INFANT, TODDLER, CAREGIVER-FRIENDLY NEIGHBOURHOOD

EVALUATION & MONITORING METRICS

Smart City
MISSION TRANSFORM-NATION

Ministry of Housing and Urban Affairs
Government of India

Bernard van Leer
FOUNDATION

URBAN
95

BDP.

Ministry of Housing and Urban Affairs
Government of India

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

http://mohua.gov.in/

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.

https://bernardvanleer.org/

BDP.

Founded in 1961, BDP is one of the largest interdisciplinary design led firm in Europe and has won over 750 awards for design quality from international and national bodies. BDP established a studio in India in 2010, and has worked on projects at every scale, from city masterplans to detailed public realm design; from concept through to delivery. BDP brings skills involved in the design of great spaces and environments into a single, managed service. The team in Delhi provides masterplanning, urbanism, architecture and landscape design services with access to the combined expertise of all of BDP professionals worldwide.

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Evaluation Metrics

The following document provides guidance on metrics for evaluating progress toward ITCN objectives. The ITCN Evaluation Metrics are elaborated here as a list of key Service Level Benchmarks, and a parallel dashboard tool which offers authorities accurate and simplified comparison across all 100 Smart Cities.

THE IMPORTANCE OF EVALUATION METRICS

Taking data seriously can lead to better decisions and more effective actions by simplifying, clarifying and making aggregated information available to policy makers. Evaluation metrics can help to incorporate scientific research into evidence-based decision-making. They can help to measure performance and calibrate progress, and can illuminate lessons learnt and reassess priorities through review. They can provide an early warning to prevent economic, social and environmental setbacks. They are also useful tools to communicate ideas and values providing shared and common objectives for different agencies to work towards.

Evaluation metrics measure aspects of the city that influence the daily lives of infants, toddlers and caregivers and give an overview for comparison between cities. Since the ITCN is an emerging concept in India, it is crucial to assess and review the effects of interventions.

This document contains a set of 65 indicators that officials can use to measure the quality of a neighbourhood for ITC needs.

The indicator set was created through a process of literature review, expert input from the fields of urban management and early childhood development, and a peer-review feedback cycle. The key features of the indicator list are:

- To provide a comprehensive view of the conditions of neighbourhood spaces and services pertinent to ITCs.
- To be economical in length: offering the essential data needed to make sound decisions especially around spending.
- Divided into a two-level hierarchy of "core" and "supporting" offering guidance on where what to prioritize in gathering.

The evaluation metrics cover spatial indicators **at the neighbourhood scale** and indicators have been chosen that enable the comparison of data within and between cities.

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How should I check if my neighbourhood meets ITC requirements? → **INDICATORS**

What should I aim for to become a 'thriving' ITC neighbourhood? → **BENCHMARK VALUE**

How should I do it? → **DESIGN GUIDELINES**

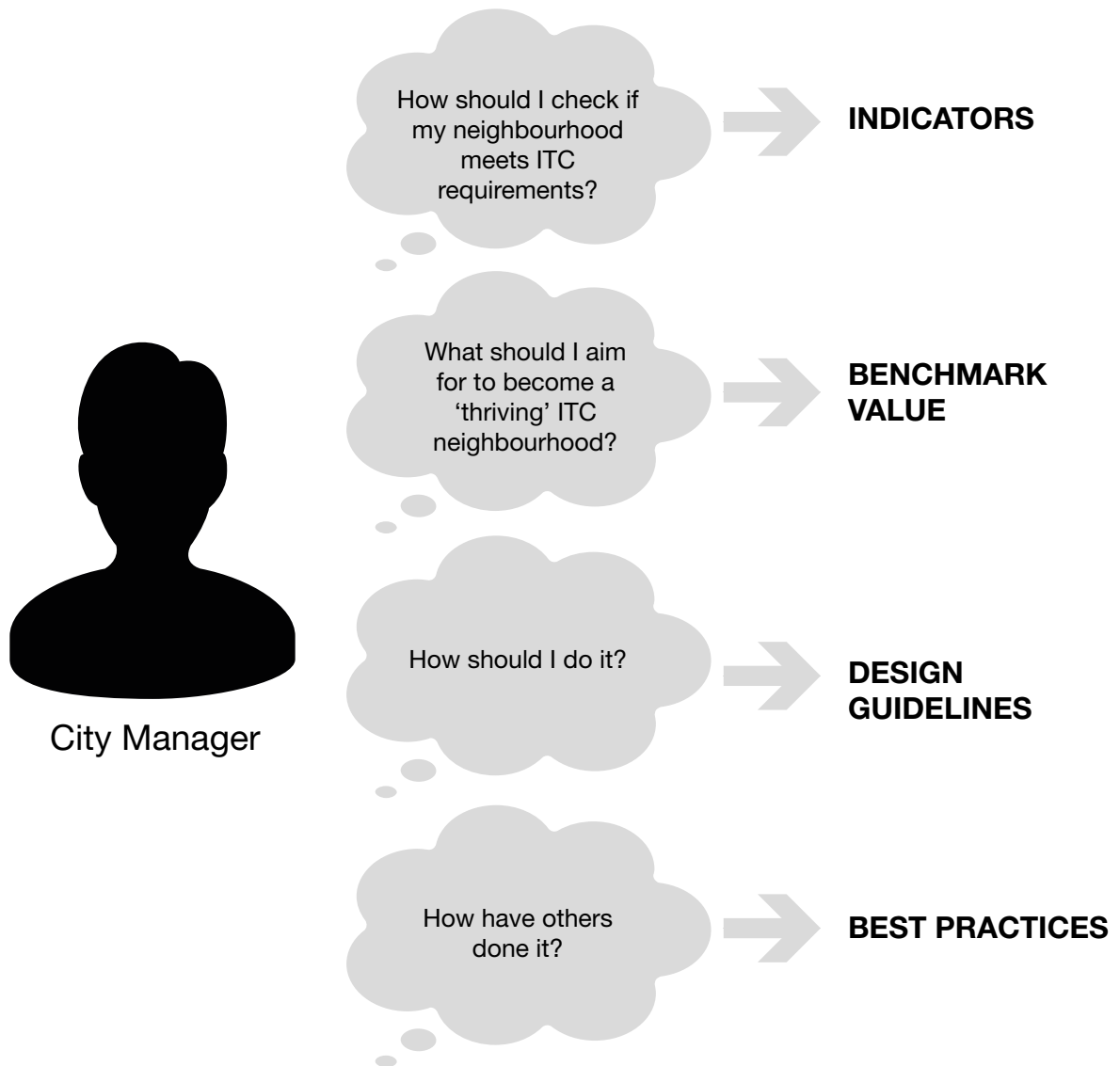How have others done it? → **BEST PRACTICES**

City Manager

Figure 2.1: ITCN Indicators and the Decision Making Process

FROM MEASUREMENT TO MANAGEMENT
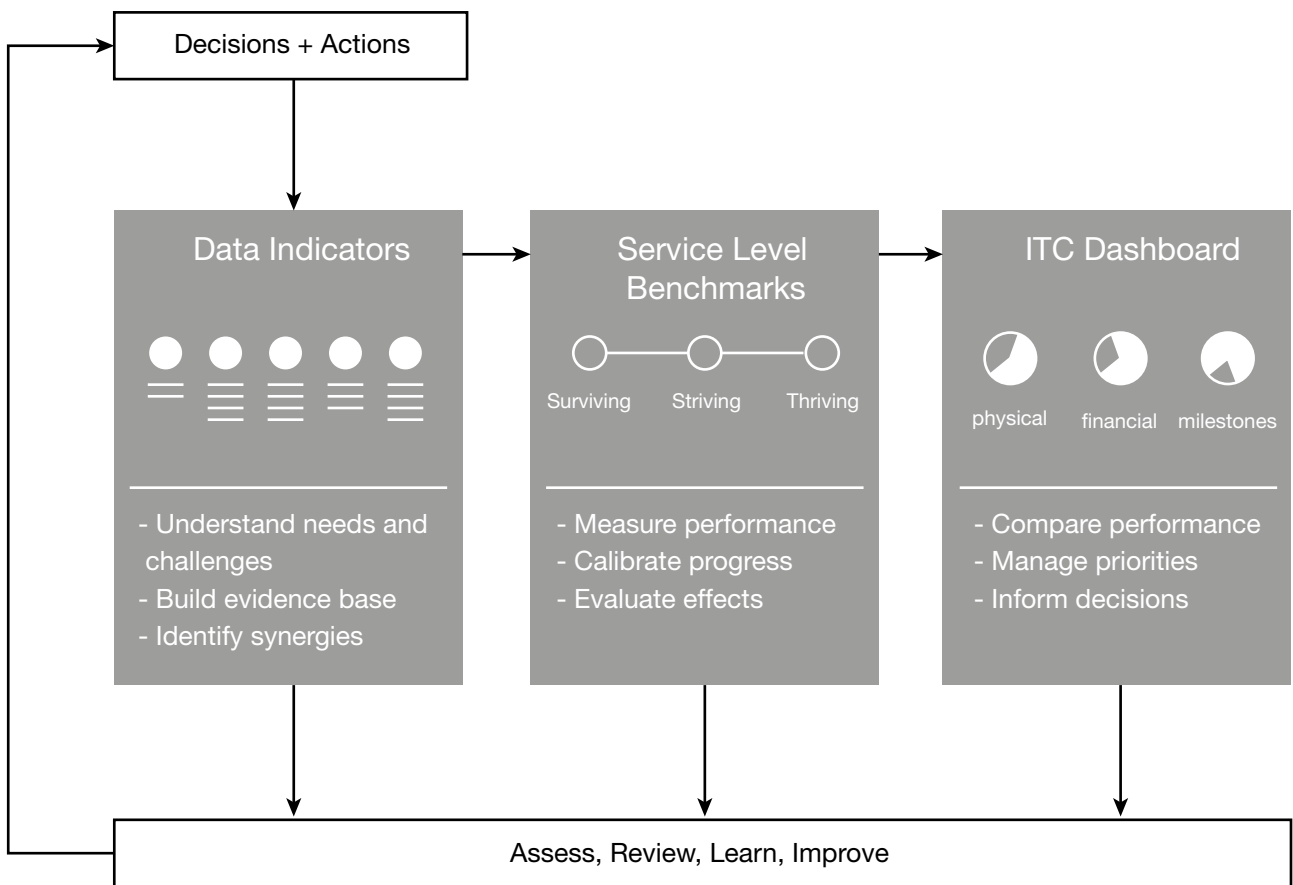
Figure 2.2: Cyclical process of assessment, reviews, learning and improvement.

FROM MEASUREMENT TO MANAGEMENT

The evaluation metrics support a cyclical process of assessment, reviews, learning and improvement.

The evaluation metrics are made up of three interrelated parts; data indicators, service level benchmarks and an ITC dashboard.

Data indicators - Data indicators are identified for each objective at the neighbourhood level. They contribute to the evidence base at hand for city managers and support a clear understanding of the needs and challenges facing ITCs. The indicators measure the spatial components that influence ITCs experience of the neighbourhood and therefore their overall wellbeing. By providing a measured overview, they signal priorities for decisions and actions.

Service Level Benchmarks - Service level benchmarks measure the performance of cities in achieving ITC objectives. They provide a clear score of how effective decisions and actions have been, ranging from Thriving (high) to Striving (average) to Surviving (low). Measuring performance in this way enables progress to be calibrated and monitored across projects and over time.

ITC Dashboard - The ITC dashboard moves measurements into management by providing a visual and comprehensive comparison of performance between cities and over time. It includes implementation progress, project types, delivery timescales for different priorities and an overview of objectives met and benchmark scores. The ITC Dashboard supports the review process of the 100 Smart Cities Mission centrally by aiding priority management and informing delivery decisions

WHERE DOES ITCN DATA COME FROM?

The Service Level Benchmarks for ITCs have been 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 indicators should be considered alongside other evidence, projects and programmes, particularly relating to health and wellbeing, in order to understand the effect of those changes on ITCs and the wider population. In order to optimise decisions and projects for ITCs, further interpretation and analysis would be required appropriate to context. For example, the reasons that infants, toddlers and caregivers spend time in a particular space, or the specific interactions and compromises at work in a local context.

Focusing on indicators of data that already exist can also mean attention is concentrated on phenomena that can be measured more readily – which may not necessarily be those that are most beneficial for ITCs. Particularly for marginalized and vulnerable groups, and especially at the small scale of the neighbourhood. Policymakers should ensure that indicators which are crucial to understanding ITC wellbeing but difficult to measure are not excluded from policies and investments.

The results of the scoring require thoughtful interpretation and application to different contexts and projects. Stakeholders should be aware of the interactions and overlaps, and highlight the decisions and compromises that need to be made to deliver projects that on balance work well for ITCs and the wider population.

There is no direct correlation between improved scores and improved wellbeing for ITCs, rather a combination of optimal results for ITCs will need to be considered and there will be priorities and compromises depending on the context.

The list of 65 indicators that we have included here are based on a review of the fields of urban data management, children's issues in cities, and an expert review panel on the Indian city management context and capacities.

The information provided in the Service Level Benchmarks for ITCs aims to provide city managers with an understanding of the rationale and insights behind their measurement from an ITC perspective. This is an attempt to facilitate the interpretation of the indicator into effective actions. In situations where the data suggested by an indicator is unavailable or difficult to obtain, understanding this rationale could support finding of suitable alternatives.

For each indicator the following information has been provided.

- **Indicator Title, Definition and Rationale**

- **Data requirements**

- **Frequency of measurement**

- **Jurisdiction of measurement**

- **Reliability of measurement**

- **Benchmarks, divided into 3 categories of Surviving, Striving and Thriving**

SURVEY AND IMPORTANCE OF QUALITATIVE DATA

While quantitative data provides evidence on numerical statistics that presently exist, qualitative data illustrates how these values manifest in day-to-day life. Qualitative data provides insight into a community's priorities, habits, or beliefs, which dictate how or why people choose to interact with their environment. Since ITCN planning interventions will occur at such a local level, qualitative data methods are necessary to gain insights into of a child and caregiver's experience and views. Methods such as interviews, focus groups, participatory action research showcase the complexity of community interactions, help identify future indicators and inform community members at the same time promoting public engagement.

For instance, gathering information about how and why people use public transportation or send their children to school is essential for the efficacy of a project that deals with improving mobility. Including a qualitative approach for collecting data can show intimate details about the way people choose to get to school and show new factors that could be overlooked when merely using quantitative data collection techniques. Qualitative data helps to confirm direct and identify indirect health determinants for ITC design.

Additionally, new ITC design interventions will undoubtedly require people to adapt to new routines. City managers need to comprehend the complexities of use that exist in a community to help guide how second and third waves of implementation so that they receive the highest possible public support.

FORMS AND METHODS OF QUALITATIVE DATA GATHERING

Method	Form of data	How to collect	Example analysis procedure
Personal Interviews	Recorded then transcribed interview dialogue	Pre-established interview questions Record interviews (audio or visual)	Memoing transcripts Coding words or statements based on noted experiences and their contexts Developing themes from codes Larger unit of abstractions gathered from themes and related to previous research
Focus Groups/ Workshops	Questionnaires Recorded collective conversations prompted by a design researcher Workshop assignments like diagrams and maps	Record (audio or visual) and preferably with other researchers observing and noting interactions or conversations	Coding questionnaire responses Identifying themes from workshop assignments Identifying values, habits, priorities, or interests from interviews and responses
Participatory Action Research	Meeting minutes Participant feedback Collected data from participants Design mapping activities	Participants identify problems together with researchers. Participants collect data based on the identified problems in their community	Enacting similar procedural methods as other methods (observations, focus groups/workshops, interviews) Noting the initiative and self-direction from participant interest
Observation	Free-writing observations as they occur, focusing on one child or caregiver at a time. Structured notes from a pre-drafted sheet where behaviors are checked off a list.	Notes are taken on behaviors seen during activity Data is collected at an appropriate distance away so that the integrity of the information is not compromised	Identifying commonalities and differences between separate individuals who navigate the same space

Table 2.1: Cyclical process of assessment,reviews,learning and improvement.

SURVEY DATA COLLECTION AND COMMUNITY ENGAGEMENT SIMULTANEOUSLY

It's important to view qualitative data gathering not simply as collecting information for later use, but as an opportunity for building community interest and engagement.

Community engagement will be the driving force behind the success of ITCN design projects. Community investment and ownership in plans are best when started at the beginning. The process of data collection can become stronger and more systematic through Participatory Action Research. According to Cities Alive: Designing for Urban Childhoods, "Insights and impacts from successful child-friendly interventions should be explored, shared and incentivized, for example through networks, knowledge sharing platforms, study tours, and awards." This document clearly states that planning for children is most

impactful when information is understood by, and available to, every department working on ITCN planning and the shared objectives it aims to fulfil.

This message means that there should be a keen awareness of different department databases and design conversations between various departments. It is not only essential to build trust for the fidelity of the project, but it is also necessary to understand the risks involved without public input and engagement. Mistrust, apprehension for change, and feeling blindsided can occur when a limited conversation is engaged.

INTERPRETING RESULTS: ITC DASHBOARD
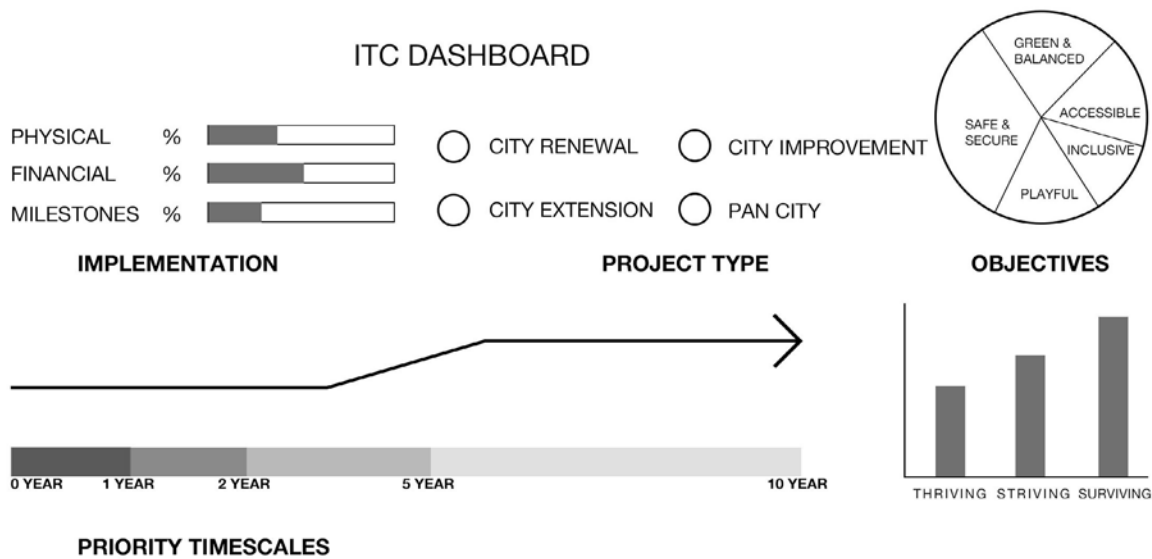
Figure 2.3: Interpreting Results: ITC Dashboard

Note: Dashboard needs to be developed and the above illustrates a generic example of what it would include.

The dashboard is a powerful tool through which to deliver information to the public. The Dashboard visualizes change within a city in a quick to grasp way. It can also provide an interface between the public and the government. The dashboard is not a surrogate for community engagement but when deployed well it is an important aspect of a government's commitment to transparency and accountability to stated goals.

City or neighbourhood dashboards use visual analytics – dynamic and/or interactive graphics (e.g. gauges, traffic lights, meters, arrows, bar charts, graphs), maps, 3D models and augmented landscapes – to display information about the performance, structure, pattern and trends of cities. The ideal display offers a big-picture view of what is happening in real time, along with information on historical trends, so that users can divine the 'how' and 'why', and redirect future action.

The dashboard's utility extends beyond monitoring "the current situation"; it also "allows a manager to … make provisions, and take appropriate actions."

In general, as data become more abstracted over space and time (i.e. when "structure" is introduced or a "lens" is applied to the initial data with respect to the way they are aggregated or classified) the more useful the data are in that their organisation usually reflects a purpose for which the data are to be used.

Creating a flexible, interactive platform for the purpose of gauging Smart Cities' progress toward the transformation of ITCNs allows us to conceptually transform disaggregated pieces of information, into holistic, valuable indicators of the wellbeing of ITCs.

It is important for Dashboards to integrate diverse data. This is challenging as often there are no common keys, because the data are in inconsistent formats, because of noise, missing data, etc.

The ITCN dashboard would measure and monitor the performance of the 100 Smart Cities Mission, offering a comparison of progress and performance across 100 cities in India.

The dashboard enables the evaluation of project implementation including the priorities, milestones and progress of projects associated with 100 Smart Cities. It will support the move from performance measurement to performance management, by feeding into operational review and central decision-making processes.

The service level benchmarks represent a set of common goals and shared benchmarks that all 100 Cmart Cities are signed up to and are measured against. The indicated performance can highlight the important value judgements and investment decisions to be made to deliver the 100 Smart Cities mission. Tracking progress in this way ensures that stakeholders responsible for delivering results are aware of the milestones and challenges ahead and the interrelated considerations to feed into those decisions.

As the implementation of the mission progresses, the performance level will improve over time. The dashboard should therefore be seen as a dynamic tool. A periodic review of benchmarks, performance indicators, data systems and priorities should be undertaken, as the milestones in Smart City Proposals are implemented and as the impact of dashboard-driven management decisions is better understood. The dashboard provides a consistent baseline against which outcomes

can be measured and monitored with these periodic review points highlighted.

An annual review of the dashboard would align with data collection and could be programmed with the Apex Committee Mission quarterly monitoring.

The dashboard would:

- **Visualise data to enable effective monitoring**
- **Target needs and decision-making by supporting review**
- **Match resources and needs by informing funding decisions**
- **Build partnerships by supporting engagement**
- **Track and compare performance and progress (between cities and over time)**

The data included in our ITCN indicators have accounted for these differences using a tiered system of benchmark values. The system of Surviving, Striving, and Thriving, gives a scoring system with thresholds that allows diverse kind of data to be compared.

The Service Level Benchmark tool turns: apples, oranges, mangoes, and coconuts, all into apples.
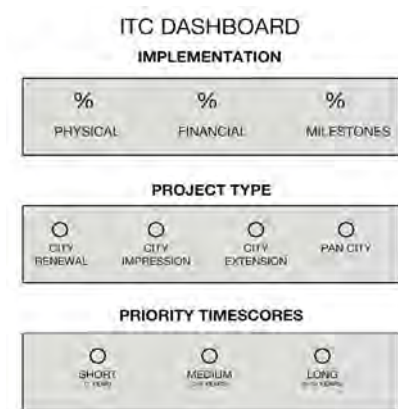
Figure 2.4: ITC Dashboard

For more information on Dashboards, see:
- (PDF) Urban data and city dashboards: Six key issues. Available from: https://www.researchgate.net/publication/307545817_Urban_data_and_city_dashboards_Six_key_issues https://placesjournal.org/article/mission-control-a-history-of-the-urban-dashboard/

Companies that make dasboards
- Juice Software http://www.juiceanalytics.com/writing/the-future-of-dashboards
- KnowNow, Rapt, Arzoon, ClosedloopSolutions, SeeBeyond, and CrossWorlds

ITC NEIGHBOURHOOD INDICATORS AND SERVICE LEVEL BENCHMARKS

	Sr. No	Data Indicator Title	Benchmark Value		
		Short self-explanatory description of indicator	Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.		
			Thriving (3)	Striving (2)	Surviving (1)
NEIGHBOURHOOD	**1** Pg. 29	Perception of safety for ITCs of key public amenities - streets, parks, playspaces, school, health services etc. **(Supporting)**	More than 80% residents feels safe outside environment around public amenities (streets, parks, playspaces, school, health services etc.)	80 - 50% residents feels safe outside environment around public amenities (streets, parks, playspaces, school, health services etc.)	Less than 50% residents feels safe outside environment around public amenities (streets, parks, playspaces, school, health services etc.)
	2 Pg. 30	Percentage of caregivers and infants/toddlers walking to public amenities (day care centres, pre primary and primary schools, primary health facilities, local markets) **(Supporting)**	100% caregivers and infants/toddlers walking to public amenities and spend > 30 mins in walking per day	50 - 100% caregivers and infants/toddlers walking to public amenities and spend 15 to 30 mins in walking per day	Less than 50% caregivers and infants/toddlers walking to public amenities and spend less than 15 mins in walking per day
	3 Pg. 31	% of buildings within 300m distance of a green space above 125sqm **(Core)**	100% of buildings within 300m distance of a green space and at least green space of 125sqm	50 - 100% of buildings within 300m distance of a green space and at least green space of 125sqm	< 50% of buildings within 300m distance of a green space and green space <125sqm
	4 Pg. 32	% of buildings within 300m distance or 5 - 10 min walking distance of a public facilities like day care centres, pre primary and primary schools, primary health facilities, local markets **(Core)**	100% of buildings within 300m distance of a public facilities and walking distance of less than 10 mins	50 - 100% of buildings within 300m distance of a public facilities and walking distance of 10 mins	< 50% of buildings within 300m distance of a public facilities and walking distance >10 mins
	5 Pg. 33	% of daily trips by non-motorized means **(Supporting)**	More than 50% of daily trips by NMT	25 - 50% of daily trips by NMT	< 25% of daily trips by NMT
	6 Pg. 34	% of journey destined at creche / kindergarten / play school is by walking or cycling **(Supporting)**	More than 40% of daily NMT trips destined at creche / kindergarten / school	25 - 40% of daily NMT trips destined at creche / kindergarten / school	Less than 25% of daily NMT trips destined at creche / kindergarten / school

Table 2.2: ITC Neighbourhood Indicators and Service Level Benchmarks - Neighbourhood

	Sr. No	Data Indicator Title	Benchmark Value		
		Short self-explanatory description of indicator	Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.		
			Thriving (3)	Striving (2)	Surviving (1)
NEIGHBOURHOOD	**7** Pg. 35	% of creches within accessible 500m distance from housing cluster **(Core)**	100% of creches within 500m distance from housing cluster/block	50-100% of creches within 500m distance from housing cluster/block	< 50% of creches within 500m distance from housing cluster/block
	8 Pg. 36	Number of Tot lots **(Supporting)**	More than 6	4 - 6	Less than 6
	9 Pg. 37	Number of good quality housing area park spaces in the neighbourhood **(Core)**	More than 4 & Total area more than 15,000 sqm	3-4 & total area of 15,000 sqm	Less than 3 & Total area less than 15,000 sqm
	10 Pg. 38	Number of good quality neighbourhood park spaces in the neighbourhood **(Core)**	More than 4 with total area more than 10,000 sqm	1 of 10,000 sqm or 1 - 4 with total Area of 10,000 sqm	Less than 1 with total area less than 10,000 sqm
	11 Pg. 39	% of Organised green open space in the neighbourhood **(Core)**	More than 15% open space out of total neighbourhood area	10 -15% open space out of total neighbourhood area	Less than 10% open space out of total neighbourhood area
	12 Pg. 40	Per Capita organised green open space for a neighbourhood **(Core)**	More than 4sqm open space per person	3 - 4sqm open space per person	Less than 3sqm open space per person
	13 Pg. 41	% of encroached/ informal area of total neighbourhood area **(Supporting)**	Less than 2% area is under encroachment / Informal areas out of total neighbourhood area	2-5% area is under encroachment / Informal areas out of total neighbourhood area	More than 5% area is under encroachment / Informal areas out of total neighbourhood area

	Sr. No	Data Indicator Title	Benchmark Value		
		Short self-explanatory description of indicator	Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.		
			Thriving (3)	Striving (2)	Surviving (1)
STREETS	**14** Pg. 43	Presence of walk zone/ footpath/sidewalk at major routes in neighbourhood **(Core)**	Width more than 3m and >80% of route do have continuous footpath & meet quality criteria	Width between 3m and 1.8m and 30% - 80% of route do have continuous footpath & meet quality criteria	Width less than 1.8m and < 30% of route do have continuous footpath & meet quality criteria
	15 Pg. 44	Provision and quantity of public seating to stop and rest, by neighbourhood **(Core)**	There is less than 50m between resting points. And > 50% of route do have provision for resting points	There is between 50m and 150m between resting points. And 30-50% of route do have provision for resting points	There is more than 150m between resting points. And < 30% of resting points meet quality criteria
	16 Pg. 45	% of clear and unobstructed pedestrian footpath of total road length **(Core)**	More than 80% clear and unobstructed pedestrian footpath	50-80% clear and unobstructed pedestrian footpath	Less than 50% clear and unobstructed pedestrian footpath
	17 Pg. 46	Presence of kerb cuts y/n & No of kerb cuts per road km **(Supporting)**	**TBD**	**TBD**	**TBD**
	18 Pg. 47	% of streets with adequate lighting **(Core)**	100% of street area with adequate lighting facilities with >= 8 lux	100% < street area < 50% of street area with adequate lighting facilities with 6-8 lux	Less than 50% of street area with adequate lighting facilities with 6-8 lux
	19 Pg. 48	Street light spacing in the neighbourhood **(Core)**	100% of street area with light poles spacing not more than 30m	80% of street area with light poles spacing not more than 30m	50% of street area with light poles spacing not more than 30m
	20 Pg. 49	Presence of cycle routes inside the neighbourhood and on major bordering roads (kms would be future indicator) **(Supporting)**	Not Applicable for benchmarking. This is a visual comprehension of the indicator. Presence (Yes/ No)		

Table 2.3: ITC Neighbourhood Indicators and Service Level Benchmarks - Streets
Note: TBD based on expert & capacity building workshop.

	Sr. No	Data Indicator Title	Benchmark Value		
		Short self-explanatory description of indicator	Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.		
			Thriving (3)	Striving (2)	Surviving (1)
STREETS	**21** Pg. 50	Encroachment on NMT roads at neighbourhood level by Vehicle Parking (%) **(Core)**	Less than <= 10% of total NMT roads	Width between 3 m and 1.8m and 10 - 20% of NMT routes do have continuous footpath & meet quality criteria	Width less than 1.8m and > 20% of NMT routes do have continuous footpath & meet quality criteria
	22 Pg. 51	Presence of traffic calming measures in the neighbourhood and average speed of vehicles in the neighbourhood **(Core)**	Yes and less than 10kmph	Yes & 10-20 kmph	No & More than 20 kmph
	23 Pg. 52	% of intersections containing timed signals and lighting in the neighbourhood and along its border roads **(Supporting)**	100% of intersection with time signalized infrastructure	50%- 100% clear and unobstructed pedestrian footpath	Less than 50% clear and unobstructed pedestrian footpath
	24 Pg. 53	% of one way streets in a neighbourhood **(Core)**	More than 50% of neighbourhood street	20-50% of the neighbourhood street	Less than 20% of the neighbourhood street
	25 Pg. 54	% of total street length closed to 4 wheel traffic **(Supporting)**	More than 15% of total street length closed to 4-wheel traffic	5-15% of total street length closed to 4-wheel traffic	Less than 5% of total street length closed to 4-wheel traffic
	26 Pg. 55	% of total street length closed to 4 and 2 wheel traffic **(Core)**	More than 25% of total street length closed to 4- & 2-wheel traffic	10-25% of total street length closed to 4- & 2-wheel traffic	less than 10% of total street length closed to 4- & 2-wheel traffic
	27 Pg. 56	Presence of informal way finding in the vicinity of schools and parks **(Core)**	Not Applicable for benchmarking. This is a visual comprehension of the indicator. Presence (Yes/ No)		

	Sr. No	Data Indicator Title	Benchmark Value		
		Short self-explan-atory description of indicator	Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.		
			Thriving (3)	Striving (2)	Surviving (1)
STREETS	28 Pg. 57	Instances of observ-able standing water, overflowing drains, sewage **(Supporting)**	TBD	TBD	TBD
	29 Pg. 58	Presence of green corridors on major routes & number of corridor in a neigh-bourhood **(Support-ing)**	TBD	TBD	TBD
	30 Pg. 59	% of streets with decibel levels above standard 55 dB inside the neighbourhood **(Supporting)**	Less than 5% of streets with decibel levels above standard 55 dB	5 - 10% of streets with decibel levels above stan-dard 55 dB	More than 10% of streets with decibel levels above standard 55 dB
	31 Pg. 60	Presence of no-honking zones in the neighbourhood **(Core)**	Not Applicable		
	32 Pg. 61	Fatality rate for pe-destrian and NMT (%) **(Core)**	Less than equal to 10%	10 - 20%	More than 20%
	33 Pg. 62	No. of fatal accidents occurring due to traf-fic in the neighbour-hood **(Supporting)**	Less than 85% the city average numbers	Less than 70 - 85% the city average numbers	Less than 0 - 70% the city average numbers

	Sr. No	Data Indicator Title	Benchmark Value		
		Short self-explanatory description of indicator	Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.		
			Thriving (3)	Striving (2)	Surviving (1)
PARKS & OPEN SPACES	34 Pg. 65	Number of hours per day open areas is occupied in a neighbourhood. Totlot, housing area park, neighbourhood playground **(Supporting)**	More than 120 mins / 2 hours - average green spaces occupied daily	60 - 120 mins - average green spaces occupied daily	Less than 60 mins - average hours green spaces occupied
	35 Pg. 66	Average no of time per week caregivers engage with their 0-5 in outdoor playing/activities in organised green spaces/ recreation spaces **(Core)**	TBD	TBD	TBD
	36 Pg. 67	Average duration of visits for infants, toddlers and their caregivers at park facilities **(Core)**	More than 60 mins per organised park visit by Infant, toddler & their care givers	60 mins < duration < 30 mins per organised park visit by Infant, toddler & their care givers	Less than 30 mins per organised park visit by Infant, toddler & their care givers
	37 Pg. 68	% utilization of parks by infants, toddlers and their caregivers **(Core)**	TBD	TBD	TBD
	38 Pg. 69	% of area in parks dedicated to play spaces suitable for young children 0-5 **(Core)**	There is more than 10% of existing park area dedicated to young children (0-5 years)	There is 10% < Park areas < 5% of existing park area dedicated to young children (0-5 years)	There is less than 5% of existing park area dedicated to young children (0-5 years)
	39 Pg. 70	Presence of natural materials in play equipment (y/n) by play space (y/n), natural areas (e.g. greenery, sand, safe and clean water) as percentage of total play space **(Core)**	TBD	TBD	TBD
	40 Pg. 71	Number of parks that have quality seating, facing 0-3 play areas **(Core)**	More than 4 parks at neighbourhood level with the provision of quality seating & oriented towards 0-3 play areas	4 < of parks < 2 parks at neighbourhood level with the provision of quality seating & oriented towards 0-3 play areas	Less than 2 parks at neighbourhood level with the provision of quality seating & oriented towards 0-3 play areas

Table 2.4: ITC Neighbourhood Indicators and Service Level Benchmarks - Parks & Open Spaces

	Sr. No	Data Indicator Title	Benchmark Value		
		Short self-explanatory description of indicator	Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.		
			Thriving (3)	Striving (2)	Surviving (1)
PARKS & OPEN SPACES	41 Pg. 72	% of parks with adequate lighting **(Supporting)**	100% of park area with adequate lighting facilities	100% < park area < 50% of park area with adequate lighting facilities	Less than 50% of park area with adequate lighting facilities
	42 Pg. 73	Presence of stray animals in parks (Y/N) **(Supporting)**	Not Applicable		
	43 Pg. 74	% of parks at neighbourhood level with free public drinking water, toilets and other facilities for families **(Core)**	100% park with basic facilities like drinking water, toilets & other facilities for families	50 - 100% with basic facilities like drinking water, toilets & other facilities for families	Less than 50% with basic facilities like drinking water, toilets & other facilities for families
	44 Pg. 75	Percentage distribution of Children engaged in formal & informal play in organised green spaces **(Supporting)**	TBD	TBD	TBD
	45 Pg. 76	Frequency of maintenance of parks **(Core)**	Daily maintenance of Park	Weekly maintenance of Park	Monthly maintenance of Park
	46 Pg. 77	% of municipal budget allocated for open spaces or parks (including management/ maintenance and programming) **(Core)**	There is more than 5% of the allocated municipal budget on open spaces or parks development	There is 5% < Park budget < 1% of the allocated municipal budget on open spaces or parks development	Less than 1% of the allocated municipal budget on open spaces or parks development
	47 Pg. 78	Air Quality Index in the neighbourhood **(Supporting)**	Less than 50% of city AQI	Less than 30 - 50% the city AQI	More than city AQI
	48 Pg. 79	RSPM (Size less than 10 microns) **(Core)**	0-40	40 - 80	More than 80

	Sr. No	Data Indicator Title	Benchmark Value		
		Short self-explanatory description of indicator	Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.		
			Thriving (3)	Striving (2)	Surviving (1)
SOCIAL INFRASTRUCTURE	49 Pg. 81	Total Number of Private kindergarten in the neighbourhood and whether they have attached outdoor space **(Core)**	TBD	TBD	TBD
	50 Pg. 82	% of Government schools that allow usage of school campuses during non-school hours **(Core)**	100% government school allow usage of school campuses during non-school hours	50 - 100% government school allow usage of school campuses during non-school hours	< 50% government school allow usage of school campuses during non-school hours
	51 Pg. 83	Presence of affordable health clinic inside (Anganwadi) the neighbourhood y/n **(Core)**	There is more than 1 Anganwadi in the neighbourhood of 15,000 population and meet model Anganwadi quality criteria.	There is 1 Anganwadi in the neighbourhood of 15,000 population and meet model Anganwadi quality criteria.	There is 1 Anganwadi in the neighbourhood of 15,000 population and does not meet model Anganwadi quality criteria.
	52 Pg. 84	Number of doctors employed within the neighbourhood **(Supporting)**	There are more than 4 doctors per 1,000 population in the neighbourhood	There is 1<doctors< 4 per 1,000 population in the neighbourhood	There is only 1 doctor per 1,000 population in the neighbourhood
	53 Pg. 85	Presence of Dispensary in the neighbourhood y/n **(Core)**	There are more than 3 dispensaries in the neighbourhood of 15,000 population and > 50% of dispensaries meet quality criteria.	There is 1 < dispensaries < 3 in the neighbourhood of 15,000 population and 30 - 50% of dispensaries meet quality criteria.	There is only 1 dispensary in the neighbourhood of 15,000 population and < 30% of dispensaries meet quality criteria.
	54 Pg. 86	Community based organisations deliberately inviting women to planning meetings and delivering recommendations to ULB **(Core)**	More than 3 recommendation from RWA/ equivalent bodies to ULB is from women representatives anticipated in RWA meetings	1> recommendation > 3 from RWA/ equivalent bodies to ULB is from women representatives anticipated in RWA meetings	At least 1 recommendation from RWA/ equivalent bodies to ULB is from women representatives anticipated in RWA meetings
	55 Pg. 87	Provision of public art expenditure in budget to enhance the aesthetic of public spaces - (Y/N) & Percentage change in investment in public art- year by year **(Supporting)**	TBD	TBD	TBD

Table 2.5: ITC Neighbourhood Indicators and Service Level Benchmarks - Social Infrastructure

	Sr. No	Data Indicator Title	Benchmark Value		
		Short self-explanatory description of indicator	Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.		
			Thriving (3)	Striving (2)	Surviving (1)
URBAN SERVICES	56 Pg. 89	Presence of SWM collection facility and efficiency in the neighbourhood **(Supporting)**	100% collection efficiency	50% - 100% collection efficiency	Less than 50% collection efficiency
	57 Pg. 90	Household level coverage of SWM services through door-to-door collection of waste **(Core)**	100% households covered by daily door-step collection system.	50% - 100% households covered by daily door-step collection system	Less than 50% households covered by daily door-step collection system.
	58 Pg. 91	Presence of SWM segregation facilities in the neighbourhood **(Supporting)**	100% segregation efficiency	50% - 100% segregation efficiency	Less than 50% segregation efficiency
	59 Pg. 92	Efficiency in Redressal of customer complaints on SWM **(Supporting)**	100% complaints redressed within 24 hours of receipt of complaint	50 - 100% complaints redressed within 24 hours of receipt of complaint	Less than 50% complaints redressed within 24 hours of receipt of complaint
	60 Pg. 93	Quality of water supplied to household in neighbourhood **(Supporting)**	100% water sample meet potable water standards	50% - 100% water sample meet potable water standards	Less than 50% water sample meet potable water standards
	61 Pg. 94	% of households with rainwater harvesting systems **(Supporting)**	100% of housing units with rainwater harvesting facilities	100% - 50% of housing units with rainwater harvesting facilities	Less than 50% of housing units with rainwater harvesting facilities
	62 Pg. 95	% of parks, schools , and other public plots within the neighbourhoods with rainwater harvesting systems **(Core)**	100% of public building & public spaces wit h rainwater harvesting facilities	100% - 50% of public building & public spaces with rainwater harvesting facilities	Less than 50% of public building & public spaces with rainwater harvesting facilities
	63 Pg. 96	Percentage of households with renewable source of energy like Solar/PNG etc. **(Core)**	100% of household with renewable energy	100 - 50% of household with renewable energy	Less than 50% of household with renewable energy
	64 Pg. 97	Percentage of public buildings and plots using solar / wind or non-carbon means (mapped) **(Supporting)**	100% of public buildings with renewable energy	100 - 50% of public buildings with renewable energy	Less than 50% of public buildings with renewable energy
	65 Pg. 98	Presence of Solar lighting in and immediately surrounding parks **(Supporting)**	100% of housing area parks with solar lighting facilities	100 - 50% of housing area parks with solar lighting facilities	Less than 50% of housing area parks with solar lighting facilities

Table 2.6: ITC Neighbourhood Indicators and Service Level Benchmarks - Urban Services

Indicators

The following pages list out the various indicators. The information provided for each Indicator is set out as per the format below:

Indicator ##/57

INDICATOR TITLE

Definition
Full definition of data to be collected.

Rationale for the Indicator
150 word description of overall significance and rationale for assessing and monitoring the performance indicator. What does the indicator mean for ITCs experience? What does the indicator tell you about the quality of public realm for ITCs?

Data Requirements	Frequency of measurement	Jurisdiction of measurement
Specific elements of data that need to be captured along with corresponding unit of measurement. The point and frequency of data capture should be mentioned. Any specific formulae to be used to arrive at the performance indicator.	Frequency at which the performance indicator will be assessed (not the frequency of the data elements collection) should be indicated based on the potential for visible change between time periods. This should strike a balance between too long which prevents feedback into operational improvements and too short which creates a time burden in measuring and reporting.	The smallest geographic jurisdiction for which performance should be measured (not the point of data collection). Most Indian cities have large differences in service delivery between localities. Measuring at the neighbourhood level would give an important indication of child-friendliness (as the focus for ITCs) as well as allowing comparison within cities. Data should be collected at the neighbourhood level wherever possible and aggregated to city level performance for reporting, which are most helpful for central level to compare between cities.

Reliability of measurement
The reliability of data systems underpin the reliability of performance measurement and management decisions. Reliability of data systems should be measured from A (highest/preferred), B, C (intermediate levels) to D (lowest). Data of a high reliability (A) should be targeted, provided on a repeat basis and in a consistent manner.

A	B	C	D

Benchmark Value
Benchmark values should be provided (indicating what constitutes a high to low score) against which performance can be monitored.

Thriving (3)	Striving (2)	Surviving (1)

Design Guidelines to Refer :

NEIGHBOURHOOD LAYOUT

Objectives Achieved	Indicators
🔒	1. Perception of safety for ITCs of key public amenities -streets, parks, play-spaces, school, health services
🛒	2. Percentage of caregivers and infants/toddlers walking to public amenities (schools/kindergartens, playground, parks, health services) 3. % of buildings within 300m distance of a green space 4. % of buildings within 300m distance or 5-10 min walking distance of a public facilities like day-care centres, pre-primary and primary schools, primary health facilities, local markets 5. % of daily trips by non-motorized means. 6. % of journey destined at creche / kindergarten / play school is by walking or cycling. 7. % of creches within accesible 500 m distance from housing cluster. 8. Number of tot-lots 9. Number of good quality housing area park spaces in the neighbourhood 10. Number of good quality neighbourhood park spaces in the neighbourhood
🌱	11. % of open space in the neighbourhood 12. Per Capita organised green open space for a neighbourhood 13. % of encroached/ informal area of total neighbourhood area

Indicator 1/65

PERCEPTION OF SAFETY FOR ITCS OF KEY PUBLIC AMENITIES

Definition
Number of residents feels safe outside environment around public amenities (streets, parks, playspaces, school, health services etc.)

Rationale for the Indicator
The perception of safety for ITCs plays an important role in their motivation to spend time outdoors, the activities they are included in and how relaxed, welcome and comfortable they feel when they do. The perceived safety of public amenities that are frequently accessed by ITCs will contribute to their effectiveness. Existing of accessible street with kerb cut promotes perceived safety in the neighbourhood.

Units	Data Requirements		Frequency of Measurements		Jurisdiction of Measurements	
%	Observation		Once annually		Neighbourhood	
Reliability of Measurements						
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages		Desk based estimation For example - based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on earlier survey/ information	
Benchmark Value						
Thriving		**Striving**		**Surviving**		
More than 80% residents feels safe outside environment around public amenities		80 - 50% residents feels safe outside environment around public amenities		less than 50% residents feels safe outside environment around public amenities		

Refer to : ITCN Design Guidelines, page 13

Indicator 2/65

PERCENTAGE OF ITCS WALKING TO PUBLIC AMENITIES

Definition
Percentage of ITCs as a percentage of the total number of ITCs within a neighbourhood walk to public amenities like school/kindergartens, playgorund, park, health services

Rationale for the Indicator
It is critical that ITCs are able to access all parts of a neighbourhood easily and conveniently. A neighbourhood planned for ITCs has a mix of uses and services that give reasons to be outdoors and within comfortable walking distances. There are key destinations that ITCs may go to on a regular basis such as daycare, health centres, parks and other amenities. The presence of these within the neighbourhood enhances their accessibility, through travel modes such as walking and cycling.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Survey	Once annually	Neighbourhood
Reliability of Measurements			
On-site pedestrian survey covering all public amenities (schools/kindergartens, playground, parks, health services)	On-site pedestrian survey of specific public amenities as averages.	Desk based estimation For example - based on earlier pedestrian count assignment & with systematic on-site verification.	Desk based estimation For example - based on earlier assignments like Non Motorised Plan.
Benchmark Value*			
Thriving	**Striving**		**Surviving**
100% caregivers and infants/toddlers walking to public amenities and spend >30 mins in walking per day	50% - 100% caregivers and infants/toddlers walking to public amenities and spend 15 to 30 mins in walking per day		Less than 50% caregivers and infants/toddlers walking to public amenities and spend less than 15 mins in walking per day

* Pt.8.4.10.2 Amenities, *Page 368,* URDPFI Guidelines 2014, Ministry of Urban Development

Refer to : ITCN Design Guidelines, page 14

Indicator 3/65

PERCENTAGE OF BUILDINGS WITHIN 300M DISTANCE OF A GREEN SPACE ABOVE 125 SQM

Definition

Well-designed networks of green spaces encourage infant, Toddlers & caregivers to travel safely by foot or by bicycle for recreation. The number of buildings at neighbourhood level is within the range of 300 m distance of adequate green space

Rationale for the Indicator

It is critical that ITCs are able to access all parts of a neighbourhood easily and conveniently. A neighbourhood planned for ITCs has a mix of uses and services that give reasons to be outdoors and within comfortable walking distances. There are key destinations that ITCs may go to on a regular basis such as daycare, health centres, parks and other amenities. The presence of these within the neighbourhood enhances their accessibility, through travel modes such as walking and cycling.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
%	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Observational on-site survey of all housing cluster & green spaces	Observational on-site survey of specific housing cluster & green spaces as averages	Desk based estimation For example - based on existing maps & with systematic on-site verification.	Desk based estimation For example - based on existing maps like Landuse map.	
Benchmark Value*				
Thriving		**Striving**		**Surviving**
100% of buildings within 300m distance of a green space and atleast green space of 125 m^2		50-100% of buildings within 300m distance of a green space and atleast green space of 125 m^2		< 50% of buildings within 300m distance of a green space and green space <125 m^2

* Pt.8.4.10.2 Amenities, *Page 368*, URDPFI Guidelines 2014, Ministry of Urban Development; *Page 7,* Urban Greening Guidelines, TCPO, GoI, MoUD

Refer to : ITCN Design Guidelines, page 14 - 19

Indicator 4/65

PERCENTAGE OF BUILDINGS WITHIN 300M DISTANCE OF A PUBLIC FACILITY

Definition

A neighbourhood planned for ITCs has a mix of uses and services that give reasons to be outdoors and within comfortable walking distances. The presence of these services within the neighbourhood enhances their accessibility. The number of public facilities / services at neighbourhood level is within the range of 300 m distance

Rationale for the Indicator

It is critical that ITCs are able to access all parts of a neighbourhood easily and conveniently. A neighbourhood planned for ITCs has a mix of uses and services that give reasons to be outdoors and within comfortable walking distances. There are key destinations that ITCs may go to on a regular basis such as daycare, health centres, parks and other amenities. The presence of these within the neighbourhood enhances their accessibility, through travel modes such as walking and cycling.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
%	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Observational on-site survey of all public facilties	Observational on-site survey of specific specific public facilties as averages	Desk based estimation For example - based on existing maps & with systematic on-site verification		Desk based estimation For example - based on existing maps like utility maps
Benchmark Value*				
Thriving		**Striving**		**Surviving**
100% of buildings within 300m distance of a public facilties and walking distance of 10 mins		50-100% of buildings within 300m distance of a public facilties and walking distance of less than 10 mins		< 50% of buildings within 300m distance of a public facilties and walking distance > 10 mins

* Pt.8.4.10.2 Amenities, *Page 368*, URDPFI Guidelines 2014, Ministry of Urban Development

Refer to : ITCN Design Guidelines, page 14 - 19

Indicator 5/65

PERCENTAGE OF DAILY TRIPS BY NON-MOTORIZED MEANS

Definition
Non-motorised means of transport includes mainly cycling , walking and cycle rickshaws. percentage of non-motorised trips as a percentage of the total number of daily trips

Rationale for the Indicator
It is critical that ITCs are able to access all parts of a neighbourhood easily and conveniently. A neighbourhood planned for ITCs has a mix of uses and services that give reasons to be outdoors and within comfortable walking distances. There are key destinations that ITCs may go to on a regular basis such as daycare, health centres, parks and other amenities. The presence of these within the neighbourhood enhances their accessibility, through travel modes such as walking and cycling.

Units	Data Requirements		Frequency of Measurements		Jurisdiction of Measurements
%	Survey		Once annually		Neighbourhood
Reliability of Measurements					
Comprehensive traffic survey at all routes/destination	Traffic survey at specific routes/destination as averages		Desk based estimation For example - based on earlier assignment & with systematic on-site verification.		Desk based estimation For example - based on earlier assignment like Comprehensive mobility Plan.
Benchmark Value					
Thriving		**Striving**		**Surviving**	
More than 50% of daily trips by NMT		25-50% of daily trips by NMT		Less than 25% of daily trips by NMT	

* Page *3* , SLBs for Urban Transport- MoUD, Government of India

Refer to : ITCN Design Guidelines, page 14 - 19

Indicator 6/65

PERCENTAGE OF JOURNEY DESTINED AT CRECHE / KINDERGARTEN / SCHOOL BY WALKING OR CYCLING

Definition
Percentage of non motorised trips destined at creche/kindergarten as a percentage of the total number of non motorised daily trips.

Rationale for the Indicator
It is critical that ITCs are able to access all parts of a neighbourhood easily and conveniently. A neighbourhood planned for ITCs has a mix of uses and services that give reasons to be outdoors and within comfortable walking distances. There are key destinations that ITCs may go to on a regular basis such as daycare, health centres, parks and other amenities. The presence of these within the neighbourhood enhances their accessibility, through travel modes such as walking and cycling.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Survey	Once annually	Neighbourhood
Reliability of Measurements			
On-site NMT survey at all routes/destination covering creche, & kindergartens,	On-site NMT survey of Specific routes/destinations as averages.	Desk based estimation For example - based on earlier NMT assignments & with systematic on-site verification.	Desk based estimation For example - based on earlier assignments like Non Motorised Plan.
Benchmark Value			
Thriving	**Striving**		**Surviving**
More than 40% of daily NMT trips destined at creche / kindergarten / school	25 - 40% of daily NMT trips destined at creche / kindergarten / school		Less than 25% of daily NMT trips destined at creche / kindergarten / school

Refer to : ITCN Design Guidelines, page 19

Indicator 7/65

PERCENTAGE OF CRECHES WITHIN ACCESIBLE 500M DISTANCE FROM HOUSING CLUSTER

Definition

A crèche is a facility which enables parents to leave their children while they are at work and where children are provided stimulating environment for their holistic development. Crèches are designed to provide group care to children, usually up to 6 years of age, who need care, guidance and supervision away from their home during the day. The number of operational creches at neighbourhood level is within the range of 300 m distance from housing cluster.

Rationale for the Indicator

It is critical that ITCs are able to access all parts of a neighbourhood easily and conveniently. A neighbourhood planned for ITCs has a mix of uses and services that give reasons to be outdoors and within comfortable walking distances. There are key destinations that ITCs may go to on a regular basis such as daycare, health centres, parks and other amenities. The presence of these within the neighbourhood enhances their accessibility, through travel modes such as walking and cycling.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
%	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Observational on-site survey of all routes/destination covering existing & operational creche's	Observational on-site survey of specific routes/destination covering existing & operational creche's	Desk based counts of creche's with systematic on-site verification.		Desk based counts of creche's For example - based on aerial imagery.
Benchmark Value*				
Thriving		**Striving**		**Surviving**
100% of creches within 500m distance from housing cluster/block		50-100% of creches within 500m distance from housing cluster/block		< 50% of creches within 500m distance from housing cluster/block

* Pt.8.4.10.2 Amenities, *Page 368*, URDPFI Guidelines 2014, Ministry of Urban Development

Refer to : ITCN Design Guidelines, page 19

Indicator 8/65

NUMBER OF TOT LOTS

Definition
Number of children's parks or tot lots developed per year at neighbourhood level. Children's Park - an open space frequently used by ITCs and usually equipped with facilities for play and recreation especially by children.

Rationale for the Indicator
Open spaces are ideal places for ITCs to socialise, play and interact. Accessible good quality parks should be provided to promote outdoor activities for ITCs, connection to nature and climate resilience. The number and amount of different park spaces indicates the range of opportunities and the sufficiency of provision for the community.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
No.	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Observational on-site survey of all children park	Observational on-site survey of specific children park	Desk based estimation For example - based on existing maps & with systematic on-site verification.	Desk based estimation For example - based on existing maps
Benchmark Value*			
Thriving		**Striving**	**Surviving**
More than 6		4 - 6	Less than 6

* Pt.8.4.10.2 Amenities, *Page 368,* URDPFI Guidelines 2014, Ministry of Urban Development

Refer to : ITCN Design Guidelines, page 16 - 17

Indicator 9/65

NUMBER OF GOOD QUALITY HOUSING AREA PARK SPACES IN THE NEIGHBOURHOOD

Definition
A park is an area of natural, semi-natural or planted space set aside for human enjoyment and recreation. Good quality small parks should contain shaded area, landscaped area, bright cloured equipment, comfortable seating areas, cleanliess and safety.

Rationale for the Indicator
Open spaces are ideal places for ITCs to socialise, play and interact. Accessible good quality parks should be provided to promote outdoor activities for ITCs, connection to nature and climate resilience. The number and amount of different park spaces indicates the range of opportunities and the sufficiency of provision for the community.

Units	Data Requirements		Frequency of Measurements		Jurisdiction of Measurements
No.	Sample Survey		Once annually		Neighbourhood
Reliability of Measurements					
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages		Desk based estimation For example - based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on existing maps like Landuse map.
Benchmark Value*					
Thriving		**Striving**		**Surviving**	
More than 4 and total area more than 15,000 Sqm		3 - 4 and total area of 15000 Sqm		Less than 3 and total area less than 15000 Sqm	

* Pt.8.4.5. Open Spaces, *Page 362-63,* URDPFI Guidelines 2014, Ministry of Urban Development

Refer to : ITCN Design Guidelines, page 16 - 17

Indicator 10/65

NUMBER OF GOOD QUALITY NEIGHBOURHOOD PARK SPACES IN THE NEIGHBOURHOOD

Definition
A park is an area of natural, semi-natural or planted space set aside for human enjoyment and recreation. Good quality large parks should contain dedicated areas for different users, shaded area, landscapes spaces, bright cloured equipment, comfortable seating areas, cleaness, safety, public facilities like drinking water, toilets etc.

Rationale for the Indicator
Open spaces are ideal places for ITCs to socialise, play and interact. Accessible good quality parks should be provided to promote outdoor activities for ITCs, connection to nature and climate resilience. The number and amount of different park spaces indicates the range of opportunities and the sufficiency of provision for the community.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
No.	Sample Survey	Once annually	Neighbourhood

Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on existing maps like Landuse map.

Benchmark Value*		
Thriving	**Striving**	**Surviving**
More than 4 with total area more than 10,000 Sqm	1 of 10,000 sqm OR 1-4 of total Area of 10,000 Sqm	Less than 1 with total area less than 10,000 Sqm

* Pt.8.4.5. Open Spaces, *Page 362 -63,* URDPFI Guidelines 2014, Ministry of Urban Development

Refer to : ITCN Design Guidelines, page 16 - 17

Indicator 11/65

PERCENTAGE OF OPEN SPACE IN THE NEIGHBOURHOOD

Definition
Area under open spaces (including vacant land, organised green and underitlised land) as percentage of total area of the neighbourhood.

Rationale for the Indicator
Open spaces are ideal places for ITCs to socialise, play and interact. Accessible good quality parks should be provided to promote outdoor activities for ITCs, connection to nature and climate resilience. The number and amount of different park spaces indicates the range of opportunities and the sufficiency of provision for the community.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
%	Existing Data		Once annually	Neighbourhood
Reliability of Measurements				
Based on Latest published landuse report	Selected landuse survey at specific housing blocks as averages & based on old ULB landuse report	Desk based estimation For example - based on Old landuse report		Desk based estimation For example - based on earlier data
Benchmark Value				
Thriving		**Striving**		**Surviving**
More than 15% open space out of total neighbourhood area		10- 15% open space out of total neighbourhood area		Less than 10% open space out of total neighbourhood area

Refer to : ITCN Design Guidelines, page 17

Indicator 12/65

PER CAPITA ORGANISED GREEN OPEN SPACE FOR A NEIGHBOURHOOD

Definition
Average per person area under open spaces including underitlised land, organised gree and other common open spaces but excluding flood plains, forest cover etc.

Rationale for the Indicator
Open spaces are ideal places for ITCs to socialise, play and interact. Accessible good quality parks should be provided to promote outdoor activities for ITCs, connection to nature and climate resilience. The number and amount of different park spaces indicates the range of opportunities and the sufficiency of provision for the community.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
Sqm.	Existing Data		Once annually	Neighbourhood
Reliability of Measurements				
Based on Latest published landuse report	Selected landuse survey at specific housing blocks as averages & based on old ULB landuse report		Desk based estimation For example - based on Old landuse report	Desk based estimation For example - based on earlier data
Benchmark Value*				
Thriving		**Striving**		**Surviving**
More than 4 sqm. open space per person		3 -4 sq.m. open space per person		Less than 3 sqm. open space per person

* Pt.8.4.5. Open Spaces, *Page 362* , URDPFI Guidelines 2014, Ministry of Urban Development

Refer to : ITCN Design Guidelines, page 17

Indicator 13/65

PERCENTAGE OF ENCROACHED / INFORMAL AREA OF TOTAL NEIGHBOURHOOD AREA

Definition
Encroached area as percentage of total neighbourhood area.

Rationale for the Indicator
Encroachment/Informal areas in urban spaces highlights the level of underutlisation of limited urban spaces. Organised & smart intervention in these areas will lead to more spaces available for park, recreation, community interaction points

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Sample Survey	Once annually	Neighbourhood
Reliability of Measurements			
Based on Latest published landuse report	Selected landuse survey at specific housing blocks as averages & based on old ULB landuse report	Desk based estimation For example - based on Old landuse report	Desk based estimation For example - based on earlier data
Benchmark Value			
Thriving		**Striving**	**Surviving**
Less than 2% area is under encroachment / informal areas out of total neighbourhood area.		2- 5% area is under encroachment / informal areas out of total neighbourhood area.	More than 5% area is under encroachment / informal areas out of total neighbourhood area.

Refer to : N/A

STREETS

Objectives Achieved	Indicators
	14. Presence of walk zone/footpath/sidewalk at major routes in neighbourhood. 15. Provision and quantity of public seating to stop and rest, by neighbourhood
	16. % of clear and unobstructed pedestrian footpath of total road length. 17. Presence of kerb cuts. 18. % of streets with adequate lighting. 19. Street light spacing in the neighbourhood. 20. Presence of cycle routes inside the neighbourhood and on major bordering roads (kms would be future indicator). 21. Encroachment on NMT roads at neighbourhood level by Vehicle Parking (%) 22. Presence of traffic calming measures in the neighbourhood and average speed of vehicles in the neighbourhood 23. % of intersections containing timed signals and lighting in the neighbourhood and along its border roads. 24. % of one-way streets in a neighbourhood. 25. % of total street length closed to 4 wheel traffic. 26. % of total street length closed to 4 wheel and 2 wheel traffic. 27. Presence of informal wayfinding in the vicinity of schools and parks. 28. Instances of observable standing water, overflowing drains, sewage.
	29. Presence of green corridors on major routes and number of corridors in a neighbourhood. 30. % of streets with decibel levels above standard 55 dB inside the neighbourhood. 31. Presence of no-honking zones in the neighbourhood.
	32. Fatality rate for pedestrian and NMT (%) 33. Number of fatal accidents occuring due to traffic in the neighbourhood.

Indicator 14/65

PRESENCE OF WALK ZONE/FOOTPATH/SIDEWALK AT MAJOR ROUTES IN NEIGHBOURHOOD

Definition
Footpaths/walk zone/sidewalk spaces- are defined as any area primarily used by "all" pedestrian. They can be adjacent to roadways, or away from the road. Number of major routes at neighbourhood level with the existence of adequate footpaths /walkzone

Rationale for the Indicator
Pedestrians are affected by their surroundings ,ambience of the space around them and they respond accordingly to make decisions whether to use a facility or not. Pedestrian footpath can be used at select places for people to congregate. Place making encourages more people to use pedestrian facilities, which in-turn makes our streets livelier and safer young children.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
y/n, No.	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Observational on-site survey of all major routes in neighbourhood	Observational on-site survey of selected major routes as averages	Desk based estimation For example - based on existing maps & with systematic on-site verification.		Desk based estimation For example - based on existing maps like road network map
Benchmark Value*				
Thriving		**Striving**		**Surviving**
Width more than 3 m and >80% of route do have continous footpath & meet quality criteria		Width between 3 m and 1.8 m and 30% - 80% of route do have continous footpath & meet quality criteria		Width less than 1.8 m and <30% of route do have continous footpath & meet quality criteria

*Pt.8.2.3. Footpath, *Page 286* , URDPFI Guidelines 2014, Ministry of Urban Development

Refer to : ITCN Design Guidelines, page 32 - 43

Indicator 15/65

PROVISION AND QUANTITY OF PUBLIC SEATING TO STOP AND REST, BY NEIGHBOURHOOD

Definition
The average distance between resting points (e.g. benches, informal seating) within a neighbourhood.
The number of resting points that are comfortable and inclusive (sheltered, providing for different abilities) as a% of the total number of resting points.

Rationale for the Indicator
Streets need to be comfortable places to dwell; enabling ITCs people to sit comfortably contributes to this as well as to natural surveillance and ensuring street environments are inclusive for people who cannot walk long distances without a rest. The recommended spacing between resting points is driven by the average comfortable walking distances of the least mobile.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
m /%	Observation	Once annually	Neighbourhood

Reliability of Measurements			
Observational survey of resting points by neighbourhood.	Observational on-site survey of specific routes/ destinations as averages.	Desk based counts of resting points with systematic on-site verification.	Desk based counts of resting points For example - based on aerial imagery.

Benchmark Value*		
Thriving	**Striving**	**Surviving**
Less than 50m between resting points. And >50% of route do have provision for resting points.	50 - 150m between resting points. And 30% - 50% of route do have provision for resting points.	More than 150m between resting points. And <30% of resting points meet quality criteria.

* Pt.8.4.10.2 Amenities, *Page 368*, URDPFI Guidelines 2014, Ministry of Urban Development

Indicator 16/65

PERCENTAGE OF CLEAR AND UNOBSTRUCTED PEDESTRIAN FOOTPATH OF TOTAL ROAD LENGTH

Definition
Continuous pedestrian footpath as percentage of total road length

Rationale for the Indicator
Clear, comfortable and legible movement through the neighbourhood is more accessible and inclusive for a range of ages and abilities as well as for ITCs who may be travelling with strollers.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all street at neighbourhood level	Sample survey at all street at neighbourhood level as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value*			
Thriving	**Striving**		**Surviving**
More than 80% clear and unobstructed pedestrian footpath	50%- 80% clear and unobstructed pedestrian footpath		Less than 50% clear and unobstructed pedestrian footpath

*SLBs for Urban Transport- MoUD, Government of India

Refer to : ITCN Design Guidelines, page 32 - 43

Indicator 17/65

PRESENCE OF KERB CUTS

Definition
Existence of kerb cuts in existing local & collector street & number of kerb cuts per km of street

Rationale for the Indicator
Traffic, regardless of the speed it is travelling at, affects how safe and relaxing the street feels and contributes to the severance effect of the street. Even slow-moving traffic affects the safety and ease of crossing, walking and cycling for ITCs.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
y / n, No.	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all street at neighbourhood level	Sample survey at selected street at neighbourhood level as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation e.g. based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
Not applicable for benchmarking. This is a visual comprehension of the indicator. Presence (Yes/No)			

Refer to : ITCN Design Guidelines, page 46 - 47, page 52 - 53

Indicator 18/65

PERCENTAGE OF STREETS WITH ADEQUATE LIGHTING

Definition
Street area covered by adequate lighting as a percentage of total area.

Rationale for the Indicator
Street lighting and lighting in parks is important for ensuring that ITCs walking and cycling can see their way and can feel safe. The ambience of the lighting also affects how relaxed they feel. Consider interactivity, visibility, ambience and safety.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all street at neighbourhood level	Sample survey at all street at neighbourhood level as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
100% of street area with adequate lighting facilities with >= 8 lux	100% < street area < 50% of street area with adequate lighting facilities with 6- 8 lux		Less than 50% of street area with adequate lighting facilities with 6- 8 lux

Refer to : ITCN Design Guidelines, page 48

Indicator 19/65

STREET LIGHT SPACING IN A NEIGHBOURHOOD

Definition
The distance between poles should not be more than 30 m.

Rationale for the Indicator
Street lighting and lighting in parks is important for ensuring that ITCs who are either walking or cycling can see their way and feel safe. The ambience of the lighting also affects how relaxed they feel. Consider interactivity, visibility, ambience and safety.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
Meters	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Comprehensive survey at all street at neighbourhood level	Sample survey at all street at neighbourhood level as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information	
Benchmark Value				
Thriving		**Striving**		**Surviving**
100% of street area with light poles spacing not more than 30 m		100% > street area > 80% with light poles spacing not more than 30 m		50% > street area with light poles spacing not more than 30 m

Refer to : ITCN Design Guidelines, page 48

Indicator 20/65

PRESENCE OF CYCLE ROUTES INSIDE THE NEIGHBOURHOOD AND ON MAJOR BORDERING ROADS (KMS WOULD BE FUTURE INDICATOR)

Definition
Existence of cycle routes in the neighbourhood

Rationale for the Indicator
Offering choice to ITCs in active, safe and pleasant travel modes can cater for greater freedom and ease of journeys through the neighbourhood. Considerations include the quality, width and accessibility of routes.

Units	Data Requirements		Frequency of Measurements		Jurisdiction of Measurements	
y / n	Existing data		Once annually		Neighbourhood	
Reliability of Measurements						
Based on published government notification		Based on government advisory report		Desk based estimation For example - based on latest secondary sources		Desk based estimation For example - based on old secondary sources
Benchmark Value						
Thriving			**Striving**		**Surviving**	
Not Applicable						

Refer to : ITCN Design Guidelines, page 22 - 29, page 36 - 37

Indicator 21/65

ENCROACHMENT ON NMT ROADS AT NEIGHBOURHOOD LEVEL BY VEHICLE PARKING

Definition
Area encroached by vehicular parking out of the total NMT dedicated roads.

Rationale for the Indicator
Street lighting and lighting in parks is important for ensuring that ITCs walking and cycling can see their way and can feel safe. The ambience of the lighting also affects how relaxed they feel. Consider interactivity, visibility, ambience and safety.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at major routes to public facilties like park , school, health centre	Sample survey at selected major routes public facilties like park , school, health centre	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value*			
Thriving	**Striving**		**Surviving**
Less than <= 10% of total NMT roads	10% -20% of total NMT roads		More than > 20% of total NMT roads

* SLBs for Urban Transport- MoUD, Government of India

Refer to : ITCN Design Guidelines, page 30

Indicator 22/65

PRESENCE OF TRAFFIC CALMING MEASURES IN THE NEIGHBOURHOOD

Definition
Traffic calming uses physical design and other measures to improve safety for motorists, pedestrians and cyclists. Urban planners and traffic engineers have many strategies for traffic calming, including narrowed roads and speed humps.

Rationale for the Indicator
Traffic, regardless of the speed it is travelling at, affects how safe and relaxing the street feels and contributes to the severance effect of the street. Even slow-moving traffic affects the safety and ease of crossing, walking and cycling for ITCs.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
y / n	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Comprehensive survey at major routes to public facilties like park, school, health centre	Sample surveyat selected major routes public facilties like park, school, health centre	Desk based estimation For example - based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on earlier survey / information
Benchmark Value*				
Thriving		**Striving**		**Surviving**
Yes and less than 10kmph		Yes and 10-20 kmph		No and more than 20 kmph

* Pt.8.2.2.1 Design Speed & Space Standard, *Page 285*, URDPFI Guidelines 2014, MoUD ; Urban Street Design Guidelines, UTTIPEC; Urban Road, Code of Practice Part 1, MoUD.

Refer to : ITCN Design Guidelines, page 22 - 23

Indicator 23/65

PERCENTAGE OF INTERSECTIONS CONTAINING TIMED SIGNALS AND LIGHTING IN THE NEIGHBOURHOOD AND ALONG ITS BORDER ROADS

Definition
Signalised intersection as percentage of total number of intersection

Rationale for the Indicator
The walking speed for ITCs ranges from 0.41 m/s to 0.61 m/s. Intersections should promote ease of crossing for ITCs including accommodating ample crossing time and legibility.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
%	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Comprehensive survey at all street at neighbourhood level	Sample survey at selected street at neighbourhood level as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on earlier survey / information
Benchmark Value				
Thriving		**Striving**		**Surviving**
100% of intersection with time signailsed infrastructure		100% < intersection < 75% of intersection with time signailsed infrastructure		Less than 75% of intersection with time signailsed infrastructure

* SLBs for Urban Transport- MoUD, Government of India

Refer to : ITCN Design Guidelines, page 47

Indicator 24/65

PERCENTAGE OF ONE WAY STREETS IN A NEIGHBOURHOOD

Definition
Length of local and collector street at neighbourhood level as one way traffic movement as percentage of total local & collector street network.

Rationale for the Indicator
The walking speed for ITCs ranges from 15 m /min to 75 m / min. Intersections should promote ease of crossing for ITCs including accommodating ample crossing time and legibility.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all street at neighbourhood level	Sample survey at selected street at neighbourhood level as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
More than 50% of neighbourhood street	20-50% of neighbourhood street		Less than 20% of neighbourhood street

Refer to : ITCN Design Guidelines, page 33, page 39

Indicator 25/65

PERCENTAGE OF TOTAL STREET LENGTH CLOSED TO 4-WHEEL TRAFFIC

Definition
Length of local & collector street at neighbourhood level closed to 4 wheel traffic movenent as percentage of total local & collector street network.

Rationale for the Indicator
Traffic, regardless of the speed it is travelling at, affects how safe and relaxing the street feels and contributes to the severance effect of the street. Even slow-moving traffic affects the safety and ease of crossing, walking and cycling for ITCs.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood

Reliability of Measurements			
Based on published government notification	Based on government advisory report	Desk based estimation For example - based on latest secondary sources	Desk based estimation For example - based on old secondary sources

Benchmark Value		
Thriving	**Striving**	**Surviving**
More than 15% of total street length closed to 4 wheel traffic	5 -15% of total street length closed to 4 wheel traffic	Less than 5% of total street length closed to 4 wheel traffic

Refer to : ITCN Design Guidelines, page 60

Indicator 26/65

PERCENTAGE OF TOTAL LOCAL STREET LENGTH CLOSED TO 4- & 2-WHEEL MOTORIZED TRAFFIC

Definition
Length of local & collector street at neighbourhood level closed to 4 & 2 wheel traffic movement as percentage of total local & collector street network

Rationale for the Indicator
Traffic, regardless of the speed it is travelling at, affects how safe and relaxing the street feels and contributes to the severance effect of the street. Even slow-moving traffic affects the safety and ease of crossing, walking and cycling for ITCs.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Based on published government notification	Based on government advisory report	Desk based estimation For example - based on latest secondary sources	Desk based estimation For example - based on old secondary sources
Benchmark Value			
Thriving		**Striving**	**Surviving**
more than 25% of total street length closed to 4 & 2 wheel traffic		10 - 25% of total street length closed to 4 & 2 wheel traffic	less than 10% of total street length closed to 4 & 2 wheel traffic

Refer to : ITCN Design Guidelines, page 60

Indicator 27/65

PRESENCE OF INFORMAL WAYFINDING IN THE VICINITY OF SCHOOLS AND PARKS

Definition
Wayfinding refers to information systems that guide people through a physical environment and enhance their understanding and experience of the space.

Rationale for the Indicator
ITCs can be supported to explore the wider neighbourhood safely, actively and playfully through integrated and interactive wayfinding. Wayfinding can also enhance public spaces distinctive identity, drawing attention to meaningful landmarks on everyday journeys and activating spaces. Consideration should be given to low level indicators at the height of infants and toddlers, colours, materials and lighting and continuous lines and borders that can give that are stimulating and navigable to ITCs.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
y / n	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all street at neighbourhood level	Sample survey at all street at neighbourhood level as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
Not Applicable			

Refer to :

Indicator 28/65

INSTANCES OF OBSERVABLE STANDING WATER, OVERFLOWING DRAINS, SEWAGE

Definition
Number of incidence standing water, overflowing drains, sewage per kilometer of street network

Rationale for the Indicator
Water management is a constant issue in cities, whether it is conservation of water in dry areas or preventing flooding during the monsoons or ensuring that water in the public realm is safe and appropriately accessible. In neighbourhoods it is important to have good drainage to prevent stagnant water and puddles from forming in the public realm where mosquitos can breed.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
No.	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Comprehensive survey at all street at neighbourhood level	Sample survey at selected street at neighbourhood level as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on earlier survey / information
Benchmark Value				
Thriving		**Striving**		**Surviving**
TBD				

Refer to : ITCN Design Guidelines, page 102

Indicator 29/65

PRESENCE OF GREEN CORRIDORS ON MAJOR ROUTES & NUMBER OF CORRIDOR IN A NEIGHBOURHOOD

Definition
Streets or pedestrian ways shaded by continous trees at minimum distance of 8-12m

Rationale for the Indicator
Trees can contribute to making streets feel more relaxing and more attractive places to walk, cycle and use public transport. Tree cover contributes to shade from sunshine and protection from rain. In some cases trees can also help remove some pollutants from the air, provide a buffer for dust and improve the perception of noise. The wider benefits of trees in mitigating the impacts of climate change through CO_2 capture is also important to retaining mature trees and planting new ones.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
y/n, No.	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Observational on-site survey of all major routes in neighbourhood	Observational on-site survey of selected major routes as averages	Desk based estimation For example - based on existing landuse maps & with systematic on-site verification.	Desk based estimation For example - based on aerial imagery	
Benchmark Value				
Thriving		**Striving**		**Surviving**
Not Applicable				

Refer to :

Indicator 30/65

PERCENTAGE OF STREETS WITH DECIBEL LEVELS ABOVE STANDARD 55 DB INSIDE THE NEIGHBOURHOOD

Definition
Number of streets with decibel levels above standard 55 dB as of percentage of total number of streets inside the neighbourhood.

Rationale for the Indicator
ITCs are sensitive to noise. Lower noise levels promote interaction between infants, toddlers and caregivers and with their environment, contributing to intimacy, perceived safety and reduced stress levels.

Units	Data Requirements		Frequency of Measurements		Jurisdiction of Measurements	
%	Observation		Once annually		Neighbourhood	
Reliability of Measurements						
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages		Desk based estimation For example - based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on earlier survey / information	
Benchmark Value*						
Thriving		**Striving**		**Surviving**		
Less than 5% of streets with decibel levels above standard 55 dB		5 - 10% of streets with decibel levels above standard 55 dB		More than 10% of streets with decibel levels above standard 55 dB		

* Page 9, The Noise Pollution Regulation & Control Rules, 2000, Ministry of Environment & Forests

Refer to : N/A

Indicator 31/65

PRESENCE OF NO-HONKING ZONES IN THE NEIGHBOURHOOD

Definition
Existence of silence zones in the neighbour-hood.

Rationale for the Indicator
ITCs are sensitive to noise. Lower noise levels promote interaction between infants, toddlers and caregivers and with their environment, contributing to intimacy, perceived safety and reduced stress levels.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
y / n	Existing Data		Once annually	Neighbourhood
Reliability of Measurements				
Based on published government notification	Based on government advisory report		Desk based estimation For example - based on latest secondary sources	Desk based estimation For example - based on old secondary sources
Benchmark Value*				
Thriving		**Striving**		**Surviving**
Not Applicable				

* Page 6, The Noise Pollution Regulation & Control Rules, 2000, Ministry of Environment & Forests

Refer to : N/A

Indicator 32/65

FATALITY RATE FOR PEDESTRIAN AND NMT (%)

Definition
Fatalties occuring per year

Rationale for the Indicator
ITCs have to take care of multiple things while making their daily trips in the neighbourhood. Its very important to provide safety from any mishaps due to traffic movement.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood

Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information

Benchmark Value*		
Thriving	**Striving**	**Surviving**
Less than equal to 10%	10 - 20%	More than 20%

*SLBs for Urban Transport- MoUD, Government of India

Refer to : ITCN Design Guidelines, page 22 - 23

Indicator 33/65

NUMBER OF FATAL ACCIDENTS OCCURING DUE TO TRAFFIC IN THE NEIGHBOURHOOD

Definition
Fatal accidents occuring on roads due to traffic.

Rationale for the Indicator
ITCs have to take care of multiple things while making their daily trips in the neighbourhood. Its very important to provide safety from any mishaps due to traffic movement.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
No.	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on earlier survey / information
Benchmark Value				
Thriving		**Striving**		**Surviving**
Less than 85% the city average numbers		Less than 70%-85% the city average numbers		Less than 0%-70% the city average numbers

Refer to : ITCN Design Guidelines, page 22 - 23

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PARKS & OPEN SPACES

Objectives Achieved	Indicators
	34. Number of hours per day open areas are occupied in a neighbourhood. Tot-lot, housing area park, neighbourhood playground. 35. Average no of time per week caregivers engage with their 0-5 in outdoor playing/activities in organised green spaces/recreation spaces. 36. Average duration of visits for infants, toddlers and their caregivers at park facilities. 37. % utilization of parks by infants, toddlers and their caregivers. 38. % of area in parks dedicated to play spaces suitable for young children 0-3. 39. Presence of natural materials in play equipment (y/n) by play space, presence of natural areas (e.g. greenery, sand, safe and clean water) as percentage of total play space. 40. Number of parks that have quality seating, facing 0-3 play areas.
	41. % of parks with adequate lighting. 42. Presence of stray animals in parks.
	43. % of parks at neighbourhood level with free public drinking water, toilets and other facilities for families.
	44. Percentage distribution of Children engaged in formal & informal play in organised green spaces.
	45. Frequency of maintenance of parks.
	46. % of municipal budget allocated for open spaces or parks (including management/maintenance and programming)
	47. Air Quality Index in the neighbourhood 48. RSPM (Size less than 10 microns)

Indicator 34/65

NUMBER OF HOURS PER DAY OPEN AREAS ARE OCCUPIED IN A NEIGHBOURHOOD.

Definition
Average duration per day organised green spaces (Tot-lot, housing area park, neighbourhood playground) are occupied by Infant, toddlers & their care givers.

Rationale for the Indicator
How well used parks and playspaces are by ITCs and the duration of their stay is an indication of the quality of play and social contact when it happens in outdoor settings. Interaction through activities like play and connection to nature supports children's development and provides opportunity for safe, pleasant, friendly interactions in the community which can contribute to reduced stress.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
Hours	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Observational survey of all park at neighbour-hood.	Observational on-site survey of specific park as averages.	Desk based estimation For example - based on existing & earlier informa-tion & with systematic on-site verification.		Desk based estimation For example -based on infromation.
Benchmark Value*				
Thriving		**Striving**		**Surviving**
More than 120 mins / 2 hours - average green spaces occupied daily		60 - 120 mins - average green spaces occupied daily		Less than 60 mins - average hours green spaces occupied

* International benchmarks.

Refer to : N/A

Indicator 35/65

AVERAGE AMOUNT OF TIME PER WEEK ITCS ENGAGE IN OUTDOOR PLAYING/ACTIVITIES IN ORGANISED GREEN /RECREATION SPACES

Definition

Average no of time per week caregivers with young children (0-5 years) engage in outdoor playing/activities in organised green spaces/ recreation spaces

Rationale for the Indicator

Playing is a prime activity for small children. For the 0-5 age group especially, playing is a way to have fun, to socialize but also to learn and develop. Outdoor play gives children physical exercise, closer contact with nature and a means of socializing with their peers and with caregivers. Consideration should be given to informal play, from the door step exploring out to the street and neighbourhood in a stimulating and sensory way as well as providing opportunities for formal play such as in parks and playspaces.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
No.	Sample Survey	Half Yearly	Neighbourhood

Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information

Benchmark Value		
Thriving	**Striving**	**Surviving**
TBD		

Refer to : N/A

Indicator 36/65

AVERAGE DURATION OF VISITS FOR INFANTS, TODDLERS AND THEIR CAREGIVERS AT PARK FACILTIES

Definition
Average duration per organised green park visit by infants, toddlers & their caregiver.

Rationale for the Indicator
How well used parks and playspaces are by ITCs and the duration of their stay is an indication of the quality of play and social contact when it happens in outdoor settings. Interaction through activities like play and connection to nature supports children's development and provides opportunity for safe, pleasant, friendly interactions in the community which can contribute to reduced stress.

Units	Data Requirements		Frequency of Measurements		Jurisdiction of Measurements	
minutes	Sample Survey		Once annually		Neighbourhood	
Reliability of Measurements						
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages		Desk based estimation For example - based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on earlier survey / information	
Benchmark Value						
Thriving		**Striving**			**Surviving**	
More than 60 mins per organised park visit by Infant, toddler & their care givers		60 mins > duration > 30 mins per organised park visit by Infant, toddler & their care givers			Less than 30 mins per organised park visit by Infant, toddler & their care givers	

Refer to : N/A

Indicator 37/65

PERCENTAGE UTILISATION OF PARKS BY ITCS

Definition
Area out of total park utlised by Infants, tod-dlers & their care givers on their visit to organised green spaces.

Rationale for the Indicator
How well used parks and playspaces are by ITCs and the duration of their stay is an indication of the quality of play and social contact when it happens in outdoor settings. Interaction through activities like play and connection to nature supports children's development and provides opportunity for safe, pleasant, friendly interactions in the community which can contribute to reduced stress.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Observational survey of all park at neighbour-hood.	Observational on-site survey of specific park as averages.	Desk based estimation For example - based on existing & earlier informa-tion & with systematic on-site verification.	Desk based estimation For example - based on infromation.
Benchmark Value			
Thriving		**Striving**	**Surviving**
TBD			

Refer to :

Indicator 38/65

PERCENTAGE OF AREA IN PARKS DEDICATED TO PLAY SPACES SUITABLE FOR YOUNG CHILDREN 0-5

Definition
Existing park area for young children as a% of the total park area

Rationale for the Indicator
Play opportunities in the neighbourhood should be available for all age groups. Children under 0-3 have particular sensitivities and interactions that can be neglected in playspace design. Providing opportunities specifically for this group will enable ITCs interactions early on.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Sample Survey	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
There is more than 10% of existing park area dedicated to young children (0-5 years)	There is 10% > Park areas > 5% of existing park area dedicated to young children (0-5 years)		There is less than 5% of existing park area dedicated to young children (0-5 years)

Refer to : ITCN Design Guidelines, page 84 - 85

Indicator 39/65

PRESENCE OF NATURAL MATERIALS IN PLAY EQUIPMENT BY PLAY SPACE, PRESENCE OF NATURAL AREAS AS % OF TOTAL PLAY SPACE

Definition
Existence of natural environment / material in play space & natural area as a% of total playable area

Rationale for the Indicator
Regular exposure to nature has been found to have positive benefits on the health of children, Natural materials are eco-friendly, cheap, easy-to-find and they can offer children a unique experience: to get contact with nature and the materialization natural objects have: textures, smells, properties and colours. Contact with such elements can also stimulate their learning ability in a very creative way.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
y/n,%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Observational survey of all playable space at neighbourhood.	Observational on-site survey of specific plyable area as averages.	Desk based estimation For example -based on existing & earlier information & with systematic on-site verification.	Desk based estimation For example -based on earlier information.
Benchmark Value			
Thriving	**Striving**		**Surviving**
Not Applicable			

Refer to : ITCN Design Guidelines, page 74

Indicator 40/65

NUMBER OF PARKS THAT HAVE QUALITY SEATING, FACING 0-3 PLAY AREAS

Definition
Number of parks at neighbourhood with the provision of quality seating oriented towards 0-3 play areas.

Rationale for the Indicator
Public spaces that cater for social interaction and informal opportunities to look out for infants and toddlers provide opportunities for greater freedom and enjoyment for both caregivers and young children, it can also contribute to shared care.

Units	Data Requirements		Frequency of Measurements		Jurisdiction of Measurements
No.	Observation		Once annually		Neighbourhood
Reliability of Measurements					
Observational survey of all park at neighbourhood.	Observational on-site survey of specific park as averages.		Desk based estimation For example -based on existing & earlier information & with systematic on-site verification.		Desk based estimation For example -based on layout plan
Benchmark Value*					
Thriving		**Striving**		**Surviving**	
There is more than 4 parks at neighbourhood level with the provision of quality seating & oriented towards 0-3 play areas		4 > parks > 2 parks at neighbourhood level with the provision of quality seating & oriented towards 0-3 play areas		Less than 2 park at neighbourhood level with the provision of quality seating & oriented towards 0-3 play areas	

* *Page 7,* Urban Greening Guidelines, TCPO, GoI, MoUD

Refer to : ITCN Design Guidelines, page 76

Indicator 41/65

PERCENTAGE OF PARKS WITH ADEQUATE LIGHTING

Definition
Park area covered by adequate lighting as a percentage of total area.

Rationale for the Indicator
Street lighting and lighting in parks is important for ensuring that ITCs walking and cycling can see their way and can feel safe. The ambience of the lighting also affects how relaxed they feel. Consider interactivity, visibility, ambience and safety.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example -based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
100% of park area with adequate lighting facilities	100% > park area > 50% of park area with adequate lighting facilities		Less than 50% of park area with adequate lighting facilities

Refer to : ITCN Design Guidelines, page 69

Indicator 42/65

PRESENCE OF STRAY ANIMALS IN PARKS

Definition
Existence of stray animal in the parks

Rationale for the Indicator
Stray animals can be a safety risk for infants and toddlers and contribute to the comfort and perceived safety of spending time in parks for caregivers.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
y / n	Observation		Quarterly	Neighbourhood
Reliability of Measurements				
Comprehensive survey at all housing area park	Sample survey at specific housing area park as averages	Desk based estimation For example -based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on earlier survey / information
Benchmark Value				
Thriving		**Striving**		**Surviving**
Not Applicable				

Refer to : ITCN Design Guidelines, page 70

Indicator 43/65

PERCENTAGE OF PARKS AT NEIGHBOURHOOD LEVEL WITH FREE PUBLIC DRINKING WATER, TOILETS AND OTHER FACILITIES

Definition
No of parks out of total with the provision of basic facilities like drinking water, toilets & other facilties for families

Rationale for the Indicator
Basic facilities, such as toilets and drinking water are needed for both caregivers and young children. They support comfort levels and ultimately enable ITCs to spend time together outdoors for longer.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Observational on-site survey of all public park facilities	Observational on-site survey of specific park facilties as averages	Desk based estimation For example - based on existing information & with systematic on-site verification.	Desk based estimation For example - based on approval park layout maps
Benchmark Value			
Thriving	**Striving**		**Surviving**
100% park with basic basic facilities like drinking water, toilets & other facilties for families.	50% - 100% with basic basic facilities like drinking water, toilets & other facilties for families.		Less than 50% with basic basic facilities like drinking water, toilets & other facilties for families.

Refer to :

Indicator 44/65

PERCENTAGE DISTRIBUTION OF CHILDREN ENGAGED IN FORMAL & INFORMAL PLAY IN ORGANISED GREEN SPACES

Definition
Distribution of daily children times between formal & informal play areas in a orgaised green space

Rationale for the Indicator
Playing is a prime activity for small children. For the 0-5 age group especially, playing is a way to have fun, to socialize but also to learn and develop. Outdoor play gives children physical exercise, closer contact with nature and a means of socializing with their peers and with caregivers. Consideration should be given to informal play, from the door step exploring out to the street and neighbourhood in a stimulating and sensory way as well as providing opportunities for formal play such as in parks and playspaces.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Sample Survey	Half Yearly	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example -based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
TBD			

Refer to : N/A

Indicator 45/65

FREQUENCY OF MAINTENANCE OF PARKS BY SIZE OF PARK

Definition
Periodic Maintenance of parks by ULB

Rationale for the Indicator
Visibly active maintenance programmes support how comfortable and welcoming public spaces are and encourage ITCs to spend time in public space and explore, especially women and girls. Considerations for maintenance include cleaning, upkeep of street furniture and playspaces, waste management, inclusivity policies and natural surveillance.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification	Desk based estimation For example - based on earlier survey / information	
Benchmark Value				
Thriving		**Striving**		**Surviving**
Daily maintenance of Park		Weekly maintenance of Park		Monthly maintenance of Park

Refer to : ITCN Design Guidelines, page 10 - 11

Indicator 46/65

PERCENTAGE OF MUNICIPAL BUDGET ALLOCATED FOR OPEN SPACES OR PARKS

Definition
Municipal budget on public spaces or park development including operation and maintenance as% of total municipal budget in a year.

Rationale for the Indicator
Allocating sufficient budget to maintenance and management of public space underpins helps to optimise the benefits of public spaces for ITCs and the wider community and supports productive functioning of those spaces. This reduces the risk that public spaces are under used once built and underpins their sustainability. Consideration includes maintenance regimes as well as event and activity programming for the community.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Existing Data	Once annually	Neighbourhood
Reliability of Measurements			
Based on published ULB budget report	Based on un published ULB budget report	Desk based estimation For example - based on earlier data & last year ULB budget	Desk based estimation For example - based on earlier data
Benchmark Value			
Thriving		**Striving**	**Surviving**
There is more than 5% of the allocated municipal budget on open spaces or parks development (including management/maintenance and programming)		There is 5% > Park budget > 1% of the allocated municipal budget on open spaces or parks development	Less than 1% of the allocated municipal budget on open spaces or parks development

Refer to : ITCN Design Guidelines, page 10 - 11

Indicator 47/65

AIR POLLUTION LEVELS IN THE NEIGHBOURHOOD

Definition
An air quality index (AQI) is a number used by government agencies to communicate to the public how polluted the air currently is or how polluted it is forecast to become.

Rationale for the Indicator
Visibly active maintenance programmes support how comfortable and welcoming public spaces are and encourage ITCs to spend time in public space and explore, especially women and girls. Considerations for maintenance include cleaning, upkeep of street furniture and playspaces, waste management, inclusivity policies and natural surveillance.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
No.	Existing Data		Once annually	Neighbourhood
Reliability of Measurements				
Based on published government notification	Based on government advisory report	Desk based estimation For example - based on latest secondary sources	Desk based estimation For example - based on old secondary sources	
Benchmark Value				
Thriving		**Striving**		**Surviving**
Less than 50% the city AQI		Less than 10-20% the city AQI		More than 10-20% the city AQI

Refer to : ITCN Design Guidelines, page 50, page 72

Indicator 48/65

RSPM (SIZE LESS THAN 10 MICRONS)

Definition
Respirable Suspended Particulate Matter

Rationale for the Indicator
Visibly active maintenance programmes support how comfortable and welcoming public spaces are and encourage ITCs to spend time in public space and explore, especially women and girls. Considerations for maintenance include cleaning, upkeep of street furniture and playspaces, waste management, inclusivity policies and natural surveillance.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Existing Data	Once annually	Neighbourhood
Reliability of Measurements			
Based on published ULB budget report	Based on un published ULB budget report	Desk based estimation For example - based on earlier data & last year ULB budget	Desk based estimation For example - based on earlier data
Benchmark Value*			
Thriving		**Striving**	**Surviving**
0-40		40 - 80	More than 80

*SLBs for Urban Transport- MoUD, Government of India

Refer to : ITCN Design Guidelines, page 50, page 72

SOCIAL INFRASTRUCTURE

Objectives Achieved	Indicators
	49. Total Number of Private kindergarten in the neighbourhood and whether they have attached outdoor space.
	50. % of Government schools that allow usage of school campuses during non-school hours. 51. Presence of affordable health clinic inside (Anganwadi) the neighbourhood 52. Number of doctors employed within the neighbourhood 53. Presence of Dispensary in the neighbourhood 54. Community based organisations deliberately inviting women to planning meetings and delivering recommendations to ULB
	55. Provision of public art expenditure in budget to enhance the aesthetic of public spaces - (Y/N) & Percentage change in investment in public art- year by year

Indicator 49/65

TOTAL NUMBER OF PRIVATE KINDERGARTENS IN THE NEIGHBOURHOOD & DO THEY HAVE ATTACHED OUTDOOR SPACE

Definition
Kindergarten is a day-care service offered to children from age three until the child starts attending school. The number of operational private kindergarten available at neighbourhood level

Rationale for the Indicator
It is critical that ITCs are able to access all parts of a neighbourhood easily & conveniently. A neighbourhood planned for ITCs and their caregivers has a mix of uses and services that give reasons to be outdoors & within comfortable walking distances. There are key destinations that ITCs may go to on a regular basis such as daycare, health centres, parks and other amenities. The presence of these within the neighbourhood enhances their accessibility, through travel modes such as walking & cycling.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
y/n, no	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Observational on-site survey of all operational private kindergarten	Observational on-site survey of specific routes/destination covering existing & operational kindergarten	Desk based counts of private kindergarten with systematic on-site verification.	Desk based counts of private kindergarten For example - based on aerial imagery.
Benchmark Value			
Thriving	**Striving**		**Surviving**
TBD			

Refer to :

Indicator 50/65

PERCENTAGE OF GOVERNMENT SCHOOLS THAT ALLOW USAGE OF SCHOOL CAMPUSES DURING NON-SCHOOL HOURS

Definition
Percentage of government schools out of total number of government schools that allow multi usage of school campuses during non-school hours

Rationale for the Indicator
Extending the use of frequently visited destinations for ITCs such as government school campuses to the wider community can provide extra opportunities, space and accessibility for time spent outdoors.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Sample Survey	Half Yearly	Neighbourhood

Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey

Benchmark Value		
Thriving	**Striving**	**Surviving**
100% government school allow usage of school campuses during non-school hours	50% - 100% government school allow usage of school campuses during non-school hours	< 50% government school allow usage of school campuses during non-school hours

Refer to : ITCN Design Guidelines, page 89

Indicator 51/65

PRESENCE OF AFFORDABLE HEALTH CLINIC (ANGANWADI) INSIDE THE NEIGHBOURHOOD

Definition

An Anganwadi is the focal point for delivery of ICDS services to children and mothers. An Anganwadi normally covers a population of 1000 in urban areas.

Rationale for the Indicator

Healthy lifestyles require support from services such as health clinics, particularly in early childhood development. Health clinics may be frequently visited by ITCs and can provide anchors of the community and activity in the neighbourhood.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
y / n	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Observational on-site survey of all operational Anganwadi centre at neighbourhood level	Observational on-site survey of specific routes/ destination covering existing & operational anganwadi as average	Desk based counts of anganwadi centres with systematic on-site verification.	Desk based counts of anganwadi centres For example - goevrnement documents
Benchmark Value*			
Thriving	**Striving**		**Surviving**
There is more than 1 Aanganwadi in the neighbourhood of 15,000 population and meet model aanganwadi quality criteria.	There is 1 Aanganwadi in the neighbourhood of 15,000 population and meet model aanganwadi quality criteria.		There is 1 Aanganwadi in the neighbourhood of 15,000 population and does not meet model aanganwadi quality criteria.

* Pt.8.4.4 Socio-Cultural, *Page 361*, URDPFI Guidelines 2014, Ministry of Urban Development

Refer to :

Indicator 52/65

NUMBER OF DOCTORS EMPLOYED WITHIN THE NEIGHBOURHOOD

Definition

The density of doctors per 1,000 population. As per WHO standards there should atleast 1 doctor per 1000 population. This is also based on High Level Expert Group (HLEG) for Universal Health Coverage' constituted by the Planning Commission.

Rationale for the Indicator

Healthy lifestyles require support from services such as health clinics, particularly in early childhood development. Health clinics may be frequently visited by ITCs and can provide anchors of the community and activity in the neighbourhood.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
No.	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Observational on-site survey of all available doctors in operational health facilties at neighbourhood level	Observational on-site survey of specific routes/ destination covering available doctors in existing & operational health facilities as average	Desk based counts of doctors with systematic on-site verification.		Desk based counts of doctors based on published documents For example - government documents
Benchmark Value				
Thriving		**Striving**		**Surviving**
There are more than 4 doctors per 1,000 population in the neighbourhood		There is 1 < doctors < 4 per 1,000 population in the neighbourhood		There is only 1 doctor per 1,000 population in the neighbourhood

Refer to : N/A

Indicator 53/65

PRESENCE OF DISPENSARY IN THE NEIGHBOURHOOD

Definition
A health care delivery system aimed at providing basic health and family welfare services to the population within 1 - 3 kms. Family Welfare Centres manned by medical and para-medical persons.

Rationale for the Indicator
Healthy lifestyles require support from services such as health clinics, particularly in early childhood development. Health clinics may be frequently visited by ITCs and can provide anchors of the community and activity in the neighbourhood.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
y/n, No.	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Observational on-site survey of all operational Anganwadi centre at neighbourhood level	Observational on-site survey of specific routes/ destination covering existing & operational anganwadi as average	Desk based counts of anganwadi centres with systematic on-site verification.		Desk based counts of anganwadi centres For example - government documents
Benchmark Value*				
Thriving		**Striving**		**Surviving**
There are more than 3 dispensaries in the neighbourhood of 15,000 population and >50% of dispensaries meet quality criteria.		There is 1 < dispensaries < 3 in the neighbourhood of 15,000 population and 30% - 50% of dispensaries meet quality criteria.		There is only 1 dispensary in the neighbourhood of 15,000 population and < 30% of dispensaries meet quality criteria.

* Table 8.50 Health Care Facilities, *Page 360*, URDPFI Guidelines 2014, Ministry of Urban Development

Refer to : ITCN Design Guidelines, page 19, page 92

Indicator 54/65

CBOS DELIBERATELY INVITING WOMEN TO PLANNING MEETINGS AND DELIVERING RECOMMENDATIONS TO ULB

Definition

% of women recommendation/suggestion forms a part of overall recommendation by Community based organisations/ RWA / equivalent bodies to ULB .

Rationale for the Indicator

Infants and toddlers are invariably accompanied by a caregiver, in Indian contexts that caregiver is often female. Providing welcoming, comfortable and safe public realm for women supports them in their care of and interactions with infants and toddlers. To design a public realm that supports the wellbeing of babies and toddlers requires design that specifically addresses the health and safety of women, including through engagement with and response to women's needs.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Observational on-site survey of all RWA/equivalent bodies at neighbourhood level	Observational on-site survey of specific sample of RWA/equivalent bodies at neighbourhood level	Desk based estimation For example - based on existing information & with systematic on-site verification.	Desk based estimation For example - based on earlier assignment
Benchmark Value			
Thriving		**Striving**	**Surviving**
More than 3 recommendation from RWA/ equivalent bodies to ULB is from women representatives articipated in RWA meetings		1> recommendation > 3 from RWA/ equivalent bodies to ULB is from women representatives articipated in RWA meetings	Atleast 1 recommendation from RWA/ equivalent bodies to ULB is from women representatives articipated in RWA meetings

Refer to : ITCN Design Guidelines, page 10 - 11

Indicator 55/65

PROVISION OF PUBLIC ART EXPENDITURE IN BUDGET TO ENHANCE THE AESTHETIC OF PUBLIC SPACES - (Y/N) & PERCENTAGE CHANGE IN INVESTMENT IN PUBLIC ART- YEAR BY YEAR

Definition
Existing provision in municipal budget for public art expenditure & percentage increase in expenditure per year.

Rationale for the Indicator
Public art can provide stimulating opportunities for ITCs including play and learning. It also contributes to memorable and vibrant public spaces that are attractive for caregivers and the community to spend time.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
y/n,%	Existing Data	Once annually	Neighbourhood
Reliability of Measurements			
Observational survey of all playable space at neighbourhood.	Observational on-site survey of specific plyable area as averages.	Desk based estimation For example - based on existing & earlier information & with systematic on-site verification.	Desk based estimation For example - based on earlier information.
Benchmark Value			
Thriving		**Striving**	**Surviving**
Not Applicable			

Refer to :

URBAN SERVICES

Objectives Achieved	Indicators
🌱	56. Presence of SWM collection facility and efficiency in the neighbourhood.
♻	57. Household level coverage of SWM services through door-to-door collection of waste.
🌱	58. Presence of SWM seggregation facilities in the neighbourhood. 59. Efficiency in Redressal of customer complaints on SWM.
♻	60. Quality of water supplied to houshold in neighbourhood.
🌱	61. Percentage of households with rainwater harvesting systems. 62. Percentage of parks, schools , and other public plots within the neighbourhoods with rainwater harvesting systems. 63. Percentage of households with renewable source of energy like Solar/PNG etc. 64. Percentage of public buildings and plots using solar / wind or non-carbon means (mapped). 65. Presence of Solar lighting in and immediately surrounding parks

Indicator 56/65

PRESENCE OF SWM COLLECTION FACILITY AND EFFICIENCY IN THE NEIGHBOURHOOD

Definition

Existence of soild waste collection facility in the neighbourhood area .Total waste collected by ULB and authorized service providers versus the total waste generated within the ULB excluding recycling or processing at the generation point.

Rationale for the Indicator

The global problem of waste in our cities and neighbourhoods will affect young children for decades to come. Bad waste management can affect the spatial quality of the urban environment, the air quality and can also be a source of deceases,especially in poorer areas.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
y/n,%	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value*			
Thriving	**Striving**		**Surviving**
100% collection efficiency	50% - 100% collection efficiency		Less than 50% collection efficiency

* SLBs, Ministry of Urban Development, GoI

Refer to : ITCN Design Guidelines, page 103

Indicator 57/65

HOUSEHOLD LEVEL COVERAGE OF SWM SERVICES THROUGH DOOR-TO-DOOR COLLECTION OF WASTE

Definition
Percentage of households that are covered by daily door-step collection system.

Rationale for the Indicator
Since infants and toddlers explore with all the senses, clean outdoor environments can reduce concerns Having waste free clean roads and drains by door-to-door collection of waste will support more outdoors activities for both caregivers and young children.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Sample Survey	Monthly	Neighbourhood

Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey

Benchmark Value*		
Thriving	**Striving**	**Surviving**
100% households covered by daily door-step collection system.	50% - 100% households covered by daily door-step collection system.	Less than 50% households covered by daily door-step collection system.

* SLBs, Ministry of Urban Development, GoI

Refer to : ITCN Design Guidelines, page 103

Indicator 58/65

PRESENCE OF SWM SEGGREGATION FACILITIES IN THE NEIGHBOURHOOD

Definition
Presence and efficiency of solid waste seggregation facilities which seggregate the waste into recyclable, degradable and non-degradable waste.

Rationale for the Indicator
The global problem of waste in our cities and neighbourhoods will affect young children for decades to come. Bad waste management can affect the spatial quality of the urban environment, the air quality and can also be a source of deceases,especially in poorer areas.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
y / n	Observation		Once annually	Neighbourhood
Reliability of Measurements				
Comprehensive survey at all street at neighbourhood level	Sample survey at selected street at neighbourhood level as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.		Desk based estimation For example - based on earlier survey / information
Benchmark Value				
Thriving		**Striving**		**Surviving**
100% collection efficiency		50% - 100% collection efficiency		Less than 50% collection efficiency

* SLBs, Ministry of Urban Development, GoI

Refer to : ITCN Design Guidelines, page 103

Indicator 59/65

EFFICIENCY IN REDRESSAL OF CUSTOMER COMPLAINTS ON SOLID WASTE MANAGEMENT

Definition
Total number of SWM related complaints re-dressed within 24 hours of receipt of com-plaint, as a percentage of the total number of SWM related complaints received in the given time period

Rationale for the Indicator
The global problem of waste in our cities and neighbourhoods will affect young children for decades to come. Bad waste management can affect the spatial quality of the urban environment, the air quality and can also be a source of deceases,especially in poorer areas.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Sample Survey	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
100% complaints redressed within 24 hours of receipt of complaint,	50 - 100% complaints redressed within 24 hours of receipt of complaint,		Less than 50% complaints redressed within 24 hours of receipt of complaint

* SLBs, Ministry of Urban Development, GoI

Refer to : ITCN Design Guidelines, page 105

Indicator 60/65

QUALITY OF WATER SUPPLIED TO HOUSEHOLD IN NEIGHBOURHOOD

Definition
Percentage of water samples that meet or exceed the specified potable water standards as defined by CPHEEO.

Rationale for the Indicator
The quality of water supplied is as important a performance indicator as other service delivery indicators. Poor water quality can pose serious public health hazards. Water borne diseases are quite common in Indian cities and mainly in children.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Sample Survey	Half Yearly	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey
Benchmark Value			
Thriving	**Striving**		**Surviving**
100% water sample meet potable water standards	50% - 100% water sample meet potable water standards		Less than 50% water sample meet potable water standards

* SLBs, Ministry of Urban Development, GoI

Refer to : N/A

Indicator 61/65

PERCENTAGE OF HOUSEHOLDS WITH RAINWATER HARVESTING SYSTEMS

Definition
Number of household with rain water harvesting facility as percentage of total number of household

Rationale for the Indicator
Rainwater harvesting supports the resilience of the neighbourhood, helping to reduce external water demand, alleviating water stress, reducing non-point source pollution, reducing treatable urban runoff volume, prevent flooding and helping to alleviate climate change.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Sample Survey	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
100% of housing units with rainwater harvesting facilties	100% - 50% of housing units with rainwater harvesting facilties		less than 50% of housing units with rainwater harvesting facilties

Refer to : ITCN Design Guidelines, page 102

Indicator 62/65

PERCENTAGE OF PARKS, SCHOOLS & OTHER PUBLIC PLOTS WITHIN THE NEIGHBOURHOODS WITH RAINWATER HARVESTING SYSTEMS

Definition
Number of public buildings like parks, school and other public plots with rain water harvesting facilty as percentage of total number of public buildings.

Rationale for the Indicator
Rainwater harvesting supports the resilience of the neighbourhood, helping to reduce external water demand, alleviating water stress, reducing non-point source pollution, reducing treatable urban runoff volume, prevent flooding and helping to alleviate climate change.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
%	Sample Survey	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all housing blocks/cluster	Sample survey at specific housing blocks as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
100% of public building & public spaces with rainwater harvesting facilties.	100% - 50% of public building & public spaces with rainwater harvesting facilties.		Less than 50% of public building & public spaces with rainwater harvesting facilties.

Refer to : ITCN Design Guidelines, page 102

Indicator 63/65

PERCENTAGE OF HOUSEHOLDS WITH RENEWABLE SOURCE OF ENERGY LIKE SOLAR/PNG ETC.

Definition
Number of houshold with renewable source of energy out of total number of houshold at nieghbourhood.

Rationale for the Indicator
Provision of renewable energy contributes to cleaner, healthier and more resilient environments for ITCs to live and grow up in. A green and balanced neighbourhood is certainly saturated with renewable energy harvesting and distribution technologies.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
y/n, No.	Sample Survey	Once annually	Neighbourhood
Reliability of Measurements			
Observational on-site survey of all major routes in neighbourhood	Observational on-site survey of selected major routes as averages	Desk based estimation For example - based on existing landuse maps & with systematic on-site verification.	Desk based estimation For example - based on aerial imagery
Benchmark Value			
Thriving	**Striving**		**Surviving**
100% of houshold with renewable energy	100%- 50% of houshold with renewable energy		Less than 50% of houshold with renewable energy

Refer to :

Indicator 64/65

PERCENTAGE OF PUBLIC BUILDINGS AND PLOTS USING SOLAR / WIND OR NON-CARBON MEANS (MAPPED)

Definition
Number of public buildings and plots using renewable source of energy as percentage of total number of public buildings.

Rationale for the Indicator
Provision of renewable energy contributes to cleaner, healthier and more resilient environments for ITCs to live and grow up in. A green and balanced neighbourhood is certainly saturated with renewable energy harvesting and distribution technologies.

Units	Data Requirements		Frequency of Measurements	Jurisdiction of Measurements
%	Observation		Once annually	Ward Level
Reliability of Measurements				
Observational survey of all public building at ward level.	Observational on-site survey of specific public buildings at ward level as averages.	Desk based estimation For example - based on existing & earlier information & with systematic on-site verification.	Desk based estimation For example - based on other infromation like SCP	
Benchmark Value				
Thriving		**Striving**		**Surviving**
100% of public buildings with renewable energy.		100%- 50% of public buildings with renewable energy.		Less than 50% of public buildings with renewable energy.

Refer to : ITCN Design Guidelines, page 104

Indicator 65/65

PRESENCE OF SOLAR LIGHTING IN AND IMMEDIATELY SURROUNDING PARKS

Definition
Existence of solar lighting facilties in and around housing area parks.

Rationale for the Indicator
Provision of renewable energy contributes to cleaner, healthier and more resilient environments for ITCs to live and grow up in. A green and balanced neighbourhood is certainly saturated with renewable energy harvesting and distribution technologies.

Units	Data Requirements	Frequency of Measurements	Jurisdiction of Measurements
y / n	Observation	Once annually	Neighbourhood
Reliability of Measurements			
Comprehensive survey at all housing area park	Sample survey at specific housing area park as averages	Desk based estimation For example - based on earlier survey & with systematic on-site verification.	Desk based estimation For example - based on earlier survey / information
Benchmark Value			
Thriving	**Striving**		**Surviving**
100% of housing area parks with solar lighting facilities.	100 - 50% of housing area parks with solar lighting facilities.		Less than 50% of housing area parks with solar lighting facilities.

Refer to : ITCN Design Guidelines, page 104

ANNEXURE - A

CHILD FRIENDLY NEIGHBOURHOOD – COMPONENTS OF ITC NEIGHBOURHOOD

Neighbourhood Layout
Large scale organisational factors, such as the overall character, the density, distance and mix of facilities with the area.

Streets
Mobility-related spaces concerning the practicalities of moving comfortably in the public realm between stops.

Parks and Open Spaces
Key green destinations that matter to ITCs.

Public Services
Local amenities and community facilities.

Utilities
Water, electricity, waste, drainage and other environmental factors.

ANNEXURE - B

ACTIVITIES REQUIRED AS BASE FOR ACHIEVING SERVICE LEVEL BENCHMARKS

Following activities are required to be done by urban local bodies to assess their work plan to reach service level benchmarks for ITC neighbourhood development.

1. **Mapping of existing neighbourhoods under identified ABD zone in terms of Infant, toddlers & care givers friendly features in the area targeted. This includes mapping of the following:**

   - Existing Neighbourhood layout – Its covers the larger scale organisational factors, its urban design and planning. This involves mapping of overall character of existing urban spaces, the density, distance and mix of facilities within the area which in turn influence the overall physical environment.

   - Neighbourhood Streets: mapping of existing routes on everyday path taken by young children to various destination. It basically includes compiling all data related to mobility-related spaces concerning the practicalities of moving comfortably in the public realm between routes and destination.

   - Parks and Open Spaces: mapping all existing organised green spaces like small tot-lots, Housing Area Park, neighbourhood parks and other common opens spaces at neighbourhood level in terms of facilities that matter to ITCs. For example lighting, play equipment, parks maintenance, safety features, formal & informal play zones, climate protection, protection from strays, safety and comfort of caregivers while assisting infants in parks and so on.

   - Public Services: Mapping of regular basis destination like local amenities and community facilities. Besides open spaces, children and their care takers in a neighbourhood will also have other destinations that they go to on a regular basis. Young children may accompany their caregiver to the shops. They may make regular visits to day care centres and health centres. These public facilities need to also be designed with the needs of the young in mind.

   - Utilities: Mapping of existing condition of utility services like water, electricity, waste, drainage and other environmental factors at neighbourhood level which directly and indirectly impacting the ITC friendly neighbourhood development.

2. **Preparation of GIS maps for all existing features related to ITCs at neighbourhood level in the identified ABD zone**

3. **ITCs friendly infrastructure density maps at neighbourhood level showing areas with high medium and low existence**

4. **Assessment of existing parks and playground at neighbourhood level as follows:**

   - Parks & Playground with inadequate spaces & play equipment.

   - Parks & Playground with adequate spaces with inferior quality in terms of lighting, play equipment maintenance, parks maintenance, lesser safety features.

- Park & Playground with dedicated ITCs friendly public space elements like formal and informal play zones, climate protection, protection from strays, safety and caregiver's space in assisting infants in parks etc.

5. **Assessment of existing streets and destinations at neighbourhood level as follows:**

   - Existing neighbourhood streets and regular basis destination with inadequate infrastructure and public spaces.

   - Neighbourhood streets and destinations with adequate infrastructure and public spaces but inferior quality in terms of lighting, maintenance, lesser safety and security features.
   - Neighbourhood streets and destinations with dedicated ITCs friendly public space elements like formal and informal play zones, climate protection, protection from strays, safety and caregiver's space in assisting infants and toddlers.

6. **Infrastructure Gap Assessment of ITCs friendly infrastructure.**

   - Baseline
   - Future Requirement

ANNEXURE - C

KEY OUTPUTS

By doing above activities and maintaining and updating this data shall enable cities to achieve following key outputs:

1. Baseline Assessment and Forecast

- Benchmarking existing status of neighbourhood's from the lens of ITCs and future requirement
- Identification of key ITCs friendly planning and design requirements
- Identification of gaps and thus required interventions
- Assessment of ITCN friendly elements so as to integrate the component in ABD development under Smart Cities Mission

2. Infant, Toddlers & Caregivers Neighbourhood

- Plan for the ITC friendly Infrastructure augmentation and/or retrofitting ITC friendly features in the existing infrastructure.
- Formulation of ITCN development model under ABD for Inclusive, accessible, safe, green and playful growth.

3. Development of ITC Dashboard with dynamic GIS Interface.

- ITC Dashboard - The ITC dashboard moves measurements into management by providing a visual and comprehensive comparison of performance between neighbourhood, wards, zone, cities and time series data for evidenced based planning. The dashboard includes implementation progress, project types, delivery timescales for different priorities and an overview of objectives met and benchmark scores. The ITC Dashboard supports the review process of the 100 Smart Cities Mission centrally by aiding priority management and informing delivery decisions.

ANNEXURE - D

MINIMUM DATA SET REQUIRED

Following minimum data set is required to be collected/generated by cities to perform activities as mapped in ITC Neighbourhood Indicators and Service Level Benchmarks (page 18)

Demand Assessment	- Number of neighbourhood in ABD Zone - Total population by neighbourhood - Population in the age group: 0-5 years - Total number of pregnant women by neighbourhood - Number of breastfeeding mothers as a percentage of total population by neighbourhood - Incidence of children (0-5) respiratory disease
Existing Infrastructure - Park & Open spaces	- Number of tot lots - Number of housing area park by neighbourhood - Number of neighbourhood park by neighbourhood - Percentage of open space by neighbourhood - Per capita organised green space by neighbourhood - Percentage of encroached/ informal area by neighbourhood - Number of parks dedicated young child friendly (0-5) play spaces by neighbourhood - Number of parks that have quality seating by neighbourhood - Number of parks with adequate lighting by neighbourhood - Number of parks with free basic facilities like public drinking water, toilets and other facilities for families by neighbourhood - Frequency of maintenance of parks by neighbourhood - Number of private kindergarten with attached outdoor space by neighbourhood - Number of government schools that allow usage of school campuses during non-school hours by neighbourhood - Number of parks with rainwater harvesting systems by neighbourhood - Number of parks with natural materials in play equipment by play space by neighbourhood - Number of parks with of solar lighting facilities

Existing Infrastructure - Streets	• Total length of street network by neighbourhood • Length of clear and unobstructed pedestrian footpath • Number of kerb cuts per road km • Number of streets with adequate lighting by neighbourhood • Average street light spacing by neighbourhood • Total length of NMT network by neighbourhood • Total length of the vehicle parking on cycle track • Percentage of daily trips by non-motorized means • Number of signals which are synchronized by neighbourhood • Total number of signalized intersections by neighbourhood • Number of one way streets by neighbourhood • Length of street closed to 4 wheel traffic by neighbourhood • Length of street closed to 4 wheel and 2 W traffic by neighbourhood • Length of streets with decibel levels above standard 55 dB by neighbourhood • Number of fatalities recorded of persons who were pedestrians or on non-motorised transport vehicles in road accidents by neighbourhood limits in given year • Total number of fatalities recorded in road accidents by neighbourhood in the given calendar year
Existing Infrastructure - Urban Services	• Number of private kindergarten by neighbourhood • Number of affordable health clinic inside (Anganwadi) by neighbourhood • Number of doctors employed by neighbourhood • Number of dispensary in the neighbourhood y/n • Number of buildings within 300m distance of a green space above 125sqm • Number of buildings within 300m distance of a public facilities like day care centres, pre primary and primary schools, primary health facilities, local markets • Number of crèches within accessible 500m distance from housing cluster

Existing Infrastructure - Urban Utilities	- Number of SWM collection facility by neighbourhood - Number of household covered by door-to-door collection of SWM services by neighbourhood - Number of households with rainwater harvesting systems by neighbourhood - Number of households with renewable source of energy by neighbourhood - Number of public buildings and plots with renewable source of energy by neighbourhood - Number of water supply related complaints that are satisfactorily redressed within 24 hours or the next working day. - Number of water samples that meet the specified potable water standards in that month

Other	- Level of RSPM (size less than 10 microns) by neighbourhood - Length of street with observable standing water, overflowing drains, sewage by neighbourhood - Number and length of green corridors on major routes by neighbourhood - Number of no-honking zones by neighbourhood - Percentage of municipal budget allocation for open spaces or parks (including management/maintenance and programming) by neighbourhood