



Ministry of Housing and Urban Affairs
Government of India

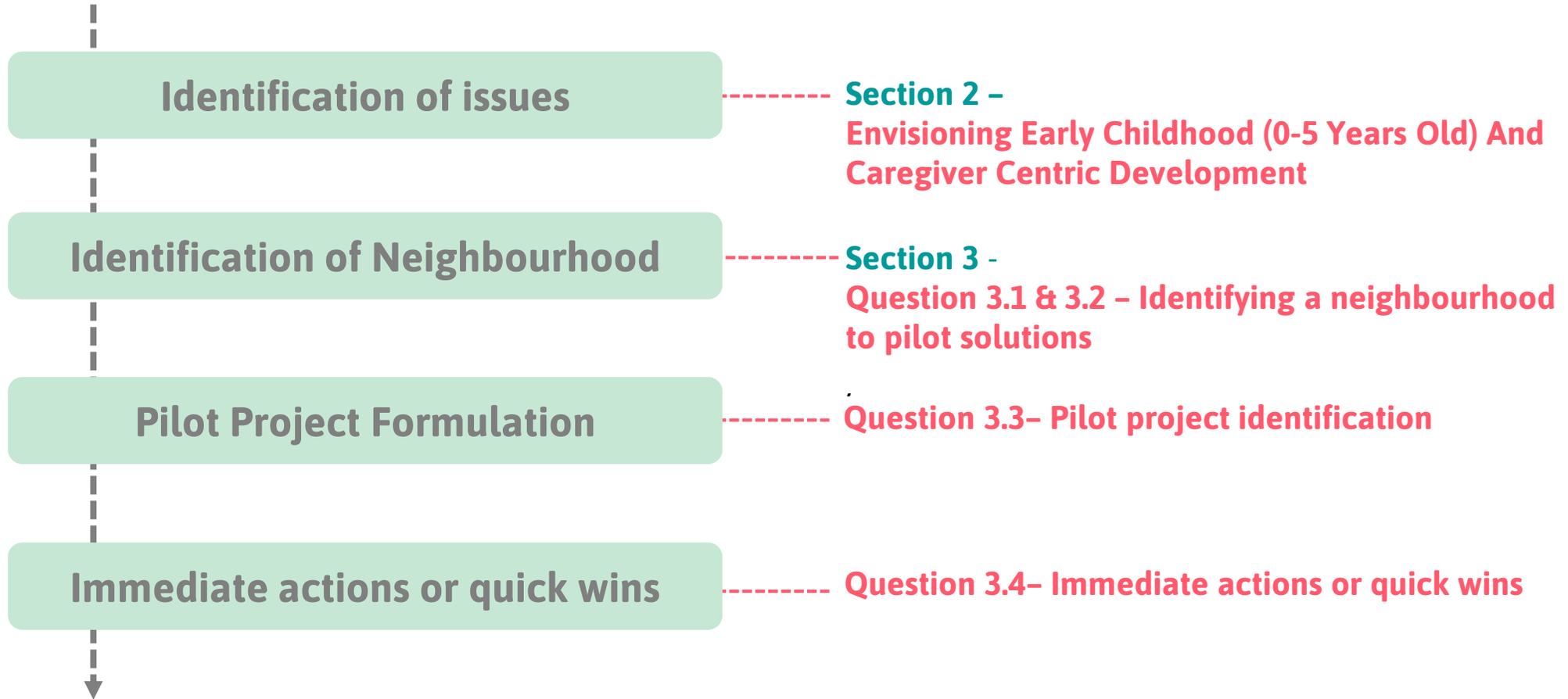


Pilot Project Formulation and Best Practices for Nurturing Neighbourhoods Challenge



Photo by Bernard van Leer Foundation

Application Sections



Identification of issues

Identification of issues

Significant issues faced by infants, toddlers and their caregivers in the city



Data related to young children and their caregivers



Discussions across various departments



Insights from expert discussions



Connect with local representatives



**Identify and prioritize significant issues
faced by infants, toddlers and their
caregivers in the city**

Identification of issues

Significant issues faced by infants, toddlers and their caregivers in the city

- Lack of access to comfortable, family-friendly public spaces
- Lack of safe, stimulating outdoor spaces to play and engage with nature
- Unsafe streets for young children and caregivers
- Crime against children and women in public spaces and streets
- Lack of access to safe and convenient public transport

QUARTER OF OPEN SPACES encroached

RESERVED SPACES ACROSS THE WARDS

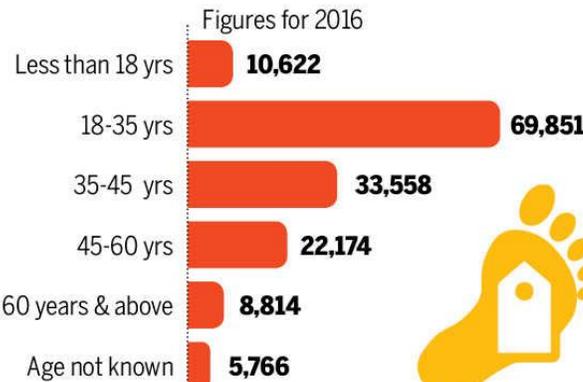
Ward	Area (sq. ft.)	Percentage
1	1,00,000	0.52%
2	1,00,000	0.83%
3	1,00,000	1.62%
4	1,00,000	1.09%

MUMBAI'S LAND PIE

Category	Area (sq. ft.)	Percentage
Open spaces	1,00,000	1.62%
Green zones	1,00,000	1.09%
Other	1,00,000	1.62%

Source: <http://www.pkdas.com/open-mumbai-news.php>

ROAD DEATHS BY AGE-GROUP



Source: Ministry of Road Transport and Highways

TOI FOR MORE INFOGRAPHICS DOWNLOAD TIMES OF INDIA APP

Source: <https://timesofindia.indiatimes.com/india/india-way-off-road-safety-targets-for-2020-road-accidents-still-kill-over-a-lakh-a-year/articleshow/65765549.cms>

At a crossroads
Tirumangalam is a major junction for buses plying on Madurai-Sengottai highway and Madurai-Tirunelveli highway

- No toilets available for passengers
- Absence of signboards creates confusion
- Cases of mugging and bag-lifting reported often
- No drinking water facility
- Passengers face a range of issues in the absence of mofussil bus terminus
- Passengers are exposed to scorching sun and rain

Plan for bus terminus

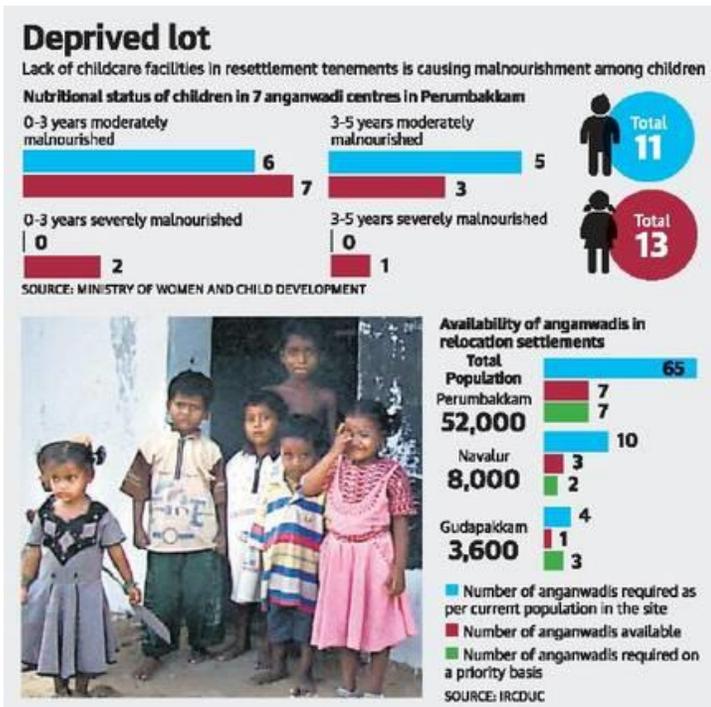
- Terminus to be built in public-private partnership
- Estimated cost: ₹ 21.75 cr
- Proposed location: land near Venkada Samuthiram adjacent to four-lane bypass

Source: <https://www.thehindu.com/news/cities/Madurai/tirumangalam-in-dire-need-of-a-mofussil-bus-terminus-madurai-city-matters/article29585715.ee>

Identification of issues

Significant issues faced by infants, toddlers and their caregivers in the city

● Access to **early-childhood** health and education **facilities**



Source: <https://www.thehindu.com/news/cities/chennai/lack-of-childcare-facilities-in-tenements-affects-childrens-nutrition/article24605885.ece>

● Exposure to **air and noise pollution** in neighbourhood areas

Silent killer among us

Death rates of children below five years of age in 2016 due to exposure to outdoor and indoor PM2.5 pollutants:

	Deaths of children below 5 years	Deaths/100,000
India	101,788	84.8
Nigeria	98,001	308.2
Pakistan	38,252	153.2
DR Congo*	32,647	225.2
Ethiopia	20,330	134

- WHO study finds India has one of the highest death rates due to acute lower respiratory infections among children below 5 years due to outdoor air pollution. India's rates are comparable with that of Sub-Saharan Africa
- Globally, the five leading causes of deaths of children below 5 years are: premature birth, respiratory infections, intrapartum-related complications and congenital anomalies
- Premature birth is the only factor that kills more children in this age group than them being affected by acute respiratory infections

Source: Air Pollution and Child Health report by WHO *Democratic Republic of Congo

Source: Air pollution and Child health report by WHO

● Vulnerability to natural and manmade **disasters or emergencies**

First such earthquake in 81 years

Tremors In City Above 6 On Richter Scale

Abhinav Malhotra @timesgroup.com

Kanpur: It is for the first time in 81 years that the area between Kathmandu and Kangra and also central UP suffered such a massive quake. Kanpur, Lucknow, Allahabad, Unnao and several other districts were also jolted. IIT Kanpur experts said the 7.9 magnitude earthquake is quite uncommon.

Tremors in the city were above 6 on Richter scale. The first tremor of the earthquake was 5.7 on the richter scale which lasted for 30-40 seconds while the second tremor was even stronger at around 6.8 and ended in 10-15 seconds.

The areas of central India including Kanpur, Lucknow, Allahabad, Varanasi and major portion of Gujarat including Kutch and field areas in Uttar Pradesh and Bihar come under seismic zone III and are vulnerable to quakes but comparatively less than the areas of seismic zones IV and V, experts said.

Prof Durgesh Rai of civil engineering department and an earthquake expert at IIT Kanpur said, "After 1934 this is the strongest earthquake having originated in the mid (middle) of Nepal, affecting majority the north of India and felt in almost the entire country". He said 12 aftershocks had surfaced by Saturday evening. Aftershocks can last for 'one to three months', but their intensity will be low, he added.

"Termining this earthquake to be 'massive', Prof Rai said that it was felt everywhere in the country - from north to south and east to west - only its intensity was different at different places. The areas which are within 500 km from the epicentres of the earthquake, will always feel the worst effect. Kanpur comes in the range of Nepal's earthquake and, therefore, such strong tremors were felt."

Prof Rai said that the Indian tectonic plates (each crust) collided with Eurasian plates causing this major earthquake. "The Earth's crust on which we exist is about 60 kms in depth after which comes mantle, which is in semi-liquid state. It is the crust which moves on the semi-liquid mantle. The Indian plates while moving collided with Eurasian plate on Saturday and this caused tremors resulting in massive damage," said Prof Rai. He said the first earthquake shock was measured at 7.9 on Richter scale while the second was of 6.6 intensity. He said that the intensity of the aftershock of earthquake normally subside. "The release of energy when the plates collide is massive. It reduces with each after-shock and gradually it is not felt. In case of Saturday's quake, the first aftershock discharged 50% less energy than the main tremor," he said.

On vulnerability of citizens the bank of the Ganga, Prof Rai said, "Areas where there is sand and water, like Ganga banks, will always be vulnerable to earthquakes. The exact time of earthquake cannot be predicted, except that chances of strong or light earthquake can be known and communicated further."

Disaster mgt trainer, Lekhan Shukla, said, "People were so tensed that it became very difficult for us to convince them about real situation. Thousands of people had gathered at Phoolbhain, Motilal, Nana Rao Park and Green Park. People should know that there is no technique to measure the time of earthquake, therefore they should not believe in fake messages." Shukla said the officials are planning to organise a few more campaigns in the coming days.

Seven teams of disaster management officials moved in different localities of the city. Riding on bikes, the officials created awareness among the locals, urging them not to panic. They also asked people to go inside their houses and to stay calm. The teams covered several areas of the city including Bithana Road, Noyagaon, Mall Road, Vijay Nagar, Nai Sadak.

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Disaster mgt team takes over

Times News Network

WHEN THE EARTH SHOOK

First high intensity earthquake tremors felt in Kanpur which comes under seismic zone III

IIT-K experts rated 7.9 magnitude earthquake as 'great' and rare

Cities on banks of Ganga more vulnerable

The aftershocks can last for one to three months but their intensity will be low

12 aftershocks recorded by Saturday evening

While the first tremor was measured at 7.9 on Richter scale, the second was of 6.6 intensity of 64 intensity - 50% less in energy than the first one

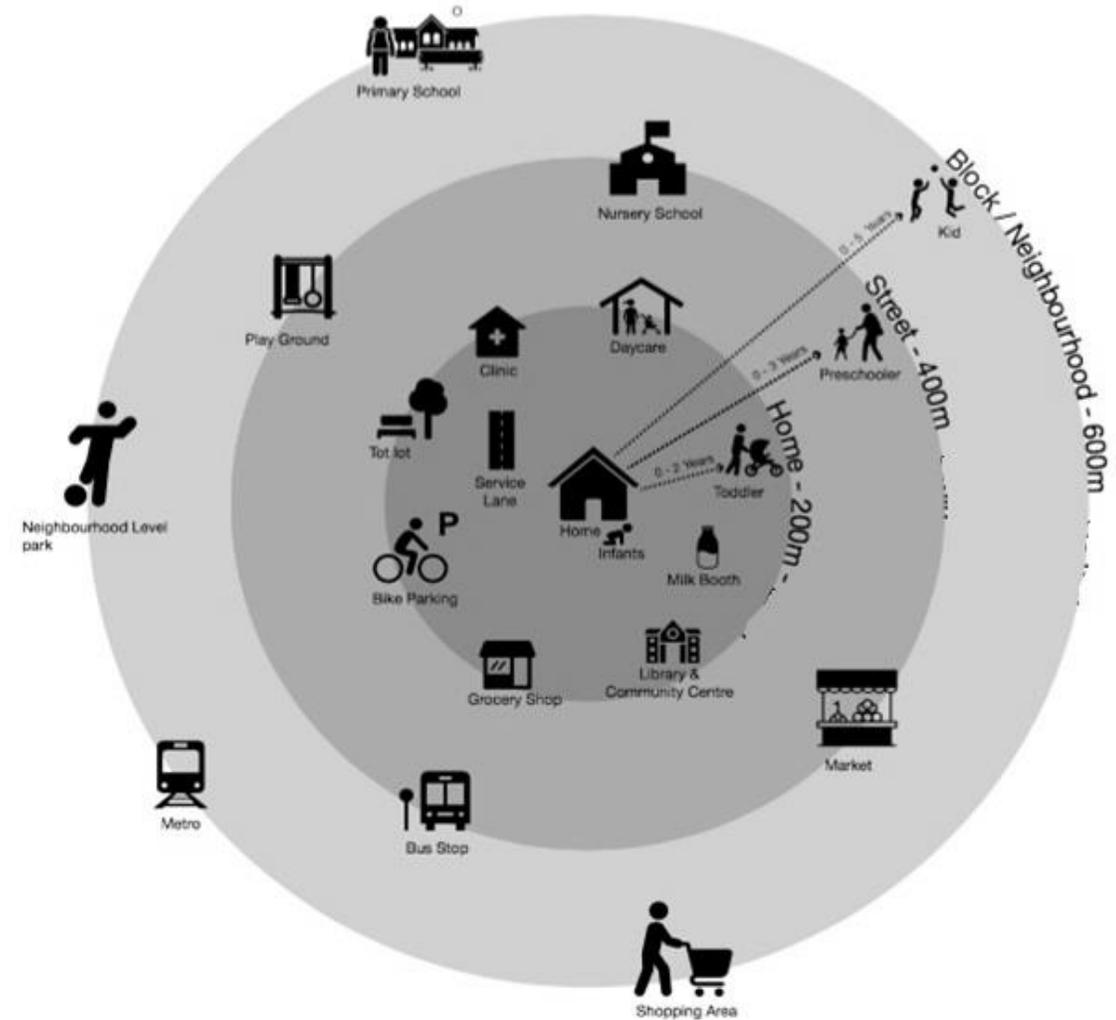
IN DIVINE SHELTER

Source: https://www.nicee.org/press_coverage.php

Identification of neighbourhood

Why focus on neighbourhoods?

- Primary domain of young children and their caregivers
- Co-location of early childhood services, open spaces, play opportunities close to home, forming convenient clusters of facilities

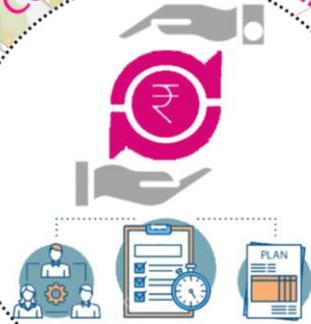


Why focus on neighbourhoods?

Neighbourhoods as a module of scaling up



Concentrated solutions



quick wins and mobilising



Localised Actions



Local Participation



Similar administrative boundary

Single ward or a combination of wards

How to identify the neighbourhood

01

Where children live

- Concentration of young children
- Gaps, imbalance in services catering to young children
- Various demographic groups

02

Where children and their caregivers visit

- High concentration of early childhood facilities
- Frequently visited facilities
- Areas in proximity of facilities

03

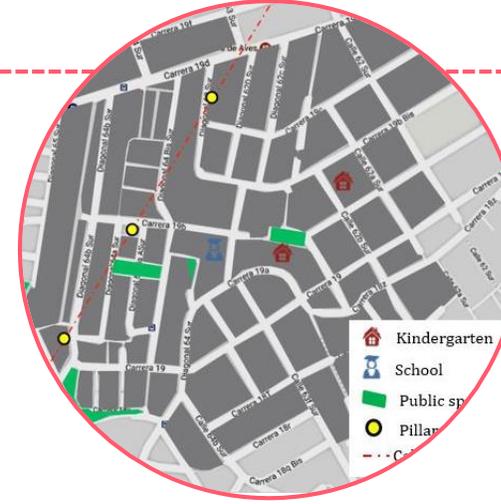
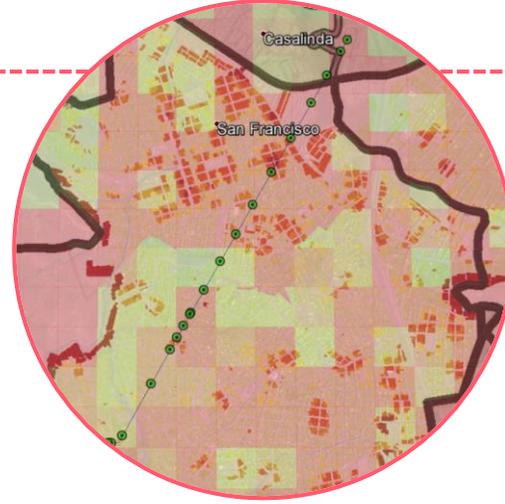
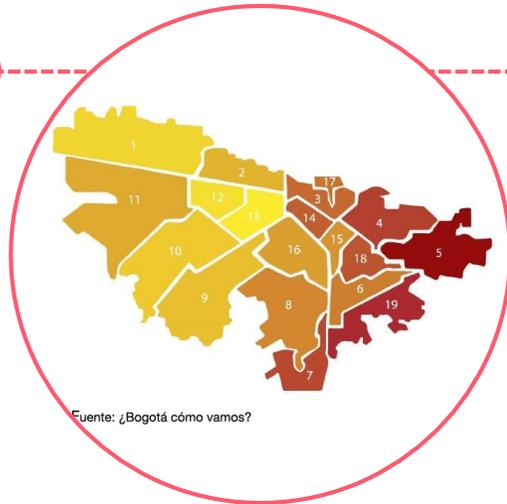
Where other projects are located

- Ongoing projects from other programs and challenges
- Based on discussions with key stakeholders and agencies

How to identify the neighbourhood

Example from Bogota

Intervention area selection based on a combination of data on young children, concentration of facilities and on-going projects



1. Mapping areas where young children faced greater challenges
2. Mapping ongoing and planned interventions

3. Mapping crimes in the selected area to understand lack of security
4. Selecting focused intervention area based on services within defining radius

5. Selecting streets and blocks for interventions based on on-ground observations

6. On-ground data collection from residents used to design the interventions

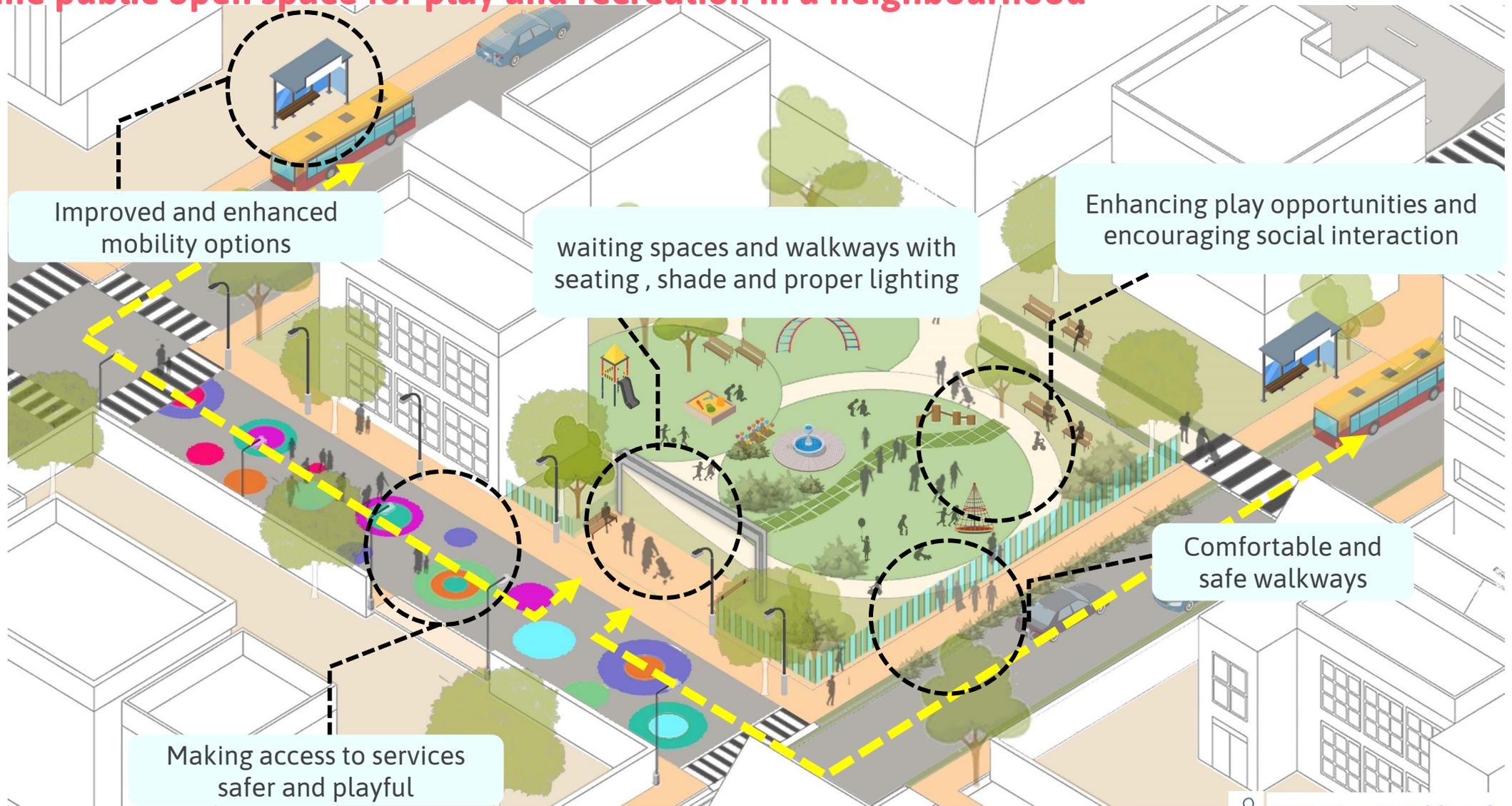
Source: <https://bernardvanleer.org/blog/how-the-bogota-urban95-team-chose-where-to-pilot-their-work/>



Guiding Concepts

Diversity and Integration

Reimagine public open space for play and recreation in a neighbourhood



Integrate multiple supportive components to ensure holistic improvement

Behavioral change

Combination of physical changes and engagement activities and communication campaigns to promote positive behavioral changes

Example-

Reimagine public open spaces for play and recreation

Behavioral changes should be induced amongst all stakeholders – Government and administrative officers, service providers and end users (young children and their caregivers)

Desired change:

- Municipal officers taking initiative towards converting residual open spaces in the city into pocket parks for young children and their caregivers
- Increased frequency of visits or increased time spent in park by young children and caregivers
- Improved behaviour of municipal workers towards ensuring cleanliness and waste management in and around green public spaces



Pilot project components:

- Converting a neighbourhood dumping site into a play area
- Local participation in keeping the park clean
- Safe, unobstructed footpath leading to park
- Well-lit and shaded seating areas
- Play equipment for all ages and abilities
- Clean public toilets with changing, feeding booth etc.

Co-creation

Ensure holistic approach with support and partnership of all stakeholders



Identify all potential stakeholders for the Pilots



Decision making about the pilot, their respective roles, outcome of the pilot, and impact with all stakeholders



Appointment of a nodal person for collaboration with key government agencies

Identification of pilots

Preparing pilots



**Pilot locations
that provide
maximum
impact**

**Variety of
solutions
integrated**

**Benefits to
vulnerable
populations**

**Positive
behavioral
changes
induced**

Solution Domains

Cities may propose pilot projects with diverse, integrated solutions which can be categorized in four major domains



Make streets safe and walkable



Improved access to early childhood services



Reimagine public open spaces for play and recreation



Adapt public spaces with early childhood amenities



Make streets safe and walkable

Safe and inclusive environment for walking, cycling

Speed calming and priority measures for young children

Playful and engaging spaces

Project: J. M. Road
Location: Pune , India



Salient Features



Continuous, wide, well-lit, shaded footpath

Green interventions along streets and comfortable seating

Dedicated cycling lanes along most frequented streets



Clear and legible signages for young children accessing services



Universal accessibility

Play pockets with interactive elements on streets frequented by young children

Project: Circling the Avenue

Location: Hadera, Israel



Salient Features



Yellow seating elements double up as playful furniture for children to stretch in, walk over or play through.

Trees are planted on either sides of the park, also shading the paths along the linear park

Benches at frequent intervals help caregivers to be nearer to the children while they are playing and encourages gathering.



Stepped and gradually inclined pathway enabling accessibility to all kinds of users.



Tree logs and stumps are introduced and placed through the park, encouraging the child user to use it as per his-her imagination.

Source: Infant, Toddler, Caregiver-Friendly Neighbourhood: Best Practices Compendium

Project: Safer commute to schools

Location: Rohtak, Haryana, India



Salient Features



Safe crossing and refuge areas with sufficient waiting space
Defining slow traffic zones in areas frequented by young children



Mitigations measures for black spots/crashes
Speed calming measures such as curb extensions, rumble strips, tabletops
Interactive street signages, painted on footpaths for young children

Tactical interventions to make streets and intersections safe for children commuting to school with simultaneous involvement of the community and administration

Make streets safe and walkable

Summary



Photo via Deccan Herald

Segregated walking and cycling spaces

Incorporate green buffers along streets to mitigate noise pollution and reduce exposure to vehicular emissions



Photo via ITDP India, JM road Pune

Street side-walks designed to include vibrant play spaces

Well-lit shaded footpaths and resting spaces.



Photo via WRI India

Slow down zones, legible street signages and use of traffic calming measures for speed management

Redesigning intersections for safer access in the surroundings of Anganwadis, nurseries, pre-primary schools

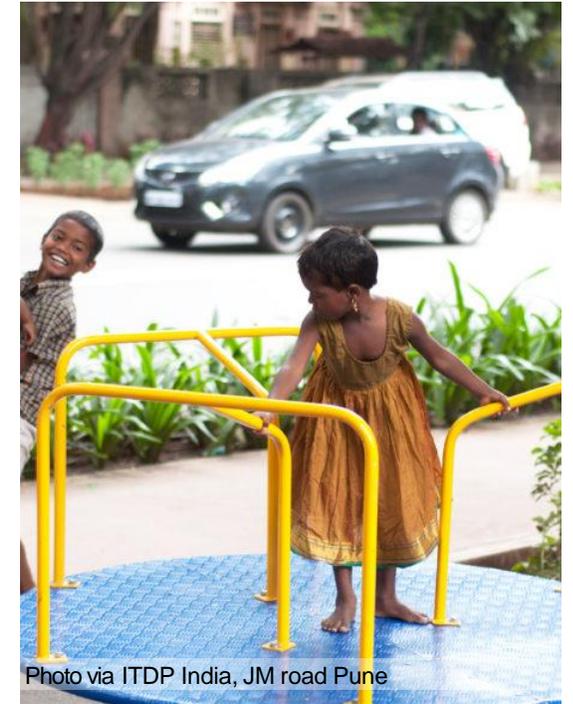


Photo via ITDP India, JM road Pune

Designing streets for all considering young children (0 to 5 aged and their caregivers)

Playful and interactive elements along streets for engaging young children



Reimagine public open spaces for play and recreation

Intergenerational safe and accessible play and recreational spaces in proximity

Revitalize existing open and underutilized spaces for play opportunities for young children

Introduce nature-based play opportunities promoting young children and caregiver interaction

Project: Project Chaak

Location: New Delhi, India



Salient Features



Introducing play spaces in abandoned, residual open spaces

Soft, low-impact material treatment in play spaces

Welcoming entry areas with interactive elements for children

Playful and interactive installations to engage young children

Unstructured play spaces with natural materials e.g. sand pits, green mounds, etc.

Source: <https://www.facebook.com/pg/ProjectChaak/posts/>

Project: Children Park Beach Road

Location: Visakhapatnam, India



Salient Features

Spaces for physical activities and interaction providing play opportunities to all.

Sensory based elements for all abilities – touch, sound and light based

Variety of plants and trees to promote play amongst nature.
Equipment and Materials to challenge creativity and enhance play

Project: Natuurspeeltuyn De Speeldernis

Location: Rotterdam, Netherlands



Salient Features



Natural playground offers possibilities for climbing, jumping and running, as well as building huts and dikes using water, sand, stones and wood. Children learn here to seek out their limits, gauge risks and make their own decisions.



Different types of ground and the varied topography make it possible for a great biodiversity to develop, giving children the chance to learn about native plants and animals.

Natural playgrounds also offer ample opportunities for daydreaming and wonder.

Source: <https://www.speeldernis.nl/index.php/speeltuyn/plattegrond-faciliteiten/>

Reimagine public open spaces for play and recreation

Summary



Photo via NCBS, Facilities accessible to Dolna Children



Photo via The Hindu

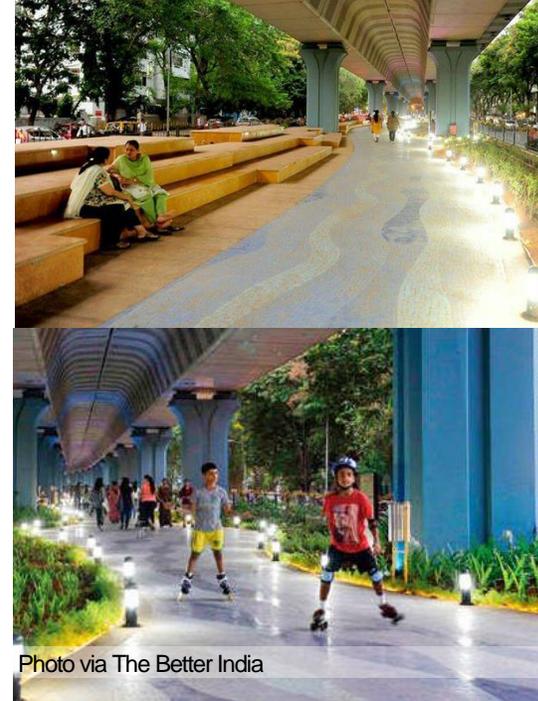


Photo via The Better India



Photo via Project Chaak, New Delhi

Safe and supervised play spaces in proximity

Soft and low-impact materials

Play spaces for all abilities and age-appropriate to young children

Activities and spaces to promote social interactions among caregivers

Reclaim abandoned, residual spaces for children's activities; increase opportunities for 'doorstep' play



Adapt public spaces with early childhood amenities

Provision of essential amenities like nursing, toilets, drinking water

Supportive amenities around public spaces such as waiting spaces, street furniture, play spaces

Enhancing comfortable and cleaner surroundings, better air quality and noise reduction

Project: Breastfeeding Booths
Location: San Jose, Costa Rica



Salient Features



Nursing/feeding facilities in public spaces such as neighbourhood centres, markets, stations

Sanitation kiosks with diaper changing stands

Convenience features for caregivers such as cubbies, storage shelves

Project: Breastfeeding Booths
Location: Palghar railway station



Salient Features



Nursing/feeding booths in railway stations – can accommodate 2 mothers with their infants at a time

Convenience features for caregivers such as storage shelves and dustbins

Also used as a polio booth alternatively

Source: <https://www.shethepeople.tv/news/palgha-railway-station-baby-feeding-centre/>
https://csrbox.org/India-CSR-projects-proposal_Child-Help-Foundation_Eradicating-hunger,-poverty-and-malnutrition,-promoting-health-care,-sanitation-&-safe-drinking-water_302

Project: Malata and Nima markets

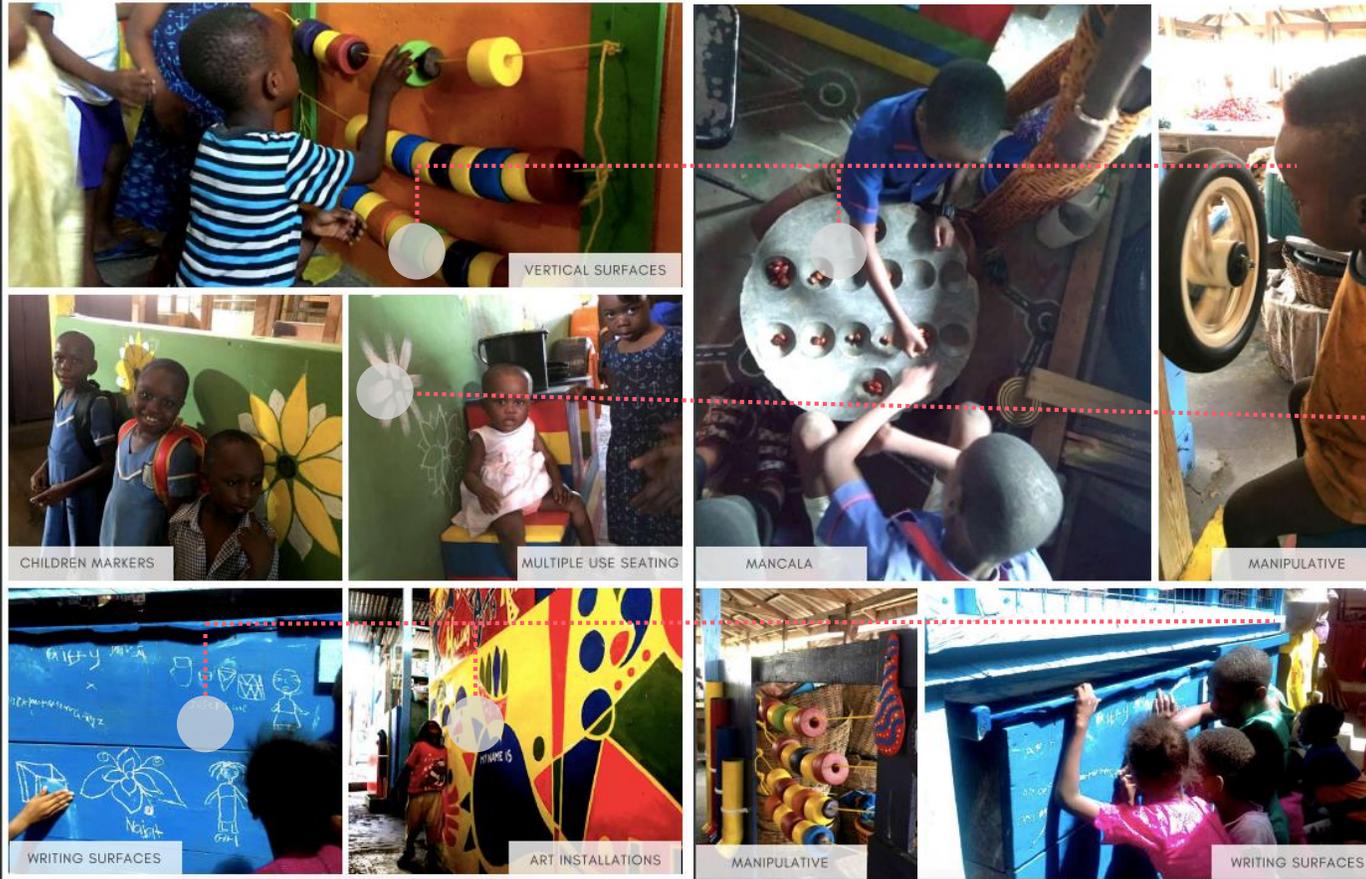
Location: Accra, Ghana



Salient Features

Micro-play spaces for children of local vendors, to play, learn, and spend time while their caregivers work or shop.

- Children markers,
 - Multiple use of seating
 - Various forms of manipulative play for learning coordination skills
-
- Art and play installations like vertical writing and drawing surfaces
 - Interactive gaming mediums,
 - Micro libraries from waste materials sourced from the markets



Project: Janmarg BRTS bus station

Location: Ahmedabad, India

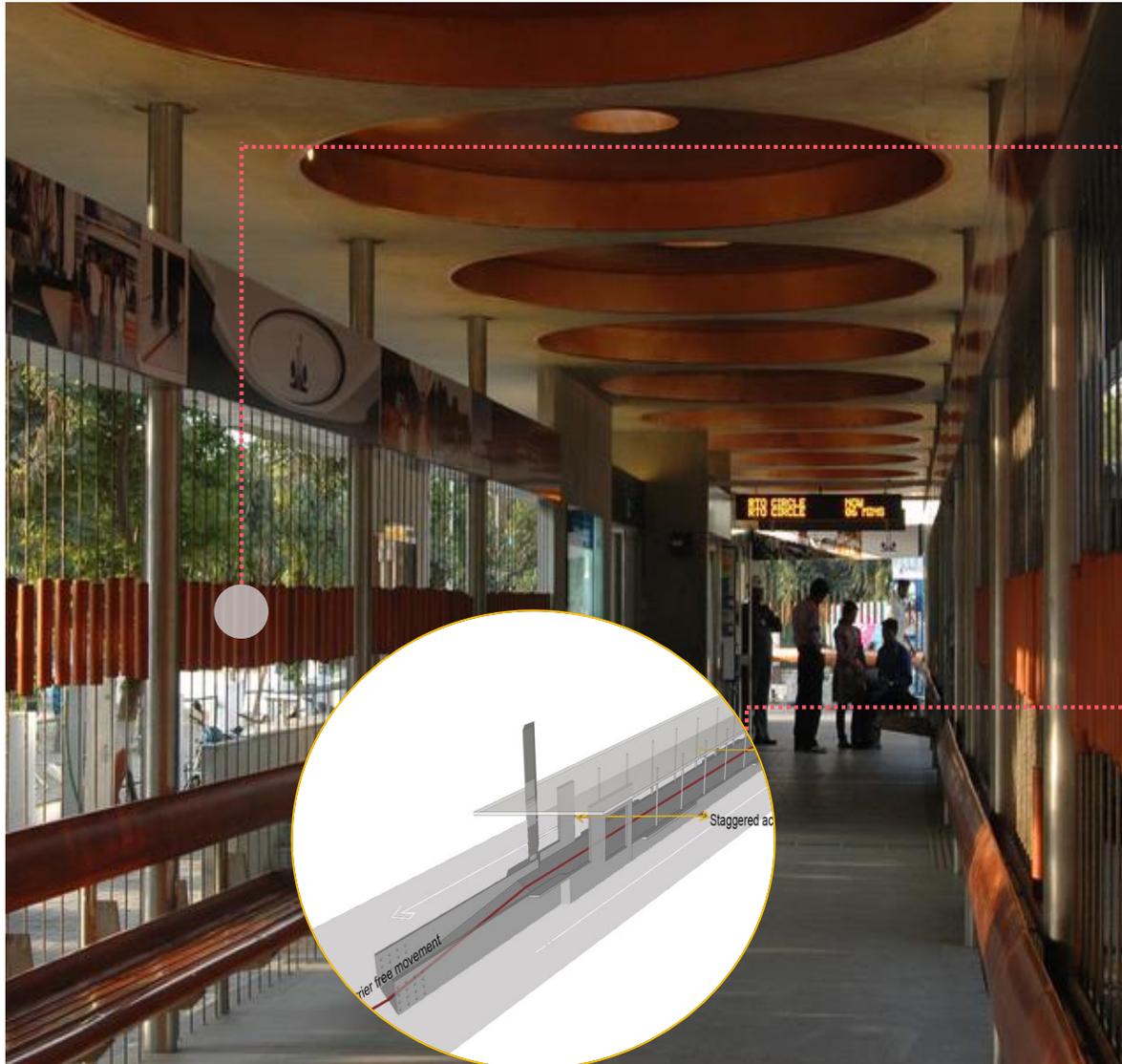


Salient Features

Comfortable, well-lit and shaded waiting spaces near entry to public spaces

Dustbins and other cleanliness related measures
Pause points with play and rest opportunities

Steel cables are used for transparency and to secure safety. Ramps on platform make it suitable for strollers.
Raised platform for boarding.



Source: <https://www.indian-architects.com/en/arya-architects-ahmedabad/project/bus-station-janmarg-brts>

Adapt public spaces with early childhood amenities

Summary



Photo by Meena Kadri via Flickr

Safety & comfort: gender sensitive precinct design of bus stops and transit stations; facilities such as feeding booths, priority queues and waiting spaces



Photo via BvLF, Municipalidad de San Jose

Support public spaces with essential amenities like nursing/feeding/changing rooms, drinking water, gender-sensitive restrooms, drinking water, appropriate street furniture and community toilets that serve pregnant women, young children and their caregiver



Photo via livechennai.com

Waiting and play spaces clustered along the facilities

Adequate provisions to keep the public spaces clean and devoid of any dangerous substances or articles accessible to young children.



Photo via BvLF, Pune

Creating play spaces and the support amenities in local community spaces such as neighbourhood centres, markets, and similar areas which are often used by young children and caregivers



Improve access to early childhood services such as Anganwadis, PHCs, maternity homes, etc.

Safe and convenient access to early childhood services

Co-locate services with open spaces connected by pedestrian-friendly zones

Create play opportunities, waiting spaces in immediate surroundings of services

Early childhood services- Anganwadis, creches, health centers, maternity hospitals etc.

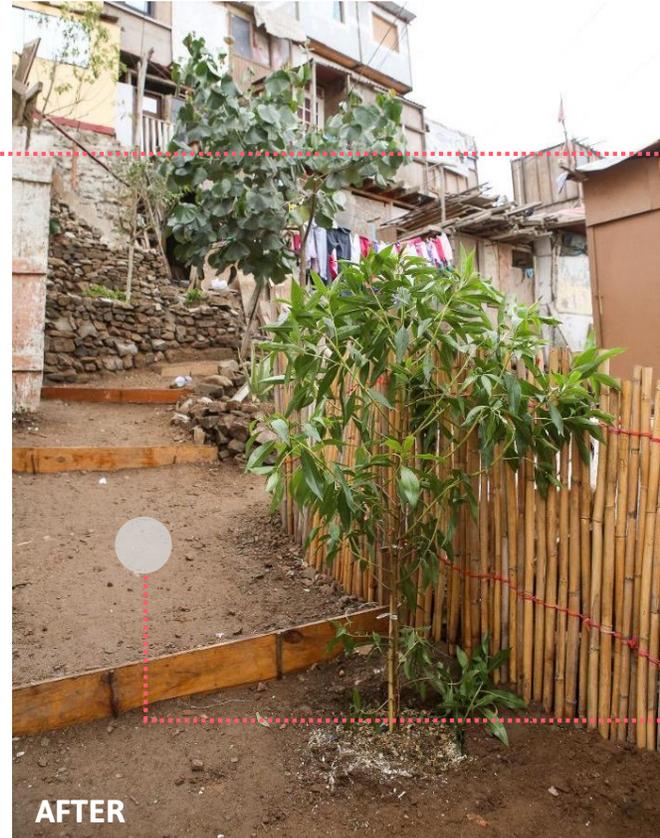
Photo Credits: Bernard van Leer Foundation

Project: Creating a safe walking route in hilly Lima

Location: Lima , Peru



Salient Features



Improving the physical (and emotional) infrastructure of a route traveled by expectant mothers, babies and young children

The implementing team worked with residents to clean up the route, build retaining walls.

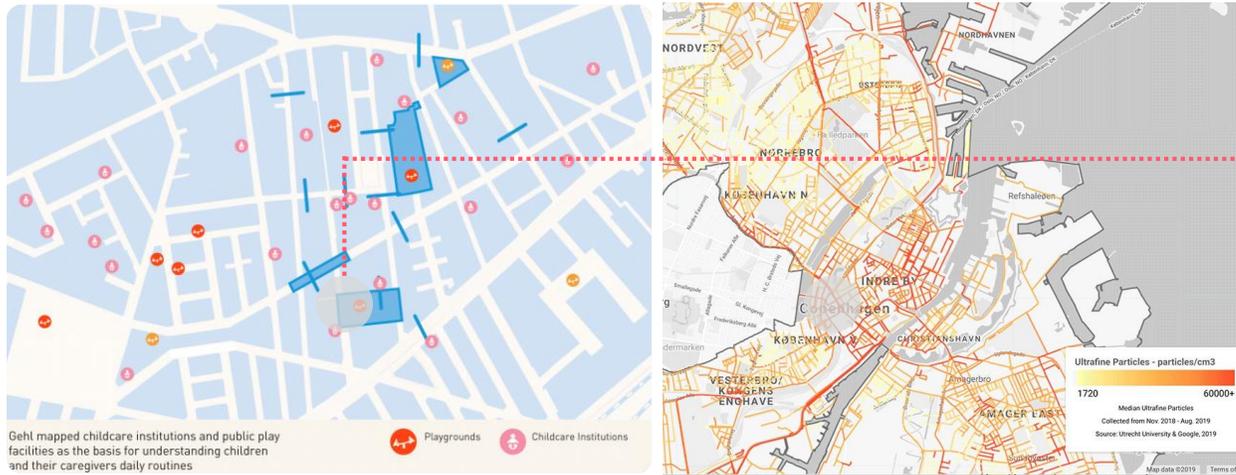
- Installed two handrails – one at adult height and one at toddler height
- planting greenery
- adding seating and rest areas.

Project: The Cleaner Air Network - Reducing Air Pollution through Urban Design

Location: Copenhagen, Denmark



Salient Features



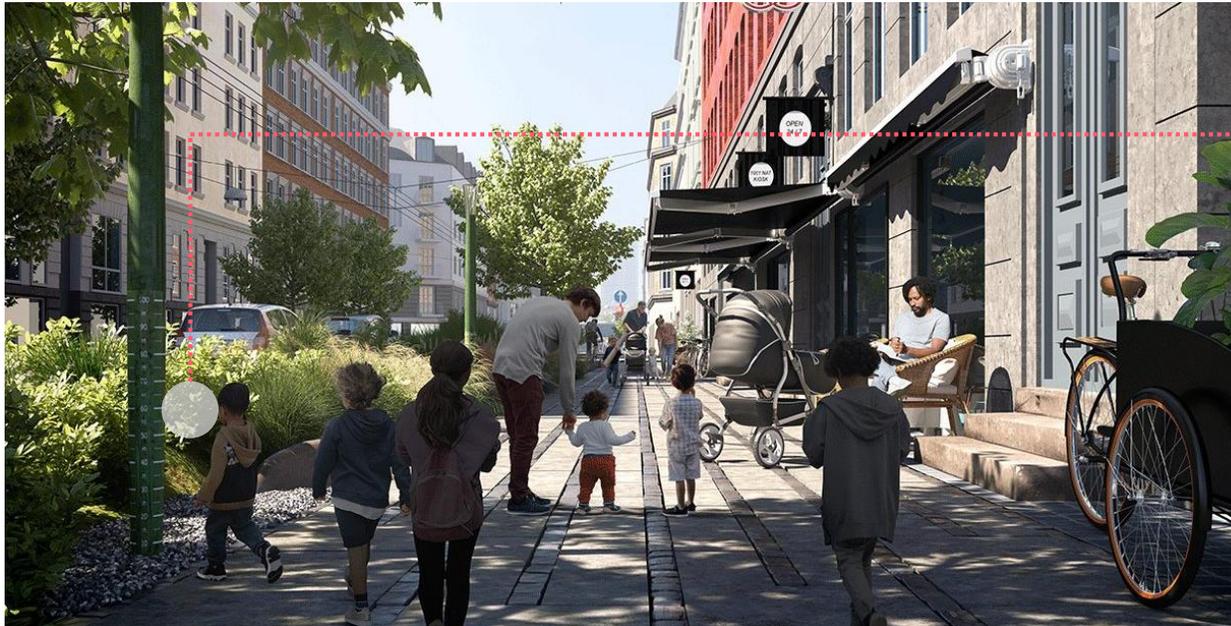
Mapping playgrounds and childcare facilities
Interviewed day care workers and caregivers about the public spaces they use most frequently and at what times of day

Using Google air view project to account for air pollution concentrations on the roads

Removal of on-street parking

Introduction of a green buffer as a pollution barrier

Pavement design, public seating, on street 'children' related facilities e.g. integrated play provisions, additional space or parking areas.



Source: <https://gehlpeople.com/projects/air-quality-copenhagen/>

Improve access to early childhood services such as Anganwadis, PHCs, maternity homes, etc.

Summary



Photo by Radhika Mathur, via BvLF

Creating safe and convenient access to early childhood services by intervening in their immediate surrounding and connectivity to access them.



Photo by Radhika Mathur, via BvLF

Clustering of early childhood facilities with location of public spaces such as gardens, play spaces, daily use shopping, etc in their immediate surroundings



Photo via Surrey Live

Create pedestrian-friendly zones around early childhood facilities with clear demarcations, signages, green buffers and improved physical access



Photo via Getty Images

Availability and access to convenient public transport optionsimproving last mile connectivity to transit stations by connecting missing links, walkways, lighting, crowd management, and active street edges by revitalizing public spaces

Immediate actions or quick wins

Short-term quick wins for the proposed pilots in order to gain momentum



Tactical interventions



Outdoor events and activities



Workshops and community engagement



Communication campaigns





Ministry of Housing and Urban Affairs
Government of India



Looking forward to your participation

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

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