementable steps to adopt ITC centric approach in live projects.



# 2. Who can use this checklist?

## 2.1 The Stakeholders

The toolkit identifies potential stakeholders who can be a part of an ITC project for carrying out varying roles in the process. The central stakeholder in addressing all issues through such a project is the ITC group. All project processes should be carried out in a consultative manner engaging the caregivers of young children. Objective of including this group as the primary target group is to identify on-ground issues and provide contextual and sustainable solutions. The other stakeholders can be government departments capable of exercising direct power in the city governance; Non-profit organizations working for the target group, Academicians researching on the subject matter; local communities working in siloes to raise awareness on their immediate needs and so on. Figure 01 pans out stakeholders identified for playing different roles in the urban realm. Primary stakeholder is ULB officials as they are often the binding force of collaborators in the project and may use this toolkit to incorporate the needs of the ITC in the city development plans and programmes<sup>1</sup>.

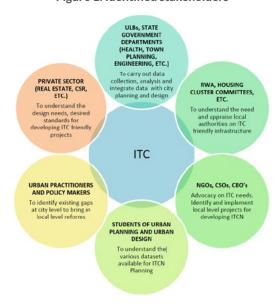


Figure 1: Identified stakeholders

<sup>1</sup> This section is referenced from 'Data Baseline Toolkit' under the section 'Who would this toolkit cater to?'.

### 2.2 Data Management Systems

The implementation of projects contributes strategically to the data collected at neighbourhood level with respect to ITCs. The following schemata for neighbourhood level data management would aid in informing ITCcentric interventions at every stage.

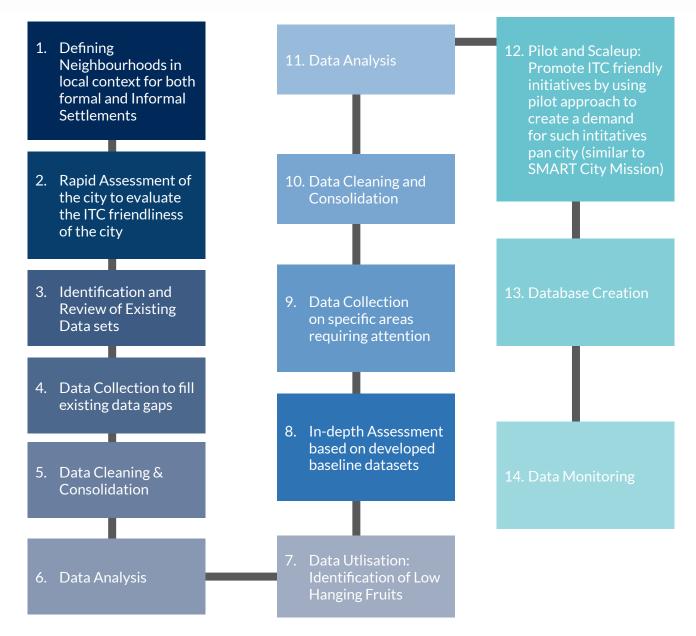


Figure 2: Schematic data management system (referenced from data baseline toolkit)

Previous two toolkits of the series have focused primarily on data related processes where it teaches data collection, data analysis, data visualization and data for informed outcomes. Figure 02 brushes up the process in a graphical attempt. At a city level, Data collection will happen through rapid assessment which adopts indicators approach. Indicators have been finalized in 'data baseline toolkit' which helps to cover necessary aspects of ITC friendly neighbourhood. They will be added as an annexure in this toolkit. ITC data indicators contribute towards creating an evidence-based repository for city management and support a clear understanding of the needs and challenges faced by ITCs. These indicators help quantify the influence of surroundings on ITCs experience, directly impacting their overall wellbeing. Following a measured overview, potential area can be identified and frame the next steps in the desired direction.

## 2.3 Roles and responsibilities of each group

Urban Local Bodies (ULBs) will be primary drivers of the ITC-centric approach to transforming neighbourhoods at city-wide scale. They need to take the responsibility of facilitating various other state and non-state agencies in adopting ITC-centric approach in their plans and investments in spatial development, urban infrastructure and services delivery in the cities. ITC-related ideology cuts across all urban sectors and hence needs to be adopted as the core principle in city planning and development. One or more related departments such as Education, Health, Women and Child may be a part of an institutionalised coordination/oversight group to review all investments in the city from ITC perspective. Depending on the capacity of a ULB, the entire programme cycle of urban transformation to develop ITC-friendly neighbourhoods on a city-wide scale may be implemented by various departments of the ULB in partnerships with other city stakeholders or it may hire third party agencies to complete one or more stages of the programme cycle. Details about the involvement of third party agencies are elaborated in later sections (section 3.3) of the Toolkit.

Roles and responsibilities for data collection and creating a city data dashboard can be detailed reference from Toolkit for creating data baseline for young children in cities and toolkit to create an ITC- centric city level dashboard (Please visit NIUA website-www.niua.in to access the toolkits).





# 3. Programme cycle

Life of a project begins at the thought of conceptualizing a project and carried out through different stages of its life while culminating at the evaluation stage. The evaluation stage may arise the need to further iterate some features of the project as its a never ending process to evaluate projects at certain decided intervals. The seven stages of the programme cycle for a ITCN friendly project is shown in Figure 3 below. The stages are not exhaustive and may sometimes require to be implemented in non-sequential manner, as per the needs of concerned projects.

Figure 3: Programme cycle

14: (2) **Baseline** 1. Awareness on assessment the importance revisit the of ITC group content 3. Strategic 4. Feasibility 5. Detailed studies project **Planning** report 6. Implementation Maintenance (O&M) and Activation (Programming

40

## 3.1 Awareness on the importance of ITC group

Service delivery in Indian cities has historically been unable to keep pace with the demand due to rapid urbanization leading to backlog demand for urban services. The national government is promoting improvement in urban services by launching emerging missions for ensuring sectoral development. This can prove to be a good opportunity for the ULBs to adopt an inclusive approach and promote ITC-friendly neighbourhoods. Early experiences become biologically embedded, and shape physiological pathways which have lifelong protective or detrimental effects on health, well-being, learning, behaviour, future employment and earnings. Experts in early childhood development highlight risk factors, such as unavailability of good social and physical infrastructure, as barriers in a young child's development. Investing in the overall development of young children such as social/emotional, language/ communication, physical/movement and cognitive development of young children and assisting them with the necessary facilities will always reflect back through their participation in India's future economic and cultural growth. This might prove to be the finest investment for a long-term future and help build a new national discourse. Investing in young children will reap a better future with ripened financial returns, enhanced academic capabilities and a formative social society.

Knowledge Needs Assessment Report analyses the existing capacities of city officials and identifies the forces driving change to ensure the effectiveness of capacity development efforts for promoting ITCN. The KNA report, prepared under the ITCN capacity building programme, can be referenced to understand the purpose, methodology and derivatives of KNA. Training modules developed under the programme can be effectively used for updating the knowledge and skills of government officials. The Study provides the building elements for developing a demand-driven capacity building strategy for ITCN. This presents a real time scenario of ITC centric information, initiatives and action plans at neighbourhood level on a city-wide scale. The diagnostics help identify and gaps, both geographically and service levels, which can help devise strategy to address the gap.

### 3.2 Baseline assessment

Baseline study helps define with the current status of service delivery/urban infrastructure. When compared with the desired service level benchmarks, it helps in identifying the gaps both geographically and across sectors. Additionally, stakeholder mapping can be a part of the baseline study to understand the position of the potential stakeholders.

The scope of the baseline study may be defined on the basis of the 'Data Baseline Toolkit'. A baseline study conducted for ITCN projects, emphasizing on the importance of having database for the ITC group, suggests methods of data collection, cleaning and analysis. In the Baseline study, rapid assessment of ITC conditions started on a wider scale covering city level aspects which further narrowed down to the granular details at neighbourhood level using in-depth assessment tools. Scope of the study stretches to touch upon every direct or indirect sector related to the development of ITC centric projects. Demographics of ITC population, distribution and quality of services, provision of facilities and community perception needs to be carried about in cross-cutting sectors of ITC development. A detailed list of ULBs' departments responsible for planning and implementation of urban projects and various state government departments working to promote early childhood development is described in the next section of the toolkit.

### 3.3 Strategic Planning

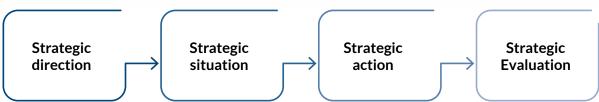
Strategic planning is a management tool that determines the direction in which an organisation is moving, and how it will get there. Similarly, Urban strategic planning determines the direction of development of a city or urban area, in the context of its current profile and SWOT analysis. This approach helps the city to respond to fast-moving events, to manage change and to improve the quality of life (UN habitat, 2007).

Methodology of Strategic Planning includes Vision/Mission, baseline diagnostics to identify the gaps, institutional assessment for stakeholder mapping, strategy to address the gaps, role assignment and resource allocation, M&E including concurrent evaluation for mid-course correction.

Strategic planning seeks the answers to three fundamental questions (CUI, 2001):

- Where are we now? (What is the present status, situation or condition of the city?)
- Where do we want to go? (Where would the city like to go or what direction it is taking?)
- How do we get there? (How would the city like to get there?)

Figure 4: Process of strategic planning



Strategic planning can be categorized into four broad implementable areas as shown in figure 3 and explained below in detail-

### **Strategic Direction**

Baseline study builds a foundation for understanding the city granularities and devise appropriate strategy for future development. Analysis of data collected during the baseline study helps to organize neighbourhoods in a rank-wise list based on various parameters to establish the level of ITC related initiatives adopted or lacking in the neighbourhood. This leads to identification of existing gaps and uncovering potential areas within the city which needs further action. Now, cities will be in a position of framing a roadmap to creating ITC-friendly neighbourhoods at city-wide scale.

### Strategic situation

Once the roadmap is in place, an umbrella goal is to established which can be further disintegrated into a series of achievable actions. Actions can be spread out over a Gantt chart in a defined sequence. Prioritization of objectives can be based on varying economic, social or political factors as found suitable from the derived strategic position.

### Strategic Action/ Strategic Plan

A strategic plan frames a wide outlook on ITC focused projects to be planned at a city or State level and can be the guiding document to decide direction for every measure adopted towards ITC-friendly neighbourhoods.

Strategic plan needs to have an overall actionable plan for the entire area that will include the number of projects to be taken up and a detailed perspective for each of them. The narrative of the plan covers the actions, relative consequences, resource allocation and intended outcome. Depending on objectives planned, the outputs and outcomes will be framed.

### **Strategic Evaluation**

Once the strategic plan is in place, it will be followed by implementation of the strategy and further evaluation. Feasibility study needs to be conducted for any possible shortcomings of the plan and consecutively strategy plan has to be reiterated. Evaluation process will be explored in detail at later section of the toolkit.

### 3.3.1 Implementing Agency

The responsibility of being the Implementing agency for creating a young child & caregiver friendly neighbourhood can be a shared responsibility cutting across various State or city departments. Many of the typical municipal functions have been assigned to state departments/parastatals and the complexities of overlapping functions and geographic jurisdictions. Urban Local Bodies (or ULBs) are the implementing agencies for all developmental works in urban areas. And hence, ULBs may be primary drivers of the ITC-centric approach to transforming neighbourhoods at city-wide scale. They need to take the responsibility of facilitating various other state and non-state agencies in adopting ITC-centric approach in their plans and investments in spatial development,

urban infrastructure and services delivery in the cities. ULBs can either implement the ITC project within their own institutional powers or may choose to outsource the full project or certain stages of the project to third party consultancy.

### A. ULBs or State departments

The nature and size of the ULB of an urban area in India is largely ascribed to its classification by size of population. With a bigger and growing population, cities and urban centres have more complex urban systems and, hence, more complex functions for the ULB to perform. As a result, to make ITC-friendly neighbourhoods in cities, ULBs tend to become primarily responsible. Jurisdiction of different departments overlaps in any given neighbourhood and requires them to work in tandem.

Out of the many joint functions of a ULB and state departments, some functions that look at the ITC guidelines integration in the project planning and implementation<sup>2</sup>:

- 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;
- The construction, maintenance, alternation and improvements of public streets, bridges, culverts, cause wavs and the like:
- The lighting, watering and cleaning of public streets and other public places.

The functions assigned to ULBs vary across urban hierarchy and State governance structure. Broadly, the various departments which are responsible for planning and implementation of urban plans and projects in the existing municipal structure include:

- **Engineering Department**
- Town Planning Department b.
- Public Health Department C.
- Poverty Alleviation Department/ Social Welfare Department d.
- Land and estate Department / Similar Departments which cater to land use zoning and allocation e.
- f. **Education Department**
- Horticulture/Parks & Garden Department g.
- h. Department responsible for Environment planning
- **Urban Development Authority** i.
- i. Special projects or equivalent departments

Furthermore, various state government departments also function in tandem with ULB officials to make cities that are inclusive to ECD. They are:

- Women and Child Development Department a.
- b. **Statistics Department**
- Health Department

<sup>2</sup> Infant, Toddler, and Caregiver-friendly Neighbourhoods Policy Workbook

- d. Education Department
- e. Urban Development Department
- f. Housing & Urban Planning Department

Once the implementing agency decides to take up ITC centric development in the area, it needs to prepare strateic plan for the area. After completion of all four stages of strategic planning, roles and responsibilities of identified stakeholders needs to be defined. The execution of the project falls on ULB as they are primarily responsible for urban development; ULBs can choose to distribute certain stages of project to other stakeholders such as consultancy firms, state departments and so on.

In case the ULB decides to take up the entire ITCN project using its own institutional and functional capacity, following are some ways the roles and reporting of works can be institutionalised:

### Coordination committee at city level:

The Committee can be constituted by issuing an executive order of the municipal council signed by the mayor. It would be chaired by the district collector, and the members to include various city stakeholders including state departments, parastatals and non-state actors including CSO and RWA, with municipal commissioner as the convener. The order must be issued with copies to all concerned. Cities to appoint an officer in-charge/nodal person who will be coordinating with city data centres, and any other municipal data platforms. This officer will be appointed from the anchor institute which will be handling the entire ITC project. In most cases, this anchor institute will be a ULB.

### Nodal officer / Officer in charge:

Additionally, it is advised to have a full time position or group within the institutional framework of the ULB. This is in alignment with the Urban95 idea of action for having a designated member of the municipal team with a mandate from city leadership working on child development can create momentum and commitment within the municipal team and enable cross-sector collaboration<sup>3</sup>. The Urban95 Starter Kit identifies areas of government involvement as: Social Services, Education, Health, Parks, Planning, Transport, etc. The ITCN Policy Workbook can be referred for detailed out roles and responsibilities of this position.

#### **Steering Committee:**

The ITCN Policy Workbook recommends the formulation of a Steering Committee within the institutional framework of a ULB, that may look after ITC related issues through the functions of the ULBs<sup>4</sup>. Steering Committee , chaired by the municipal commissioner, with representatives/heads of various municipal departments, with the ITCN nodal officer as the convener. . In case the ULB has an ITC-centric Steering Committee in place, the same can be directed to perform the functions required to implement the project as discussed, instead of constituting a committee exclusively for the project.

### **ITCN Technical unit:**

Technical Unit, headed by the ITCN nodal officer, with experts in planning and social welfare. The role is advocacy, knowledge support, capacity building and TA to all organizations represented in coordination committee and various municipal departments to ensure ITC-inclusive planning, investments and programmes. Role assignment to be drafted by the technical unit and recommended for adoption by the Coordination Committee. The ITCN Cell may be hired as individual consultants by the ULB for the purpose of implementation of the project. The criteria for selection of individual consultants can be referred in the Manual of Policies and Procedure of Employment of Consultants<sup>5</sup>.

#### **B.** Consultancy

The ULB may hire a consultancy agency with the capacity for implementing one or more stages of the programme cycle, ranging from Planning to Design to Implementation to Monitoring, Evaluation and Learning. Additionally,

<sup>3</sup> URBAN95 STARTER KIT Ideas for Action, BvLF

<sup>4</sup> Infant, Toddler, and Caregiver-friendly Neighbourhoods Policy Workbook

<sup>5</sup> Manual of Policies and Procedure of Employment of Consultants, Department of Expenditure, Government of India, 2006

to these functions, the hired consultancy based on their expertise may be engaged in the extended scope of work of conducting activities like capacity building and training of stakeholders, advocacy, and preparing proposals for local guidelines for the city that may further be adopted by the ULB or concerned development agencies. As the hired consultancies may carry out major components of the ITCN development projects, they become highly suitable agents for creating scale and replicability of said interventions. In case the ULB wishes to outsource a consultancy, the procedure for Hiring and Selection is detailed below.

The Ministry of Finance's Department of Expenditure has issued manuals of generic guidelines on Policies and Procedures for Goods, Works and Consultancy in conformity with the General Finance Rules, 2005, and the details therein may be referenced to undertake process of hiring consultancies for various purposes as recognised by the ULB.6

### Preparation of Request for EoI (Expression of Interest) and Receipt and review of EoIs (optional):

An Expression of Interest (EOI), also called Request for Information, is the channel for short listing bidders for a particular consulting assignment in a 2 stage tendering process. The shortlisted bidders in the EOI process (first stage) compete through Technical and Financial bids (second stage). It may be noted that for all consultancy contracts exceeding estimated cost of Rs.25 Lakhs<sup>8</sup>, an Invitation to Expression of Interest should be made and bidders shortlisted as per the process outlined in this document.

A Request for Proposal (or RfP) is a document issued and rolled out by a government organisation that details out the various stages and requirements of a project, when the same is intended to be achieved via outsourcing the works to a consultancy. An RfP is rolled out as a part of a longer process of project implementation through hiring of an outsourced consultancy.

### Preparation of an RfP:

The detailed contents of an RfP for any project can be based on templates provided by the ministry or department of the government under which the programme or funding of the project is taken up under. Given the Central or State Government programme under which the selected ITCN project is being implemented, the RfP and corresponding documents should align with requirements as expressed in the Model RfP developed under the programme. The same must be read with the an example of programme that issues Model RfPs include AMRUT Mission, MoHUA9 for recruiting PDMC envisaged under the AMRUT Guidelines10 to provide end-toend support broadly covering three components viz. Planning, Design, Supervision, and Project Management.

### **Rolling out of RfP:** An RfP is used for procurement under the following typical circumstances<sup>11</sup>:

- Scope of work and deliverables are standard, reasonably well known and/or can be clearly specified
- Typically involves time bound delivery
- Budget is known, approved or availability of budget is assured
- Need to procure the most economical tender, through open competitive bidding-generate competition by ensuring at least with 3 to 5 bidders
- If all the above is applicable and estimated value of the assignment is currently less than Rs.25 lakhs but proposed to be increased upto Rs. 50 lakhs then the ULB can directly release this RfP instead of releasing the EOI and then RFP. This RFP may consist of Technical evaluation criteria and/or Prequalification criteria with financial details.

Note: The important provisions in RfP or Contracts should be ensured in compliance with the Manual of Policies and Procedure of Employment of Consultants, Department of Expenditure, Government of India, 2006.

<sup>6</sup> Manual of Policies and Procedure of Employment of Consultants, Department of Expenditure, Government of India, 2006

<sup>7</sup> Preparation of Model Requests for Proposals (RFPs), Toolkit and Guidance Notes, Department of Information Technology, Ministry of Communications and Technology, Government of India

<sup>8</sup> Manual of Policies and Procedure of Employment of Consultants, Department of Expenditure, Government of India, 2006

<sup>9</sup> Model Request for Proposal for Recruitment of Consulting Firm for Project Development and Management Consultant (PDMC) for Atal Mission for Rejuvenation and Urban Transformation, Ministry of Urban Development, 2015

<sup>10</sup> AMRUT Guidelines, TCPO, MoHUA, 2015

<sup>11</sup> Preparation of Model Requests for Proposals (RFPs), Toolkit and Guidance Notes, Department of Information Technology, Ministry of Communications and Technology, Government of India

**Request for Proposal (RfP)** is the bidding document in which the technical and financial proposals from the consultants are obtained. It contains the following documents<sup>12</sup>:

- A letter of invitation (LOI)
- Instructions to consultants (ITC)
- Terms of Reference (TOR)
- Standard formats for financial proposal
- Proposed form of contract

The Instructions to Consultants contains the information that is specific to the project with the following typical contents for transparency and ITCN project centric considerations:

Table 1: Typical Components and Contents of RfP Instructions to Consultants for ITCN Projects

Typical Component and Contents of RfP Instructions to Consultants (ITC)	Important Specifications
	About the ULB and its overall Vision and Mission
	Strategic position of the ULB with respect to ITCN
	Project Background and Area
	Vision for the project
Vision	Alignment with Programme funding the project
	ITCN Project Centric Considerations
	• ITCN Objectives <sup>13</sup>
	Challenges faced by ITCs in the context of the project
	Mobilisation of teams
	Developing a strategy building on the ULB's vision of the ITCN development project
	Conduct of Primary Surveys
	Existing Situation Analysis and Inception report
	Conceptual Design
	Consultation with ULB, Stakeholders and Submission of final Conceptual Drawings
	Detail Design and Drawings
	Tender Drawings and BOQ
	Final Good for Construction Drawings Package
Scope of Work and Phasal Project	Implementation Monitoring
Deliverables	Completion Drawings
	MEL Report (separate consultant may be hired)
	Capacity building and training of project stakeholders
	Proposal for recommendations for relevant local guidelines
	Report on advocacy activities conducted
	ITCN Project Centric Considerations
	Surveys and Existing Situation Analysis of the site must incorporate the ITC-centric lens in tandem with the city's Strategic Position
	Design of the project to be based on the ITCN Design Guidelines <sup>14</sup> or relevant design toolkits, guidebooks or checklists o ITC considerations
	Consultations for the design stage must use relevant design tools as listed in Section 3.6.

<sup>12</sup> Manual of Policies and Procedure of Employment of Consultants, Department of Expenditure, Government of India, 2006

<sup>13</sup> Infant, Toddler, and Caregiver-friendly Neighbourhoods Policy Framework

<sup>14</sup> Infant, Toddler, and Caregiver-friendly Neighbourhoods Design Guidelines

Typical Component and Contents of RfP Instructions to Consultants (ITC)	Important Specifications
	Required company registrations
	Annual Turnover required
Pre-Qualification: Basic Eligibility Criteria	Specifications for Joint Ventures or Consortiums and the lead applicant
	Location of company base and office setups
	Proof of past work orders
	Suitable scoring to be provided to the following parameters:
	Cumulative Experience of bidders in Preparation of DPRs of relevant projects
	Cumulative experience in designing relevant projects and sizes of these projects
Evaluation Criteria: Technical Evaluation Parameters	Experience of Key Team Members
rarameters	List of experts among the Key Team Members with their qualifications and experience
	Technical Presentation requirements including past projects, vision, methodology, and work plan
	Technical Capability criteria
Evaluation Criteria: Price Proposal	Threshold Technical Capability scores
	Quality and Cost Based Selection (QCBS) method
	The TOR shall include:
	Purpose/ objective of the assignment;
	Detailed scope of work;
Terms of Reference	Expected input of key professionals (number of experts, kind of expertise required);
	Proposed schedule for completing the assignment;
	Reports/deliverables required from the consultant.
	Background material, records of previous surveys etc. available and to be provided to the consultant
	Facilities such as local conveyance, office space, secretarial assistance etc., which can be provided to the consultant
	Procedure for review of the work of consultant after award of contract

Shortlisting of Bidders: Consider a Threshold Technical Capability score and only Bidders who secure this should be considered as "Technically Qualified Bidders" to become eligible for the Financial Proposal opening.

**Evaluation of Price Proposal:** Recommended method of selection shall be the Quality and Cost Based Selection (QCBS)<sup>15</sup> Ranking of the qualifying proposals is done from least to most evaluated cost by the bidders, for arriving at the winning bid.

Award of Contract: If felt necessary, negotiations with the winning bidder should be carried out. Negotiations may include discussions of the TOR, the methodology, staffing, ULB's inputs, and special conditions of the contract. The final TOR and the agreed methodology shall be incorporated in "Description of Services," which shall form part of the contract. Award of the contract should then be notified to the successful firm.

# 3.4 Feasibility studies

A feasibility study is simply an assessment of the practicality of a proposed project plan or method which is done by analysing technical, economic, legal, operational and time feasibility factors.

<sup>15</sup> Refer Manual of Policies and Procedure of Employment of Consultants, Department of Expenditure, Government of India, 2006

Feasibility of project highlights several issues affecting the sustainability of urban transformation programmes framed within strategic plan. Projects are influenced by the relationship between the local area dimension and wider scale of development. Demographic statistics, regional analysis and national development strategies play a pivotal role in the identification of potential actors to be involved, as well as in developing an effective fiscal plan for the region. The implementation of feasibility analysis requires the integration of several skills and abilities within a circular process of continuous feedback.

Evaluation process is twofold – it aims to identify the weaknesses able to negatively affect the project implementation and also to highlight the conditions that may be leveraged to improve the projects viability. SWOT analysis will be the most expedient way to conduct this process.

Figure 5: Flow chart for feasibility studies

On-ground research

Preliminary analysis

On-ground research

Financial assessment assessment options

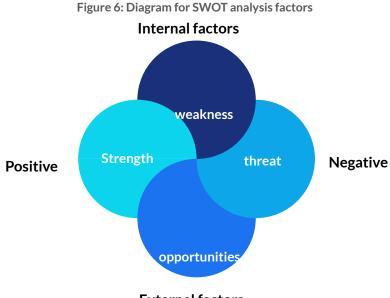
Reassessment Final decision

Certain suitable tools may be adopted for comprehensively conducting a feasibility study through different steps. These may include SWOT analysis for a preliminary analysis, conducting tactical urbanism initiatives as part of on-ground research, alternative analysis for exploring alternative options among others to lead to a final decision on the feasibility of a project.

#### **SWOT Analysis**

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats; and is a technique for assessing these four aspects of the project. This tool that can be adopted for a preliminary analysis stage of a feasibility study. SWOT Analysis can help challenge risky assumptions and uncover possibly dangerous neglected areas. This would include socio-economic, inclusive and financial factors for analysis. When strengths and weaknesses are looked upon relatively, derived relative inference leads to better suited decisions. For instance, 5 visible strengths of a project may look like a good number but they might turn out to be insignificant when compared to one overpowering possible weakness.

The purpose of performing a SWOT is to reveal positive forces that work together and potential problems that need to be recognized for iteration. Recognition of the weaknesses and threats is the first step to countering them with a robust set of strategies that build upon strengths and opportunities. With the help of this toolkit, ULBs will be oriented on the importance and process of conducting SWOT Analysis.



**External factors** 

#### **Tactical Urbanism**

Tactical Urbanism refers to temporary initiatives which intend to engage and test solutions for a neighbourhood. This is an intervention based approach such as temporary street closure, measured road marking, parklets, wall paintings for an active facades, sidewalk games, cultural installations and activities for participation of neighbourhood children. It acts as an innovative and quick approach for testing any implementation.

Tactical Urbanism is often used as an engagement activity on-ground to conduct the intended interventions for a short period of time. But as part of the on-ground research conducted for a feasibility study, this can also be used as a tool that garners responses from the communities in a tangible manner for learning from the work on-ground. The interventions are not of permanent nature and hence can create a host of evidences. As part of the interventions, pre- and post- impact analysis can be undertaken with before and after measurement criteria like presence of ITC sub-groups, traffic and accidents, crime and violence, fulfilment of basic needs, perception of comfort, safety, walkability, accessibility, etc. Analysing the test implementation can help with observations regarding satisfaction on certain pre-decided parameters.

#### **Alternative Analysis**

The step for exploring alternative options is an essential step undertaken for understanding the feasibility of a big project, and alternative analysis is a tool that can help achieve the same. An alternative analysis is the evaluation of the various routes the implementing agency can pursue to achieve the goal of a project or a particular objective. 16 It looks beyond the existing situation and to compare different ways of achieving objectives. It may factor in various considerations like operational, costing, environmental, etc.

Alternatives Analysis (AA) is often used as a tool to solve transport related problems mainly in a particular corridor or sometimes in a sub-area. <sup>17</sup> In case the city is implementing transport projects in accordance with the Comprehensive Mobility Plan (CMP) of the city, it should base the analysis objectives and further evaluation of all the feasible alternatives across all modes on inputs from the CMP. Upon affirming objectives of the analysis, the methodology for AA and reporting would include developing screening criteria for the alternative options, defining evaluation parameters of various alternatives, alternatives evaluation on these parameters, and finally identifying implementation options for the most viable alternative.

#### Rapid Behavioural Assessment

The purpose of Rapid Behavioral Assessment (RBA) tool is to transform behaviors, and for that it is critical to understand the barriers and facilitators that affect the desired behaviors of caregivers and service providers. It generates behavioral insights on facilitators and barriers faced by caregivers (mothers/fathers/other caregivers) of children under 6 years in using different infant, toddler, caregiver (ITC) destinations near them. It also recommends on service providers' experience of operating, maintaining and providing services at different ITC destinations. The data collection methods used for RBA include: Focus group discussion (FGD), In-depth Interviews (IDI), Observations, Participatory Learning and Action (PLA).<sup>18</sup>

In India, RBA has been conducted for the Phase-II of the Urban95 Programme, as part of the consultation with city level government officials. This tool should be used primarily at the re-assessment stage of feasibility study. RBA insights will enable identification of priority behaviors that will feed into the principles of design leading to modification and development of ITC friendly spaces in the city. This tool can also be used in the stages of baselining, operation, activation and evaluation.

<sup>16</sup> https://www.projectmanager.com/blog/what-is-alternative-analysis

<sup>17</sup> Manual of Policies and Procedure of Employment of Consultants, Department of Expenditure, Government of India, 2006

AMRUT Guidelines, TCPO, MoHUA, 2015. Appraisal Guidelines for Metro Rail Project Proposals, Ministry of Housing & Urban Affairs, Government of India, September 2017 https://mohua.gov.in/upload/uploadfiles/files/Appraisal%20Guidelines%20for%20Metro%20Rail.pdf

<sup>18</sup> Broad overview of the U95 program and Rapid Behavioural Assessment (RBA). Consultation with City Level Government Officials - Udaipur (Urban95). December 2022

## 3.5 Detailed project report

For the implementation of ITCN development projects and in developing quality solutions for neighbourhood planning, a realistic approach is to use applicable frameworks for quicker results. As prevalent urban planning policies at national and state level are not tailor made to suit the application of ITC Guidelines yet, existing frameworks and available resources should be focused on for ITCN development project. Planning for the ITCN project is carried out in a two-fold manner: Fiscal Planning and Spatial Planning.

## 3.5.1 Fiscal planning

Fiscal Planning is a broad concept covering every directly or indirectly related aspects of public financial affairs. Through financial planning government detects the financial situation, identifies risks to public finance, plans objectives and adopts policies in the long run. A financial operating plan (FOP) is usually an important part of fiscal planning to operationalize implementation agenda. FOP is a financial plan outlining the revenues and expenses over a period of time. A financial operating plan uses past performances, incomes, and expenses to forecast what to expect in the following years. It then incorporates past and recent trends into the planning so as to most accurately forecast what is to come. <sup>19</sup> FOP also identifies the sources of revenue while planning for future.

#### A. Finance mobilization

The ULB may mobilise fund for an ITCN project from within its existing budgets or may propose to mobilise allocations for ITC-centric efforts in the upcoming budgets.

Budgets of ULBs are official legal documents that are short-term plans, expressed in financial terms which have been used for a long time by governments. Budget of ULBs contain a plan of revenue and expenditures typically prepared for a financial year. With a strategic position in place in favour of a ITC-friendly neighbourhood development in the city, various members of the ULB can contest for greater allocations. According to the ULB's plans in order to implement ITC Neighbourhood Guidelines, a specific appropriate percentage allocation in the overall budget for young children-friendly infrastructure should be promoted. This would provide resources for ULBs to delegate, and for city officials to develop and maintain such infrastructure. Revenue is also generated by the ULB from certain sectors and sources that provide for a pool of Own Source Revenue to allocate from. These may include property taxes, user charges for solid waste, water, parking, commercial space, value capture, municipal bonds for capital expenditures, etc.

#### **B.** Available funds

ULBs are the implementing agencies for a range of programmes and missions of the Central and State Governments. The funding under these schemes are delegated to the ULB in the form of grants. The use of these are however limited to specific objectives and guidelines as laid out by the concerned ministry or department. Therefore, it is a good idea to identify missions with aligning objectives to utilise their funds in developing and implementing relevant ITCN projects.

Examples of central government missions include the Green Space and Parks component as well as other urban infrastructure components like Urban Transport, etc. under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT). The expenditure for formulation of Local Area Plan for brownfield development and Town Planning Scheme for greenfield development in a city are also funded by the Ministry of Housing and Urban Affairs under AMRUT.

The Smart Cities Mission has provisions for the Area Based Development with funding from directly central government to a Special Purpose Vehicle (SPV) in the city that works independently as an extension of or directly associated the city ULB for project development and implementation. The ULB can implement ITCN projects under ABD with capacity and funding support from the Smart City SPV.

 $<sup>19\</sup> https://www.investopedia.com/terms/f/fop.asp\#: \sim: text = A\%20 financial\%20 operating\%20 plan\%20 (FOP)\%20 is\%20 a\%20 financial\%20 plan\%20 outlining, expect \%20 in\%20 the\%20 following\%20 years.$ 

#### C. Stakeholders for funding

The ULBs can act as a nodal agency for the coming together of various stakeholders relevant to and interested in ITC welfare. Of these, certain public and private sector actors can drive the funding for ITCN development. The ITCN Policy Workbook sets out sample stakeholder actions and opportunities for an enhanced ITCN development process.

Consult the Evaluate and Monitor nodal agency with capable progress personnel Enhance setor Stakeholders Private Sector Stakeholders Implement a construction Pilot Project development Incorporate Formulate ITCN in all simple ITCN public Design projects Guidelines undertaken Actions and Built-Emvironment Professionals Opportunities Highlight Use design Non-Profit Gough **ITCN** issues guidelines for to be multiplicity addressed Influence Consult local other cities residents though benchmark Professionals Spread design to design ITC awareness environments about ITCs as per

Figure 7: Stakeholders Actions and Opportunities and actions relevant to stakeholders that can provide funding

Source: ITCN Policy Workbook, Smart Cities Mission 20

Public Sector Stakeholders: The ULB and its funds would act as the major source of mobilisation of funds for any ITCN project. A ULB may want to implement a pilot project under a specific fund for replicability across the city. Important officers within the ULB have pools of funds to allocate to works for projects as per their jurisdiction. Depending on the scale of the project the Officer may allocate funds under various departments. The Municipal Commissioner is the highest administrative officer in a ULB that can perform this function. Additional and Joint Commissioner also have specific departments and jurisdictions that may be identified for the ITCN project that

Guidelines

requirements

<sup>20</sup> ITCN Policy Workbook is developed under the leadership of the MoHUA's India Smart Cities Mission.

a ULB wishes to undertake. Funds may also be mobilised for / allocated from specific areas of ITCN project through Elected representatives in the ULB. The Mayor is elected at the ULB level and Local Councillors are elected at the Ward level. Elected representatives, as per the motivations of their agenda may contribute funds for ITC welfare, by allocating existing funds or by mobilising it from within the community for welfare. Ward Level Committees also act as an excellent level of deliberation on local issues. With a regular convening and functioning of these Committees, decisions made by these committees can act as driving force for mobilising funds for a local ITCN project.

**Private Sector Stakeholders:** The ULB can partner with the private sector actors / stakeholders with aligned interests to design and implement (aligning) ITC-centric development projects. Public Private Partnerships with developers or investors can lead to benefits for both the private agency as well as for the ULB. A ULB can also ensure through policy making and implementation that private sector developers incorporate ITCN in all public projects undertaken. Knowledge Institutions in a city also form an important stakeholder as they are driven by the idea of welfare, and have the capacity to assist a ULB in performing their initiatives better. Such organisations may also be identified within the city for using funds from their own channels and programmes.

Other stakeholders at the neighbourhood level that must be taken into account during the development process of an ITCN project include non-profit groups like caregivers, community based organisations (CBOs), civil society organisations (CSOs), neighbourhood associations (NAs), Resident Welfare Associations (RWAs), NGOs, as well as built environment professionals, like urban planners, urban designers, architects, etc.

#### D. Cost Components/BOQ of required products

Costs of the components, elements, materials, parts, labour and services undertaken for the purpose of the construction of the project are quantified in the form of a Bill of Quantities (BOQ). A BOQ is a detailed statement of work, prices, dimensions, and other details, for the development of a project by contract, and it is prepared by a quantity surveyor or cost consultant. A BOQ is prepared as a supplementary document to a Detailed Project Report.

A schedule of rates is a list in a contract setting out the staff, labour and plant hire rates that the contractor will use for pricing cost reimbursable instructed day work. Schedule of rates is published by Central Public Works Department (CPWD). The stakeholders may have a tentative budget for the project by creating a list of materials and services to be used in the project execution phase and then looking at the cost quoted for the materials under 'Schedule of rates' document, a tentative budget for the project can be formulized. The ULB is mandated to use BOQs prepared using these prices as the base rate multiplied by the quantities of works undertaken to reach the total amounts. Miscellaneous works are also included to quantify the works undertaken and attach a cost to for the final contract. In case some materials cannot be found in the published schedule of rates, a primary market survey can be carried out to have a list of rates.

Components for ITCN development to be included within a BOQ, which may include, but are not limited to, civil works (like earth, concrete/masonry, etc.), horticulture and landscaping (planting trees and vegetation, trenching for ponds, etc.), utilities (drainage, plumbing, electrical lines and systems, etc.), and more.

### 3.5.2 Spatial Planning

While fiscal planning covers the large scale finance mobilization, spatial planning zooms into the granularities of the project requirements. Spatial plan covers the physical features spread across the geographical limits of the project. Public spaces are equipped with infrastructure facilities based on the utility of the activities to be conducted there.

A space can be retrofitted at any stage of execution to become more responsive towards the needs of focus group; though true inclusivity is not borne out of retrofitting rather is an integral part since the initial thought of starting a project. A public space needs to be conceptualised from the scratch with the understanding of underlying needs of young children & their caregivers.

Different land uses in any city development plan entail different considerations for ITCs. Land uses in Indian cities largely include residential, commercial, industrial, recreational greens, natural greens, transportation, utilities and services, government and administrative, public and semi-public facilities, etc. Within a neighbourhood, the largely present land use is residential, and other land uses such as recreational and natural greens, transport and services, commercial, public facilities and services support the provisions and sustenance for a neighbourhood. Land use in Indian cities is defined using documents like Master plans, Zonal Development Plans, and Local Area Plans. These documents act as supporting documents in ensuring the access to relevant services for ITCs within appropriate proximity for neighbourhoods within the city. Master planning, which is a tool in planning and design of projects, is also a method for outlining a vision for the city over a said period of time and should be used to align an intended bigger vision for necessary provisions particular to accessibility to ITC facilities. Local Area Plans can make specific provisions at the neighbourhood level, allowing planners to go beyond statutory requirements for land use to address ITC issues.

While going forward with any ITC centric project the following elements need to be critically considered -

Table 2: Critical consideration for ITC centric projects

Table 2. Gritical consideration for the centric projects			
Ease of Accessibility			
Age-responsive zoning			
Topography			
Existing ITC friendly resources			
Existing ITC friendly infrastructure			
Lighting			
Landscaping			
Sustainable and safe materials			
Open spaces			
Sustainability			

#### **Tools for Spatial Planning - Surveys**

Being one of the initial steps to develop an ITC-centric project within a neighbourhood, the ULB needs to perform a certain set of surveys in order to establish an existing situation analysis of a given neighbourhood area. The Surveys are to be conducted at all the public spaces/activity centres of ITC in the neighbourhood to develop a comprehensive understanding of their needs and challenges. The public space/activity centres of ITC in neighbourhood can be any allocated or unallocated places of gathering for interaction and play, and can be identified through activity mapping. Surveys added as a part of in-depth assessment in 'Data Baseline toolkit' are useful to understand the texture of the desired area. The ULB may perform this function using its own capacity, or may outsource the same as a service along with other scope of work to a consultancy.

Other important surveys that should be undertaken as works may include, but are not limited to, Parking surveys, Land use survey, Pedestrian and Traffic Volume Surveys, Street vending and related activities, road crash data, etc.

Certain important tools that allow a means for interpretation of collected data include maps, municipal plans and budgets, dashboards, etc.

#### **Project example - Parks or open spaces**

Play opportunities for a young child should not be confined in the confined realms of conventional play practices. Toddlers need to be continually challenged to experiment and interact with their surrounding environment on their own which expedite positive development of their brain. An intelligently designed play space offers interesting play disguised in the space itself. Play spaces should ideally be segregated into different zones as per age group as separate zones facilitates provision of age-responsive play opportunities for young children. Play space can be a vital contributor towards cognitive development of a young child so it's our responsibility to provide for a comfortable and safe space for children. Materials play enormously significant role in designing a safe built environment for children. For instance, using a safe playground surface such as solid rubber mat multiplies the safety factor of any play area significantly. Design of the built environment in itself is capable of incorporating safe spaces.

While designing parks, the role of caregivers cannot be neglected. Young children are always accompanied by their caregivers yet their presence is not accommodated in the planning of parks. A designated space for caregivers in immediate surrounding serves dual purpose of keeping an eye on their young children and simultaneously engage in conversation with fellow caregivers. A separate space zoning for caregivers holds potential for them to utilise their time in an efficient manner; such as open gym equipment, designed seating to initiate conversations or simply a shaded bench to enjoy their short-term freedom.

When the facilities are provided in park, or any public space, for young children it should be provided at a height accessible to them. The services tend to be unusable if they don't serve the primary target group. According to Urban95 studies, the average height of a healthy 3-year-old child is 95cm. The design of various services and elements provided by the public space must be based on considerations that can comply with the needs of a young child anthropometrically. This can be done by providing low-level benches, lighting, handrails, etc. Some of the following can be the starting point to be considered in planning young child friendly park (to be presented through diagram in the designed version of the document.)–

Table 3: Planning a young child friendly park

Anthropometric design elements for a young child
Sitting bench in shaded areas
Relevant Lighting
Young Child-Friendly Way Finding
Shaded play and Pause areas
Toilets Toilets
Drinking water Drinking water
Nursing booths & diaper changing station
Permeable boundaries
Sensory elements
Surfaces
Equipment materials
Low height services
Playful furniture
Sidewalk games/painted

## 3.6 Implementation

A project centred around the needs of young children and their caregivers would go through various stages of implementation during its life cycle. Implementation Tools are activities undertaken with stakeholders for bringing required change through different stages in a project cycle. A project should transform the physical and socio-economic environment for a better status of the subject through intervention.

#### **Suggested Implementation tools**

Implementation tools are activities undertaken with stakeholders for bringing required change through different stages in a programme cycle. The tools through different stages of the programme development for ITC-friendly neighbourhoods may include:

The different types of tools introduced in this toolkit include:

- Baseline tools
- Governance tools
- Planning and Design tools
- Engagement tools
- Project Management tools
- **Evaluation and Monitoring tools**

#### **Baseline tools**

Baseline refers to the stage in the programme where an understanding of the state of ITCs in the city is established. The baseline is the stage against which outcomes of programmes can be measured and monitored. Creating a baseline is necessary to understand and plan inclusive neighbourhoods for its young children and their caregivers.<sup>21</sup> For example, it would allow a Gap Assessment of ITC friendly infrastructure. Suggested tools that help in baselining include:

- Transect Walks of Selected Neighbourhoods: This is a rapid assessment tool which refers to a walk through various areas in a neighbourhood, informally interviewing passers-by to map observations on characteristics, risks and existing solutions.<sup>22</sup> The transects are an essential tool to identify how urban spaces are utilized during different times of a day, week and year, and thus help identify activity centres for conducting activity mapping. The exercise is conducted by forming a group of experts, community and elected representatives, CSOs, Municipal Officials, Local Leaders, Anganwadi workers and other relevant persons in the neighbourhood.
- **Activity Mapping of ECD Support Systems:** Activity mapping observes and records the activity patterns of users in a given area which can be broken down further to understand the behavior patterns of target population. Observations are taken at different times of a day to map different patterns over the day. Activity mapping will be conducted by the same group of people conducting Transect walk. It includes observing and recording various kinds of activities, their location, intent, footfall, specific behaviors of children and caregivers.
- Primary Surveys: In the absence of community-level secondary database, the ITC-focused planning at the neighbourhood level will require primary surveys to assess the neighbourhood level facilities available at each of the activity centers for the ITC. It should be conducted at all the public spaces/activity centres. The primary surveys need to be undertaken on an annual basis.

<sup>21</sup> Toolkit for Creating Data Baseline for Young Children in Cities

<sup>22</sup> Toolkit for Creating Data Baseline for Young Children in Cities

#### **Governance tools**

Governance tools are designed to foster cooperation and communication among different departments and units of government. Inter-governmental efforts involve the coordination of plans, policies and programs to address issues of common welfare.

- Training and capacity building: Capacity building is a process facilitating value added instruction, the training of trainers, activities with multiplier effects, and networking. This tool includes developing structured training modules covering aspects of the subject and their issues to help bridge the gap between knowledge and practice.
- **Public investment:** Public investment may include capital improvement, land acquisition, public construction projects, impact fees, special assessment districts, and tax increment financing districts. Community decisions about public investment significantly impact the location, timing and rate of development. Many communities use capital improvement plans to identify and prioritize capital spending.
- Theory of Change: A Theory of Change (ToC) is a detailed set of beliefs or hypotheses about specific changes that are expected to result from a program. A ToC details how a program's specific strategies lead to changes in targets that are expected to produce real-world impacts on particular outcomes. Strategies are the actions the program takes to set off a chain of cause and effect that leads to the ultimate outcomes. The IDEAS Impact Framework is an approach and template to ToC provided by Harvard Education (harvard. edu) openly available as a simple, flexible tool for stakeholders undertaking programmatic activities. Stages of ToC can be defined as following:

The ToC tool can be used as part of the strategic planning step of the programme cycle. This would help arriving and furthering the agenda of the strategic position of the implementing agency for ITCN development. This tool can be used as a tool in conducting monitoring, evaluation and learning as well. The ToC is being used in the implementation of programmes in India, and still requires behavioural, societal and other changes for adoption across user groups. Swachh Bharat Mission is an exemplary programme of the Government of India that has exercised activities meant to result in social, behavioural change at a vast scale. The ITC group is a vulnerable group in our cities, and changes need to be adopted for better governance of interventions in their favour.

#### **Planning and Design tools**

- **Development regulation:** Regulation is the most common form of plan implementation used by local governments. Regulatory tools provide clear provisions about what can and cannot be done in a neighbourhood. Zoning regulations, conservation regulations, public facilities, access standards, building codes, etc. are common planning tools used for development regulation. Development Control Regulations (DCRs) in India are often state mandated documents further implemented by cities in all its development activities.
- Master plan: A master plan is a comprehensive long-term planning document that outlines a vision and strategy for the physical development of an urban area. It can include policies and guidelines for land use, building design, and infrastructure. In India, master plans are adopted as statutory documents which are further implemented by cities.
- Geographic Information System (GIS): GIS is a computer-based tool that allows for the analysis and visualization of spatial data. It can be used to map and analyze different spatial features, such as land use, population density, and environmental conditions.
- **Urban Design Guidelines:** These are principles and guidelines that can be used to guide the design and development of urban areas. They can cover a wide range of aspects, such as building height, setback distances, open space requirements, and streetscape design.

Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA): The EIA tool is used to identify and assess the potential environmental, social, and economic impacts of proposed development projects. The assessment can help identify ways to mitigate or avoid negative impacts and ensure sustainable development. SEA is a tool used to evaluate the potential environmental impacts of policies, plans, and programs before they are implemented. It can help ensure that environmental considerations are integrated into the decision-making process.

Further, following are important processes undertaken as part of planning, that influence any project undertaken in the city:

- Participatory planning: Local communities can be involved in the spatial planning process. This can help ensure that development plans and projects are responsive to the needs and aspirations of the local community and are inclusive making them more sustainable. Further tools under this are listed under engagement tools
- **Transport planning:** Transport planning involves developing transport systems that are safe, efficient, and sustainable. It can include the development of public transport systems, bike and pedestrian infrastructure, road network planning, planning for non-motorised transport, multi-modal integration for neighbourhood level connectivity.
- Land-use zoning: This involves dividing a geographic area into different zones or districts and specifying the types of land uses that are allowed in each zone. For example, residential, commercial, industrial, or agricultural land use.

#### **Engagement tools**

- Tactical interventions: Tactical Urbanism refers to temporary initiatives which intend to engage and test solutions for a neighbourhood. This is an intervention based approach such as temporary street closure, parklets, sidewalk games, and cultural installations.
- Workshops and Focus Group Discussions: These are means of engaging community members and accounting for their voice in the development process. Workshops may be conducted to exchange information and learning within the community for adoption of ITC-friendly infrastructure. FGDs may be conducted involving direct or indirect beneficiaries in the community who can share their experiences in an informal group which leads to grassroots level understanding of the issues.
- Reclamation of unused/open spaces: Unused open spaces can be developed in a manner incorporating ITC friendly initiatives. This includes noting areas which fall outside the catchment of existing public open spaces.24
- Information and Communication: Important elements include visual and written pieces of outreach. These may refer to websites, social media, public infographics, and press releases.<sup>25</sup> They should be very clear and direct, and retain consistency in color scheme and graphic styles across the project's communications to help people identify with it. Once a project is implemented, this media will be a great platform to stay connected and available to general public for evaluation stage. ULB may consider the types of audiences they want to reach and target relevant organizations or individuals.
- **Participatory Budgeting:** Participatory budgeting refers to the active involvement of people in the processes of budget priority setting and management. According to this approach, citizens and civil society along with the relevant organs of the Government and legislature, deliberate and negotiate over the distribution of public resources. While there is no standard model for it, experiments across the globe have emerge

<sup>24</sup> Reference from Urban95's outcomes in India

<sup>25</sup> how-to-implement-street-transformations, Global Designing Cities Initiative

from grassroots initiatives including local governments like Porto Alegre, Brazil, and mandated by national governments in countries such as Peru, Uganda, Bolivia and the Philippines. Key values for effectiveness for this tool include (i) transparency in budgeting, (ii) accessibility and participation of stakeholders, (ii) capacity building of local citizens, (iv) local ownership and commitment to shared responsibility. In India, prominent participatory practices have been implemented in Kerala and Pune and some processes towards adopting participatory budgeting have also been initiated in Delhi. <sup>26</sup>

Some more interesting methodologies for engagement for project implementation include surveys, public meetings, co-designing, etc.

# 3.7 Operation & Maintenance (O&M) and Activation (Programming of the ITC-friendly spaces)

O&M is undertaken via enterprise or agreement. A ULB may undertake an agreement for a Public Private Partnership (PPP) with a concessionaire company, depending on the kind of the project and its capacity to employ for operations and maintenance for the continued and smooth use of the project entities or services.

Monitoring of O&M should be carried out by teams identified by the ULB. The team should include Officials from the ULB, design and implementation team, as well as the Monitoring and Evaluation contracts. Key Performance Indicators (KPIs) may be identified on the basis of the performance requirements of the change brought about by the project in its region and to the target group. Various models of Operation & Maintenance financing exist in city organisations. For recognising the O&M costs that the project would incur by year, the ULB should identify the major assets built in the process of the ITCN development. Identify parameters and steps required to be taken for the maintenance of the implemented project. This should be done from the beginning of the project formulation and defining of roles for ULB departments, public stakeholders, and hired consultancies. The scope of O&M services should be defined during the preparation of the plan. Certain projects that a ULB may take up for the ITCN development in the city may be O&M heavy, i.e., may incur great work in this phase of the project. In defining these, an innovative approach can also be undertaken.

Community engagement can prove to be an extremely viable tool for O&M of a project. Community engagement may be defined as including community as participants in a collaborative decision-making process that guides the creation and execution of a defined scope of work. Engagement may increase or decrease throughout the project depending on need and focus. A community must have a commitment to maintaining its character and quality of place. To do this, a community must be a good land steward of peripheral open space; must maintain the streetscape and public view shed including litter and trash pickup; must insist on property maintenance for commercial, industrial and residential property; advocate for building with low maintenance materials; and must recognize the importance of maintaining a sense of safety and security.<sup>27</sup> Relatedly, a community can make an enormous contribution to achieving sustainability by maintaining control over a discrete number of key management variables such as minimizing the energy, material and land use requirements of the community and its inhabitants.

Additionally, new ITC design interventions will require people to adapt to new routines. City managers need to comprehend the complexities of use that exist in a community to help guide people on different stages of implementation so that they receive highest possible public support. Community engagement will be the driving force behind the success of ITCN design projects. Survey data collection and community engagement should occur simultaneously.

Creative placemaking can overturn the entire city development process through pop-ups and other space-activation activities that begin before and extend well after construction. The following are some considerations for keeping the creative momentum going with operating strategies<sup>28</sup>:

<sup>26</sup> https://www.cbgaindia.org/wp-content/uploads/2017/11/PARTICIPATORY-BUDGETING.pdf

<sup>27</sup> https://jefferson.extension.wisc.edu/files/2010/09/Placemaking-Document-2015-Principles-and-Practice-of-Community-Placemaking.pdf

<sup>28</sup> Creative Placemaking, Urban Land Institute

- Identify needed resources: To successfully implement an ITCN project that may run smoothly through its operations phase, identify all infrastructure and resource needs at the beginning of the process and integrate their costs into the plan. It is important to think about maintenance, operations, and ongoing programming and not just about front-end planning, design, and construction in case an amenity introduced by the project needs long-term maintenance, it may be considered to establish a funding model.
- Establishing partnerships and building trust with the community: Establish new cross-sector public/ private partnerships (PPPs) may prove important to break down the silos between government and private agencies. PPPs can be developed with improvement districts and funds or business partnerships that support planning, operations, maintenance, and programming. They can also be established on a smaller scale with an individual non-profit arts group that operates in venues of ITC development interest. New possibilities for collaborations with health organizations, environmental groups, architectural foundations, entertainment, food and other commercial businesses, and other unconventional sources are opened up by this approach.

For a project for development of parks in Washington, D.C., the developers included a non-profit arts organization on their team in meetings with the community. The idea was introduced for including an art district at the southern end of the site. Upon submitting the proposal, it was endorsed by all advisory commissions for the surrounding neighborhoods as well as the arts organisation.

- Do it yourself or outsource: With a well-considered plan and a budget that provides adequate support, municipalities and private developers can have maximum control by assuming maintenance, operations, and programming responsibilities. Alternatively, community partners or outside specialists could be looped in to manage and operate the amenities (for example, involving a school for maintaining an open public space). Investing in high-quality ongoing programming provides a very good return on property value, regardless of whether you do it yourself or outsource.
- Measure success: When measuring the success of a project, for example for creative placemaking, developers and local governments may measure various kinds of Return of investment (ROI). The effects may be observed as qualitative data or measured in terms of quantitative data like benefits to neighbourhood commercial spaces and vendors, change in rents and property values, etc. Online engagement through social media also allows to track interest in, and to document visits to development projects.

The market street (Ajmal Khan road) pedestrianization and neighbourhood development undertaken under the Karol Bagh29 market redevelopment project included walkability enhancement by improving access to parks and open spaces, and better parking management by changes to parking policy. This led to an MoU signed by the ULB with the market federation allowing them to retain the earnings from off-street parking in lieu of a monthly license fee payable to the ULB and with the market federation running the parking management. This also included running of services such as e-rickshaw, maintenance, lighting, electrical, vehicle charging points, valet etc. that the federation would provide.

Pop-up attractions and programming: To use returns from the boost made by development to neighbourhood spaces, temporary or pop-up projects can be introduced to activate the spaces within the neighbourhood that may generate benefits for operation costs. Programming of ongoing activities and events can be continued to generate long term interest in the use of spaces transformed by the concerned project. Programming can include arts and culture, commercial activity like food stalls operated by groups and associations of vendors from the neighbourhood commercial spaces, and meeting spaces for locals and neighbourhood associations, etc. Explore grants and funding partnerships for programming and operations from municipal arts boards or councils, business groups, private foundations, and non-profit organizations, as well as community banks. Tactical Urbanism (refer Section 5b) used as a tool in initiating the development and engagement of the project could act as a test case to provide for a series of programming activities that work for a specific neighbourhood.

It is also important the ULB refer to programme specific O&M recommendations and requirements. For instance, under AMRUT, once projects are completed the ULBs need to pay attention to the operation and maintenance of infrastructure assets created. It is recommended for projects being proposed to include O&M for at least five years to be funded by way of levy of user charges or other revenue streams. However, for the purpose of calculation of the project cost, the O&M cost will be excluded and the States/ULBs will fund the O&M through an appropriate cost recovery mechanism in order to make them self-reliant and cost-effective.

## 3.8 Monitoring, Evaluation, and Learning

Monitoring, Evaluation and Learning(MEL) is an exercise in measurement of what we are doing and what we are changing.<sup>30</sup> While monitoring is a process carried out throughout the programme cycle and uses indicators which would help in benchmarking against the ITCN objectives, the exercise of evaluation is conducted generally at milestones of programme implementation and captures the indicators which tell how the project intervention helped in bringing about the required change and impact to the quality of life of ITC group.

For a deeper understanding of how the project impacts the ITCs in the city and its neighbourhoods, the programme level indicators should emanate from an intended theory of change in tandem with the city level strategic position by the ULB. Through a city level theory of change, it is easier to identify the placement of the project and project activities in the long term impact of ITCN initiatives. At the programme level, a logical framework for results needs to be arrived upon to assist deriving the indicators based on how the project outputs and outcomes contribute to ITCN development in the city.

Whether the ULB undertakes the execution of entire ITCN programme within its own jurisdiction, or outsource monitoring and evaluations of the project to a separate party agency, certain criteria are essential to be integrated into the works as part of an MEL framework.

Evaluation metrics help measuring performance of the change introduced by the project in the neighbourhood. Measuring performance in this way enables progress to be calibrated and monitored across projects and over time. <sup>31</sup> The ITC dashboard <sup>32</sup> for the city includes implementation progress, project types, delivery timescales for different priorities and an overview of objectives met and benchmark scores. The results of the scoring require thoughtful interpretation and application to different contexts and projects. The dashboard enables the evaluation of project implementation including the priorities, milestones and progress of projects associated with Cities. 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.

The Service Level Benchmarks for ITCs are developed based on guidance in the Ministry of Urban Development Handbook on Service Level Benchmarks for Urban Transport at a Glance. They also align with existing requirements such as URDPFI, IRC, Urban Greening Guidelines, clarifying the relevance of such to ITCs and strengthening their role in policy making and project delivery.<sup>33</sup>

<sup>30</sup> Monitoring & Evaluation Workbook, CITIIS, NIUA

<sup>31</sup> Infant, Toddler, and Caregiver-friendly Neighbourhood Evaluation and Monitoring Metrics

 $<sup>32\,</sup> The\, Toolkit\, for\, creating\, an\, ITC\text{-}Centric\, City\, Level\, Data\, Dashboard$ 

<sup>33</sup> Infant, Toddler, and Caregiver-friendly Neighbourhood Evaluation and Monitoring Metrics

Project-specific indicators may be developed with the intention to reflect on individual project's outputs, outcomes and impact(s). Each city has a specific goal, defined objectives and comprehensive strategies to successfully plan, design and implement a particular project. <sup>34</sup>Depending on the scale of the project, cities may explore an additional layer of long term city level indicators (such as children enrolment ratio or air pollution level or equitable access to green spaces). Such indicators align with the overall city vision and may be adopted as part of a city-level monitoring & evaluation strategy. The ITC Dashboard in this context as well provides a consistent baseline against which outcomes can be measured and monitored with these periodic review points highlighted.

In order to optimise decisions and project output for ITCs, it is essential to identify the various metrics and benchmarks a project chosen by a ULB impacts. Cities may choose one or more relevant thematic areas to carry out the rapid or in-depth assessment using indicators majorly based on the Data Baseline<sup>35</sup> Toolkit. The following table presents an indicative list of projects that cities may undertake with respect to the thematic and corresponding criteria that should be considered for evaluation (listed with reference to indicators in the Data Baseline Toolkit).

Table 4: Evaluation Thematic areas, possible project types and Evaluation Metrics (indicative list, not exhaustive)

Thematic Project Types		Evaluation Metrics/Criteria to consider	
Area			
Socio- Economic Indicators	Anganwadi premises improvement     Provision of daycare centres     Improving access to schools and primary schools	<ul> <li>Healthcare staff in neighbourhood</li> <li>Public participation in ULB activities and representation</li> <li>Access to school infrastructure and community spaces</li> </ul>	
Built Environment Indicators	<ul> <li>Development of primary healthcare centres / Child Care Institutions (CCI) near or around vulnerable areas</li> <li>Design of public or community space</li> <li>Reclaim unused space or transform park for age appropriate Play</li> <li>Provision of natural Play equipment</li> <li>Improvement of housing facilities for informal settlements</li> <li>Integration of innovative systems like rainwater harvesting, decentralised water management, renewable energy sources in housing</li> <li>Improvement of neighbourhood SWM segregation &amp; collection</li> <li>Provision of urban water supply in regularised slums</li> <li>Safe toilet facilities</li> </ul>	<ul> <li>School enrolment rate</li> <li>Public school attendance</li> <li>Accessibility</li> <li>Greenery &amp; closeness to nature</li> <li>Utilization of parks by ITCs</li> <li>Coverage of water supply and electricity in the neighbourhood</li> <li>Reduce in load on water supply lines and electric grid form neighbourhood</li> <li>SWM services coverage &amp; efficiency</li> <li>Water supply coverage &amp; efficiency</li> <li>Access to Safe Sanitation Facility: Percentage of city population with access to safe toilets</li> </ul>	

<sup>34</sup> Monitoring & Evaluation Workbook, CITIIS, NIUA

<sup>35</sup> Toolkit for creating Data Baseline for Young Children in Cities

Thematic Area	Project Types	Evaluation Metrics/Criteria to consider
Safety	<ul> <li>NMT plan &amp; pedestrianization zones</li> <li>Accessible Footpath network</li> <li>Intersection redesign</li> <li>Introducing cycling infrastructure</li> <li>Public amenities like seating, signages, greenery, sanitation, drainage</li> <li>Parking management</li> <li>Provision of Bus transport at neighbourhood level</li> <li>Street lighting provision</li> </ul>	<ul> <li>NMT trips/penetration</li> <li>ITC mobility</li> <li>Neighbourhood accessibility</li> <li>Road length with footpath</li> <li>Safe intersections around schools</li> <li>Walkability (comfort &amp; safety perception)</li> <li>Accessibility</li> <li>Road safety and fatality rate</li> <li>Encroachment</li> <li>Wayfinding</li> <li>Noise pollution</li> <li>ITC user activity patterns</li> <li>Crime Rate against women and children</li> <li>Use of School Bus</li> <li>Area covered with Street Lights</li> </ul>
Governance and Planning	<ul> <li>ITC-focus Development plans, vision documents, or infrastructure projects</li> <li>ITC-focused GIS-based neighbourhood map</li> <li>Municipal Committees with representatives of CSOs for ITCs</li> <li>Capacity Building on ECD</li> </ul>	<ul> <li>Sensitisation levels</li> <li>Preparedness and advocacy</li> <li>Tools for stakeholder consultations</li> <li>ECD service delivery capacity</li> </ul>

The evaluation metrics support a cyclical process of assessment, reviews, learning and improvement. In the assessment on the 'Service Level Benchmarks' of the project as identified by the ULB, the benchmark values should be provided against the performance to be monitored. For reference the benchmarks can be indicated through Surviving (Low level), Striving (Average level), and Thriving (High level) values for a neighbourhood. The system of Surviving, Striving, and Thriving, gives a scoring system with thresholds that allows diverse kind of data to be compared<sup>36</sup>. The Surviving conditions should be achieved for all the neighbourhoods by the city, and thus the projects should aim to reach these values at the minimum, if not prevalent for a neighbourhood. The toolkit for creating a Data Baseline provides minimum benchmarks that any project must help a city to achieve for a neighbourhood. It is recommended that the Striving and Thriving level of indicator values should be reached immediately after the completion of the project, while for Thriving levels to be achieved with the help of the project, clear projections must be made by the cities. Cities may refer ITCN Evaluation and Monitoring Metrics to realise striving and thriving benchmarks for a neighbourhood. The Service Level Benchmarks for ITCs are developed based on guidance in the Ministry of Urban Development Handbook on Service Level Benchmarks for Urban Transport at a Glance. They also align with existing requirements such as URDPFI, IRC, Urban green guidelines, clarifying the relevance of such to ITCs and strengthening their role in policy making and project delivery.

The milestones for a ULB may be identified in view of the changing scenario of the ITC baseline in the city and may include periods of time extending beyond the project cycle in weeks for immediate assessments, to months to years for programme level interventions. Learning is a part of the monitoring and evaluation process that is carried out at all stages of a project, to provide for a constant feedback loop to performance. It is essential that ULBs incorporate learnings from each stage of the project cycle into the upcoming stages and make improvements in steps being taken for ITCN development. During evaluation stage, project implementing agencies need to revisit the first step of project cycle – ITC awareness – to assess the impact created by the project. This needs to be followed by documentation and communication of Monitoring, Evaluation and Learning results at specified times to present an evidence to different stakeholders. ULB should develop reports which can be in the form of project progress report, publications and case study etc. These document should highlight learnings, successes and also failures.

Specifically, to evaluate how we are progressing with the project in a public space, some matrices need to be defined including to understand utilization numbers, types of engagements, and interactions between user groups on site. To do this, tools from the 'Toolkit - for measuring urban experiences of young children' 37 by Gehl for Urban95 can be considered. These tools include the following:

- People moving count: The survey is simply about counting people moving through a space. This gives us volume of people moving through a space and can be used as an attribute to compare different sites with respect to time, day, week and year. The survey shall be timed for 10 minutes for a simple count during the peak hour, or the survey shall be repeated throughout the day to find out the highest footfall in the space.
- User profiles: This is an exercise to identify the most frequently sighted pairs/groups of infants, toddlers and caregivers in a public space and address their specific needs. Identify and count all ITC profiles visiting the public space during different times of the day and on different days of the week.
- Activity mapping: In order to understand how a public space functions for its people, it is crucial to understand the kind of activities taking place in that space. This understanding helps in identifying what works well and what requires further enhancement. An activity map is prepared using base map of the public space. Walk through the public space and observe within the demarcated area of study. Observe and make note of all activities that the ITC profiles are engaged in that space during different times of the day and on different days of the week. The selection of samples shall be carefully done to include all age wise categories of children and caregiver profiles identified in the profiling exercise.
- Urban95 Quality Criteria: This tool assesses specific urban qualities from the perspective of caregivers and young children. It is an informative discussion tool that allows us to highlight central characteristics of a public space for human well-being.

If we consider the examples of Anganwadi Centres (AWCs) and understand how the entire process of MEL will be carried out, we can consider some of the information such as enrolment of young children, actual usage of services of the centre by young children, quality interaction between young children and service providers, number of AWCs retrofitted, number of young children enrolled after retrofitting and what are the learnings which can be replicated.

<sup>37</sup> https://bernardvanleer.org/app/uploads/2018/10/Urban95-Field-Guide.pdf



## 4. Case Examples

## Case Examples

Two lighthouse Urban95 cities, Pune and Udaipur, under the active leadership of the Municipal Corporation and with the support of BvLF, have been working on the ground towards overall development with ITCs as the main stakeholders. BvLF has also supported the child-friendly initiatives in Bhubaneswar under the Child Friendly Smart Cities (CFSC) Project implemented by NIUA. These cities are working through multilateral levels of services to reach the common goal of achieving young child & caregiver friendly neighbourhoods.

In Bhubaneswar, the city authorities have been working over several years on creating examples for improving the quality of life of children through urban planning, design and policy. The city is also working under the Smart Cities Mission where learnings from on-ground work is also helping inform policy through guidelines and even training for other smart cities across India.

In Udaipur, the municipal corporation realized the need to transform the city's urban built environment into more child responsive and child friendly, and thus initiated the Urban95 program in the city. With BvLF's repository of related work and inputs from experiences of Urban 95 pioneering cities, the city's ULB acted nodal to leading its ITC-friendly initiatives. Annexure 01 looks at implemented projects from Udaipur which benefit ITCs in the city and contribute to ITC-friendly neighbourhood development from the perspective of the entire project cycle.

In Pune, Urban95 has been implemented through phases, and its current phase focuses on child- and familyfriendly features in public space, mobility and transport, neighbourhood planning and early childhood services. Annexure 01 details one such implemented project from Pune that demonstrates its implementation through various stages of the cycle.



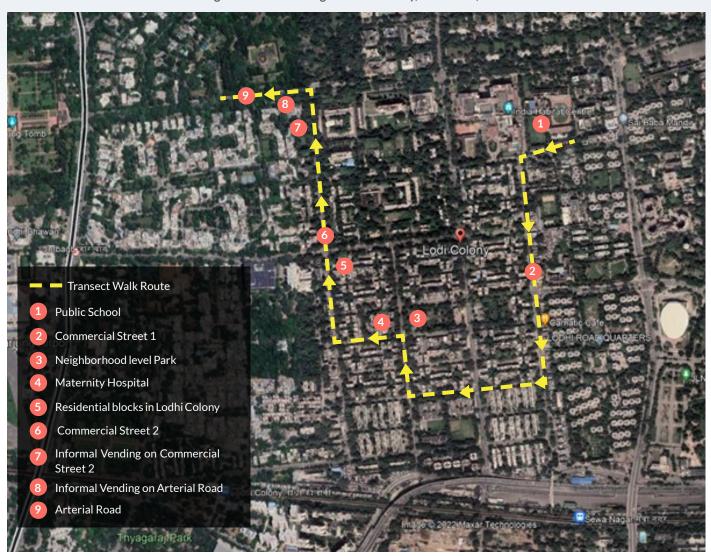


# 5. ITCN Transect Walk Lodhi Colony, New Delhi Case Study

Lodhi Colony, New Delhi is taken up by ITCN team, NIUA as a case study to assess the existing status of facilities related to young children in a neighbourhood. A transect walk was planned in the neighbourhood to understand the fabric of the place with the acquired lens of a young child and caregiver. The route for the walk traced along public spaces, open spaces, health centre, education institute, retail complex, street vending kiosks and residential area.

As an overview, the neighbourhood is a planned settlement with designated zoning to make necessary services available within walking distance of most residential complexes. Social and physical infrastructure is sufficiently provided and maintained. Wide streets offer an opportunity to activate street fronts with multiple activities which lay dead at the moment. Though an attempt to rejuvenate the area with wall paintings is a gigantic success in bringing a city-wide identity to the neighbourhood. While the residential blocks have dead street fronts, there are couple of markets in the area that remain to be vibrant and active throughout the day. The location and design of the neighbourhood in itself invoke a sense of security to the place and children can often be spotted walking or playing by themselves in the parks. The observations are further structured below under sub-headings to understand varied nature of the place:

Figure 8: Satellite image of Lodhi colony, New Delhi, India



Neighbourhood Zoning - The entire neighbourhood is distinctly segregated into residential zones with an adequate overlap of organized open green spaces and institutional areas. Residential area is made up of a replicable unit with around 20-30 houses arranged around a wide open green compound which is easily accessible yet buffered from the street. Figure 05 and figure 07 shows the entrance to the compound from the street directly. The shared compound spaces are provided with dedicated parking spots and sometimes, open gym equipment for adults. Though, it was observed that most of the open compounds were ill-maintained. Immediate need for provision of play facilities can be seen in Figure 06 where a small girl can be seen playing on gym equipment's provided in the area. It is interesting to note that a young child was playing alone in the complex which it itself testifies the sense of security caregivers feel about the planned space and These multipurpose courtyards can be leveraged to activate the area with play opportunities and community spaces to enhance the functionality of the whole complex.

Figure 9: Entry to one residential block



Figure 10: Open complex in a residential block



Figure 11: Accessibility of residential blocks through street



**Streets** – Right of way for most streets in the neighbourhood is sufficient to accommodate street side activities, still most of the street fronts remain dead as can be seen in figure 9. At certain points, mostly around retail complexes, street side vendors are a pretty common sight. Street vending kiosks on the streets create a sense of vibrancy and passive surveillance on the streets as shown in figure 8. Intersection of arterial road and collector roads are often marked with few activities popping up around it. Figure 11 shows a small café at one such junction; it is acting as an activity center as the cafe seating extends on the footpath, other small vendors have placed their carts around the node as well.

Streets are continually lined with footpaths but they are often unevenly levelled, broken or encroached at multiple locations. In figure 10, it is evident that the broken footpath forces children to walk on the carriage way which can be very dangerous for a young child. In general, the neighbourhood is well landscaped and green in nature. All streets are lined with shading trees and ample street lights encouraging a pleasant walking experience. Though this walking experience remains secluded at the moment and doesn't consider the need of vibrant, playful activities for a young child to stay indulged in a place. The streets are not densely populated with vehicles and are wide as well to host temporary closures for motorized traffic, so as to encourage young children friendly events as a community initiative for well-being. Emerging 'pause and play' concept can be explored further to adopt tactical interventions for instantly brightening up the street fronts.

Figure 12: Informal vendors along the street



Figure 13: Wide buffer space along most streets



Figure 14: Broken footpath forcing young children on the carriageway



Figure 15: Active facades on the arterial road



Play areas – Hierarchical open spaces have been planned across the neighbourhood which are mostly well equipped, organized and maintained. Detailed assessment of one neighbourhood level park named 'Veer Savarkar' was piloted by the team during transect walk. The park is definitely a good example that considers the specific needs of young children & their caregivers.

A well adopted planning approach divided the park into separate zones which blended into one another seamlessly. Segregation was mostly done on the terms of level difference, landscaping elements or usage of different materials. There was a successful attempt of providing age-responsive play facilities by allocating separate spaces for 0-5, 5-12 and older than 12 years of children which was clearly visible through the vocabulary of space as well as through appropriate signages (figure 12). Sensory play elements such as a sandpit for toddlers and open gym equipment's for caregivers were placed next to each other to facilitate passive surveillance (figure 13). There was also a small library for children to sit and read at a comfortable space (figure 14). On the other side of the park, landscaped moulds created a captivating space by adding varying topography features within the park (figure 15).

Figure 16: Age-wise zoning of play areas



Figure 17: Provision for caregivers adjacent to play area



Figure 18: Library within the park premises



Figure 19: Landscaping in the park



Social and Physical infrastructure- As a general observation of the neighbourhood, provision of social and physical infrastructure is adequate and efficient throughout. There are markets, activity centres, community halls, organized open spaces, health facilities and education centres in walking proximity of most residential blocks. Though no attempts were made in all these places to accommodate specific needs of a young child & caregiver. While there were ramps constructed along the streets at regular intervals, most of them were broken and the child would have difficulty to walk on it. There were no elements on the street to indulge young children and only hovered around public spaces for adults. The average height of a 3-years-old child is 95cm and hence, they cannot have access to facilities beyond their height. On a visit to Palika maternity hospital, an immediate health facility in the neighbourhood, it was observed that many people visit the facility on a regular basis from neighbouring localities. Even after being a place for young children & mothers specifically, there were no visible attempts made to ease the visit of young children, caregivers and pregnant women. Figure 16 shows the waiting area of the facility which is just some benches laid out in the compound. They could have easily gone a step further to introduce ECD related activities or knowledge while children wait & learn at the same time.

Conclusion - The selected neighbourhood is well-planned within intersecting zones of recreational and residential land use, well equipped with infrastructure facilities though there are no special considerations for young children and their caregivers. The need to make communities aware about the specific needs of young children while growing up in a neighbourhood is felt strongly. As mentioned above, several initiatives can be suggested along different kind of spaces to immediately brighten up the area. Tactical urbanism can be a good start to start accommodating the immediate nees of providing age-responsive play along the streets & public spaces. An initiative like Raahgiri has established the need, importance and overwhelming success of open street events which take minimum efforts to be plugged in city fabric but end up providing a much caring environment for a child to indulge in. It is to be noted that the neighbourhood is one of the finely planned neighbourhoods in the city and even then there is little consideration to adapt towards the needs of young children. We need to build a city-wide culture to get aware on the importance of providing for their youngest citizens as a first step towards creating young-child & caregiver friendly neighbourhood.



Figure 20: Caregivers wating with young children





## 6. Annexure

### **| 6.1 Annexure 01**

## Case examples

Two lighthouse Urban95 cities, Pune and Udaipur, under the active leadership of the Municipal Corporation and with the support of BvLF, have been working on the ground towards overall development with ITCs as the main stakeholders. They are working through multilateral level of services to reach the common goal of achieving young child & caregiver-friendly neighbourhood.

#### Case Example - I: Urban 95, Udaipur

This section looks at implemented projects from Udaipur which benefitted ITCs in the city and contribute to ITC-friendly neighbourhood development with a close lens of tracing project cycle.

Refer: https://udaipurmc.org/pages/urban95.

Udaipur Municipal Corporation (UMC) realizing the need to transform city's urban built environment into more child responsive and child friendly, signed a MoU for initiating Urban95 program in Udaipur. With BvLF's repository of related work and inputs from experiences of Urban95 pioneering cities , the city's ULB acted nodal to leading its ITC-friendly initiatives.

The programmatic approach undertaken in Udaipur helped visualise development of ITC-friendly neighbourhoods in phase wise development. The city's initiatives took shape largely through the following steps, including the project cycle undertaken for a specific area:

#### **Creating Awareness**

With the commencement of Urban95 Phase-1 in 2019, multiple stakeholder consultations were held for raising awareness on issues focusing on ITC group. A major activity conducted in this regard included Peer Cities Workshops.

The 'Launch Workshop' acted as the official launch of the Urban 95 Program in Udaipur<sup>38</sup>. This included sharing of National and International Experiences on Child Responsive Cities as well as shared the Citizen's Vision with city officials through stakeholder engagement and brainstorming.

This was followed by the first Peer95 Learning Workshop for the city in July 2019, whereby tools were introduced to measure needs and experiences of young children and their caregivers. The highlight of these workshops included sharing and learning from the data collection and analysis experiences of partner cities under the Urban95 programme. This workshop acted as a means for awareness generation on the importance of ITC Group by introducing to the city officials to social and behaviour change concepts and tools in the Urban 95 initiatives. Stakeholders from within and outside the city, that participated in the workshops included city officials from within the city including municipal staff and officers, built environment professionals, representatives from partner organisations, and caregivers.

#### **Baseline Assessment**

A comprehensive Baseline Assessment study was conducted for Udaipur as an initial step to establish the ITC needs in the city and make interventions accordingly. The baseline study was carried out in 6 wards, covering 120 households over 150+ survey days and 12 mock survey days.

It included primary surveys with the objective of improving the behaviours of young children, their caregivers, and of municipal staff providing services to these groups:

- Household Surveys: Household Surveys were conducted with the targeted households within the pilot wards, having presence of young children, pregnant women or lactating women, as a means of direct engagement with communities
- Focus Group Discussions (FGDs): FGDs were held with various groups at various ITC destinations
- Key Informant Interviews (KIIs): KIIs were held including with community leaders, RWAs president/ chairman, residents having first-hand knowledge about the community and on the ITC facilities, as well as with important stakeholders from the government.

#### **Strategic Planning**

The Municipal Corporation used Ward level intervention as the strategy for implementing ITC-friendly neighbourhood development within the city. For using the vast data collected through the Baseline Assessment, relevant ITC indicators were identified for selecting a Ward for Pilot demonstration by looking at available secondary data. The case of Udaipur's pilot interventions demonstrates the importance of data collection for creating a baseline and data analysis for the creation of a strategy for intervention.

The city compared its Wards on the following important Indicators like:

- Per Capita Green Space
- Population 0-6 years
- Population Density
- Number of Anganwadi Kendras
- Number of PHC
- Private Children and maternity clinic

<sup>38</sup> Phase II of Urban95 officially launches in Udaipur - Bernard van Leer Foundation https://bernardvanleer.org/news/phase-ii-of-urban95-officially-launches-in-udaipur/

- Number of Play Schools and Daycare Centres
- Income level
- Preparation of green space area in each ward
- Numbers of Street Lights
- SWM Complaints
- Accidents
- Crimes
- Presence of tourist locations with high floating footfalls

The parameters were brought to the same scale and scores of different Ward were analysed, in the following manner:

Bringing all **Finalisation** Adding of ward level **Finalisation** parameters Ward level individual analysis using on same of ITCN scoring on scores Identification range from scale using Indicators scale 0-10 against each of relevant poor to optimal scoring based on (10=best) parameter **ITCN** wards (optimal method available against to get % for Indicator having highest within secondary each mapping score for all bandwidth data parameter reference parameters) of 5 ranges

Figure 21: Parameters to analyse ward in Udaipur

Source: Urban95 Phase-I & II, Udaipur - Overview, Achievements & Learnings, Udaipur Municipal Corporation 39 (flowchart)

#### Finance mobilisation/funding

The Udaipur Urban95 programme was implemented with the ULB, Udaipur Municipal Corporation, as the anchoring agency and with support from Bernard van Leer Foundation.

In addition to the various initiatives taken under the programme, the city of Udaipur has made a provision for incorporating ITC-centric projects. This is done by providing for a separate budget head under UMC Annual Budgetary Allocations for taking up children and their care- givers friendly oriented development. Any project that accommodates or centres around development provisions that help the development of ITC-friendly neighbourhoods may also now come under the city's municipal corporation's initiatives.

#### **Spatial Planning**

The selected project under the Urban 95 programme is undertaken in the neighbourhood of Ashok Nagar.

For the implementation of ITCN development, land use and area mapping was done within a radius of 600m from a specific project site (Hanuman Park). Mapping of the area was done based on the following classifications:

- Roads: Primary, secondary, and tertiary
- Housing: HIG, MIG, LIG
- Land use: Residential, Commercial, Institutional, and Parks, open spaces and greens

It was inferred that the neighbourhood provides an inclusive environment, enriched green spaces, and connectivity with major nodes of the city

<sup>39</sup> Urban95 Phase-I & II, Udaipur - Overview, Achievements & Learnings

The process of development of an ITC-friendly neighbourhood followed the following thematic design:

Figure 22: Development Process in Udaipur

Indentifying issues based Proposing solutions for Converting **Understanding 5** on individual objective barriers through themed barriers to ITCN Objectives from visual and Gehl survey design interventions motivators

Source: Urban95 Phase-I & II, Udaipur - Overview, Achievements & Learnings, Udaipur Municipal Corporation 40

The physical elements involved in the spatial planning for ITCN development were related to Early Childhood Development targets. ECD is promoted through the special features which are as following:

- Safe and interactive pathways Safe Design of Roads and Streets
- Socially interactive, joyful and playful Playful **Designs for Roads** and footpaths
- Dedicated area to helps spend more time in nature Exclusive Play Area In The Park
- Gross motor skills Age appropriate Play (Play in Sandpits, walk, run, jump, tot lots, etc.)
- Cognitive Development Green and Various Material Finishes
- Socio-emotional Development (seating and interacting with other kids and their caregivers) Seating Areas in Road Corridors and in the Park
- Creative development Innovative Design Themes
- Language Development: Interact with other kids and their caregivers, listening to different nature voices, queries) - Public Art like Wall Art

The proposed special features of the project under the Ashok Nagar Street Network Conceptual Proposal includes Sidewalks, Way finding signages, Zebra crossing, ITC safe crossings, Traffic signages, Rumble strips.

The project example within this neighbourhood development taken for demonstration is park. The site of Hanuman Park within the neighbourhood was selected as Anchor Institute based on the following characteristics and potential support for the project identified from the data collected for the site:

- Surrounded by other ITCN destinations e.g., Playschool, community centre, temple etc.
- Anchor Institute has ITCN friendly equipment (Open gym, Play equipment, rest area, designated pathways etc.) to engage them.
- Anchor Institute is easily accessible from the rest of the areas of the zone
- Potential to attract more ITCN footfall and encourage their activities.
- Ample space to develop a playful and learning environment for young kids.
- Support facilities like toilets, adjoining community centre, enclosed with the boundary wall and gate and peripheral lighting provisions for safety and security

<sup>40</sup> Urban95 Phase-I & II, Udaipur - Overview, Achievements & Learnings

The key features of the anchor project included:

- Dedicated play area for ITC inside the park
- Engaging floor games, geometric patterns and active facades as sidewalks to make the park more accessible and increase footfall
- Cycle stands and dedicated parking spaces to resolve the issue of unorganized parking
- Introducing shared streets to increase engagement between caregivers and children of the neighbourhood
- Natural play elements, toddler swings, sandpits and rolling ground

#### **Tactical Interventions**

An innovative and quick approach for testing this implementation that was undertaken is through Tactical Urbanism, or a Semi-Permanent Implementation on-ground. Elements included in the semi-permanent implementation were:

- Measured road markings for the said interventions
- Engaging wall paintings for an active facade
- Activities for participation of neighbourhood children actively in the implementation
- Engagement of local and project stakeholders through the test of the temporary intervention

As part of the intervention, pre- and post- impact analysis was undertaken with before and after measurement of the following Urban 95 quality criteria:

- Presence of ITC sub-groups
- Perception of Protection from: traffic and accidents; crime and violence; against unpleasant sensory experiences
- Fulfilment of Basic needs: feeling of comfort; opportunities for good hygiene and health; convenient opportunities for consumption
- Comfort: opportunities to walk and cycle, walk and stay, and to see
- Invitation to interaction: with environment; to talk and listen; play and exercise
- Connection: flexibility, access, integration

Analysis from the test implementation helped with the following observation:

- It was observed that the Urban 95 quality criteria, before implementation had unsatisfactory and neutral responses, and after implementation, some saw changes.
- Positive responses were observed in Visual connectivity, improvement in accessing the park, interaction with environment, feeling of comfort, better sensory experiences, etc.
- The community highlighted the need for such young child-friendly spaces in the city.
- Increased awareness among children and their caregivers on how a journey experience can be created as vibrant and engaging for young minds.
- The neighbourhood community's behaviour was to continue to dump garbage near the site despite advocacy, awareness and attempts to promote disposal in Nigam garbage vans.
- Capacity building of caregivers, showcasing advantages of outdoor play areas is needed.
- Improvement in the road width and geometry and drain cover along the path with attractive way finders and vibrancy on the road are needed.
- Need to scale up media visibility of such events for wider dissemination of ECD and social behaviour change objectives.

Figure 23: Engaging wall paintings



Figure 24: Neighbourhood children actively participating



Source: Urban95, Udaipur, UMC

#### Implementation Tools employed

#### *Training and capacity building:*

A orientation cum training program of Aanganwadi Workers, before the start of on- ground surveys was done. The Anganwadi training workshop focused on significance of early childhood development and on-ground field challenges.

#### Learning and knowledge sharing workshops:

The initiatives of the city were shared at national level for the learning of cities taking up projects of a similar nature. This included a showcase of Urban95 Phase-I work among selected projects throughout India, at the Web launch of 'Streets for People', a joint initiative of ITDP and MoHUA. Urban95, Udaipur (Phase-I) also became a lighthouse example for other cities in India including through inclusion of its projects in a guidebook disseminated through workshops for cities under the Nurturing Neighborhoods Challenge, a joint initiative of BvLF and MoHUA.

#### Community engagement activities:

Through the Urban95 Kids Festival, the city engaged with young children and their caregiver sas direct and active beneficiaries. Young children were exposed to activities stimulating sensory experiences for touch, sight, and hearing. The event acted as a means for getting caregivers aware of benefits of outdoor environments in the growth and development of children. Including stakeholders in the festival led to an imbibing involvement of service providers to develop more such spaces. The city developed interactive outreach and IEC material with infographics to share information regarding the activities and benefits of the programme on print and social media.

#### **Evaluation**

For the Hanuman Park project as part of the Ashok Nagar, certain metrics for evaluation were developed as follows via Community Engagement survey for Hanuman Park and feedback from user:

- Average time spent by caregiver in the park
- Average visits to the park in a week
- Gender ratio among caregivers

The survey was taken to understand the footfall in the park, interact with the stakeholders and develop insights from their patterns of visiting and amount of time spent on site. The above criteria helped infer and lead a way forward in the following manner:

- The visiting hours are similar and coordinated amongst caregivers so that their children can socialise and play with other children
- People who visit the park from far away locations are irregular and come once or twice a week.
- Mostly the caregivers were female.

#### Case examples II: Urban95, Pune (Sambhaji Garden)

Neighbourhood parks and playground allow young children to develop their overall well-being. A tactical intervention was designed in Pune, an Urban 95 city, to integrate sensory development elements within a park with a view of physical, cognitive and social development of the infant, toddlers and their caregivers. The case explains the process adopted during intervention, challenges and learnings.

Refer: https://www.pmc.gov.in/sites/default/files/Basic%20Page/200920\_Tactical%201.pdf

#### Intervention site-Sambhaji Garden, Pune

Based on the stakeholder consultations, 'Sambhaji Garden' was considered for intervention. The Sambhaji Garden is a park area, operated and maintained by the Pune Municipal Corporation. The garden was taken up with the sole motive of reimagining the existing infrastructure as an ITC friendly space. The park had high footfall of infants, toddlers and caregivers, but there was no enough space to encourage free play for toddlers along with a place for caregivers to sit and interact with each other. To overcome space restriction and optimize it further, the intervention was planned and executed.

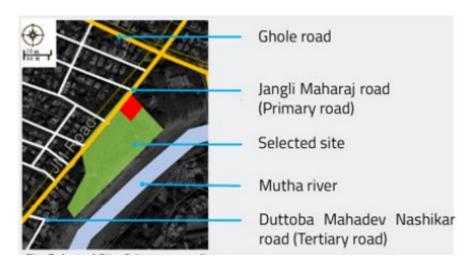


Figure 25: Selected site and its surroundings

Source: Urban95, Pune, PMC

A structured step by step process was followed from the initial stages of data collection to the post implementation stage of monitoring and evaluation of the project.

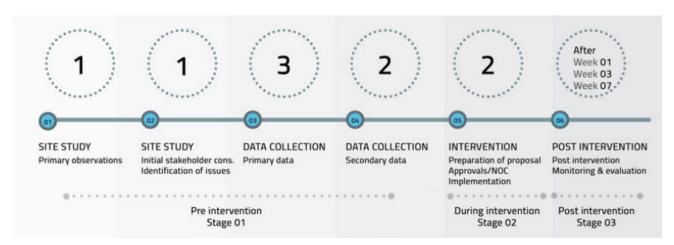


Figure 26: Step by step process of the Sambhaji Garden Project

Source: Urban95, Pune, PMC

The pre- intervention stage included initial surveys along with data collection through various processes like focused observation mapping, intercept surveys and qualitative interviews. It also included mapping of stakeholders at various levels. The stakeholders included Garden department, Pune Municipal Corporation, Garden users of all age groups and the neighbourhood residents. In the execution process of 10 weeks, local college students and garden department junior engineers were involved. Photo documentation was done during the 1st, 3rd, 6th, 8th and 10th week of intervention. Post-implementation documentation was undertaken to compare and identify the impact.

Following key issues and challenges were identified during stakeholder consultations:

- Safe and secure waiting space was not available for caregivers and play area was not available for young children.
- Lack of visually appealing space was another challenge in the identified site.
- Community was not aware about the concept of early childhood development and its importance.
- There was lack of use of sustainable materials and processes.

#### **Design Concept & Tactical Intervention**

Looking into the key issues and challenges, the aim of the intervention was to make a safe and accessible environment for the movement of ITCs and repurpose the open -gym area within the park through basic senses like touch, visuals and feasible materials like tires and waste bottles. To fulfil this idea, the ITC elements were explored such as wall art and painting; creation of sustainable play space by reusing materials for seating and climbing activity and boundary wall.

The design interventions for the 'Sambhaji Garden' were developed as per the ITCN design guidelines and objectives of ITC friendly neighbourhoods such as 'Playful' and 'Accessible'. The interventions included:

- Crawling and climbing equipment for infants and toddlers to promote adventurous and sensory play.
- Seating created by using tires promoting group benches together to provide a clear view to caregiver of the young children
- Creation of colourful graffiti wall to promote learning
- Humps, mounds and shaded areas to promote free play

#### **Outcomes of the Intervention**

The post implementation monitoring and evaluation was performed by monitoring the park at regular intervals and conducting interviews with caregivers of young children and park caretakers. From the interview conducted with caretaker of the park, it was understood that the park was intensively used by young children within the age group of 0-5 years and the caregivers.

#### **Key Learnings from the Implementation**

- Use of robust materials led to long term sustainability.
- Historical culture of city can be portrayed through wall arts. It will help children to learn and it is also cost efficient.
- A maintenance regime or stakeholder accountability is must. As the intervention was temporary experiment by Municipal Corporation, there was no maintenance provided onsite and the space fell into disarray. It should be taken note of while designing the future interventions.
- The intervention provided with familier environment for young children to have active play. The initiatives taken also provided comfortable wait for caregivers of the young children.

There is possibility of scaling up the intervention in the green premises of crèches, pre-schools, public institutions and city parks. Usage of locally available and robust materials promotes ease of scaling up the intervention.

#### **Stagewise Progress**



Source: Urban95, Pune, PMC

## 6.2 Annexure 02

#### Checklist 01 (life cycle of the ITC-friendly project)

The checklist summarizes the steps to be taken throughout the lifecycle of a project. Starting from knowledge need assessment which paints a picture of ITC awareness within the city to the O&M practice through community engagement. The checklist offers binary answers to simply ensure the major steps to be taken.

Table 5: Checklist 01

S.no	Project process	Sub-task	Completed (Yes/No)
1	Knowledge need assessment to measure ITC awareness of city		
2	Data Baseline assessment	Rapid Assessment	
3	- Data Dasellile assessifierit	In-depth assessment	
4	- Data Dashboard	Data analysis	
5	- Data Dashiboard	Data visualisation	
6	Determine strategic position		
7	Develop a strategic plan allocating resources		
8	Finalize Implementing Agency		
9	Allocation of roles & responsibilities within implementing agency		
10	Hiring of consultancy if applicable		
11	Feasibility study		
12		Surveys	
13	Fiscal planning	Available funds	
14	- Fiscal planning	Finance mobilization	
15		Preparation of BOQ	
16	Spatial planning		
17	O&M measures		
18	Community engagement		

#### Checklist 02 (ITC-friendly design elements consideration)

In the toolkit, park/open spaces have been used as a project to demonstrate the live project cycle of a ITC centric project. The following checklist dives into further detail of open space, streets and public areas to highlight certain elements to be considered while designing the mentioned area.

Table 6: Checklist 02

Thematic areas Space		Elements for consideration		
	Junctions/Intersections	Pedestrian Crossings		
	Fortroll	Ramps		
	Footpath	Passive Surveillance		
		Temporary Street Closures		
		Pause & play spots		
Thematic area 01: Streets		Landscaping		
	Street elements	Seating area		
	Street elements	Appropriate Lighting		
		Young child friendly Way Finding		
		Landscaping		
		Shaded spaces		
	Neighbourhood park	Toilets		
Thematic area 02:		Drinking Water		
Open green spaces		Nursing Booths/ Diaper changing station		
		Zoning For Age-Responsive Play		
	Tot-lots	Permeable Boundaries		
		Sensory Elements		
		Safe surfaces		
Thematic area 03:		Safe play Equipment Materials		
Public places		Shared Streets		
	Pause and play	Low Height Services for young children		
		Playful Furniture		
		Sidewalk Games/Painted		

#### Checklist 03 (ITC-friendly project efficieny assessment)

Once a project is at an evaluation stage, utility of the place can be measured through the following checklist. It assists in evaluating the efficiency of the services in the project by benchmarking it in three available options – striving (High level), thriving (Average level) and surviving (Low level). 'Surviving' values are understood as the minimum basic requirements for the early childhood development among young children in a space, the 'Striving' values refer to those which go beyond the basic minimum required but are not the maximum possible, while the 'Thriving' values of the measured metrics are those which are considered as the best case scenario. Please tick one option for each service by referring benchmark values for a neighbourhood, as expressed in ITCN Evaluation and Monitoring Metrics.

Table 7: Checklist 03

How Efficient Is It For ITCN?			
Services		Benchmarks	
	Striving	Thriving	Surviving
Accessibility			
Size			
Location			
Topography			
Landscaping			
Material			
Green Spaces			
Climate Concern			
Shaded Seating Spaces			
Gender Neutral			
Landscaping			
Relevant Lighting			
Young Child-Friendly Way Finding			
Landscaping			
Shaded walkways			
Toilets			
Drinking Water			
Nursing Booths & Diaper Changing Station			
Permeable Boundaries			
Sensory Elements			
Surfaces			
Equipment Materials			
Low Height Services			
Playful Furniture			
Sidewalk Games/Painted			
Shaded Play And Pause Areas			

## References

- BvLF. 2019. Infant, Toddler, and Caregiver-friendly Neighbourhoods Design Guidelines
- BvLF. 2019. Infant, Toddler, and Caregiver-friendly Neighbourhood Evaluation and Monitoring Metrics
- BvLF. 2019. Infant, Toddlers and Caregiver friendly Neighbourhoods Policy Workbook
- BvLF. 2019. URBAN95 STARTER KIT Ideas for Action https://bernardvanleer.org/app/uploads/2018/05/Urban95-Starter-Kit-1.pdf
- BvLF. 2021. Phase II of urban 95 officially launches in Udaipur
- BvLF. Toolkit for measuring urban experiences of young children
- CBGA. 2017. Participatory Budgeting: A case of Delhi https://www.cbgaindia.org/wp-content/ uploads/2017/11/PARTICIPATORY-BUDGETING.pdf
- Department of Expenditure, Gol. 2006. Manual of Policies and Procedure of Employment of Consultants https://doe.gov.in/manuals/manual-policies-and-procedures-employment-consultants
- Department of Information Technology, MoCT, Gol. Preparation of Model Requests for Proposals (RFPs), Toolkit and Guidance Notes
- GDCI. 2022. How to implement street transformations https://globaldesigningcities.org/publication/how-to-implement-street-transformations/
- https://ideas.developingchild.harvard.edu/theory-of-change/#sticky-nav-target
- Kagan, J. 2023. Financial Operating Plan (FOP) https://www.investopedia.com/terms/f/fop.asp
- Malsum, W. 2021. What is Alternative Analysis in Project Management https://www.projectmanager.com/blog/what-is-alternative-analysis
- MCD. 2010. Karol Bagh Urban Design UTTIPEC submission http://www.uttipec.nic.in/upload/uploadfiles/files/9173801031.pdf
- MoHUA, Gol. 2017. Appraisal Guidelines for Metro Rail Project Proposals https://mohua.gov.in/upload/ uploadfiles/files/Appraisal%20Guidelines%20for%20Metro%20Rail.pdf
- MoUD, 2015, Model Request for Proposal for Recruitment of Consulting Firm for Project Development and Management Consultant (PDMC) for Atal Mission for Rejuvenation and Urban Transformation https://localbodies.up.nic.in/DLBGO/RFP FOR PDMC-AMRUT.pdf
- NIUA. 2023. The Toolkit to create an ITC-Centric City Level Data Dashboard
- NIUA. 2023. Toolkit for creating Data Baseline for Young Children in Cities'
- PMC. Urban95 Pune, Tactical Urbanism Interventions Sambhaji Garden https://www.pmc.gov.in/sites/default/files/Basic%20Page/200920 Tactical%201.pdf
- TCPO, MoHUA. 2015. AMRUT Guidelines http://www.amrut.gov.in/upload/uploadfiles/files/ AMRUT%20Guidelines%20(1).pdf
- ULI. 2020. Creative Placemaking https://knowledge.uli.org/-/media/files/research-reports/2020/ creative-placemaking-v2.pdf
- UMC. 2022. Broad overview of the U95 program and Rapid Behavioural Assessment (RBA), Consultation with City Level Government Officials Udaipur (Urban95) (https://udaipurmc.org/pages/urban95)
- Urban 95 phase I & II, Udaipur- Overview, Achievements & Learning
- WISC. 2010. Principle & Practise of Community Placemaking https://jefferson.extension.wisc.edu/files/2010/09/Placemaking-Document-2015-Principles-andPractice-ofCommunity-Placemaking.pdf





### **National Institute of Urban Affairs**

1st Floor, Core 4B, India Habitat Centre, Lodhi Road, New Delhi - 110003 Phone: 011-24617517, 24617543, 24617595 E-mail: niua@niua.org • Website: www.niua.in