



MIX & MATCH



TOOLS TO DESIGN URBAN PLAY



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Creating inclusive spaces for all ages is central to a number of urban agendas. Following the current trend of global urbanisation cities are becoming principal contexts wherein generations of children will thrive and grow. To support the efforts of creating child-friendly urban environments, this toolkit provides a start of possible design interventions to create more inclusive play environments from the street to the neighbourhood. Focused on the role that urban planning and design can play in highlighting the agency, impact, and habits of children on space, we aim for this to be used as a guidebook for possible design interventions, inspiration, or as an evaluation handbook to assess what elements of child-friendly environments are present, needed or even absent.

The toolkit is intended to inform and aide in the creation of outdoor spaces of play, importance of creating urban green, services for parents, creating communities of action, etc. It is aimed at various stakeholders responsible for the wider public realm including but not limited to, policy-makers, designers, planners, architects, NGO's, and residents. The importance of integrating places to play within community spaces can play central roles in lives of children, youth, adults old and young. Ideally these should be spaces that various age-groups enjoy spending time in, encourage physical activity, create social communities, and importantly feel safe and inclusive.

Playing is essential to physical, social and cognitive development of both children and young adults. Outdoor play is particularly of importance given the various opportunities it presents, experiencing various environmental conditions including nature, freedom of movement, taking risks, decision making etc. The social value of play has been shown to have positive impacts on the child and the care-giver. Though research shows the urgency of acknowledging the role and importance of play, cities still have a monumental

task of creating communities where planning and design of child-friendly public spaces has a central role.

The toolkit is composed of various components (or design ideas) that when combined with other components can lead to a spatial intervention focused on various types of play, formal or informal that can be citizen and government driven. Developed along various scales, micro (the street), meso (the neighbourhood) and macro (the city), they are thematically identified by alignment with interventions that address play, green, or safety. Each of the interventions shown here are only examples of possibilities and can be combined with other components if needed.

To plan and design for inclusive spaces that are exciting play areas for children of all ages, involves steps ranging from simple action (adapting what we have), to complex resource identification (who, what, why, how). By mixing and matching ideas ranging from DIY solutions to more elaborate urban interventions, the toolkit can be seen as a guide to creatively engage with planning for child friendly environments.

SCALE OF INTERVENTIONS

Possible levels of intervention



MICRO
E.g. Street



MESO
E.g. Neighbourhood

















MACRO
E.g. City

TOOLKIT COMPONENTS

MICRO SCALE

- 01  Playful street furniture
- 02  Sidewalk games
- 03  Street green
- 04  Social media community
- 05  Natural play areas
- 06  Temporary street closure
- 07  Climbable objects
- 08  Street art
- 09  Shared space
- 10  Alternating pavement
- 11  Narrowing: visual and physical
- 12  Lighting
- 13  Maintenance & awareness
- 14  Living school grounds
- 15  Use of semi-private spaces
- 16  Flexible schoolyard

- 17  Playful street crossings
- 18  Junk yard playground
- 19  Community garden
- 20  Seating possibilities
- 21  Free Wi-Fi zone
- 22  Coffee bar
- 23  Stroller friendly streets
- 24  Neighborhood child route
- 25  Designing for flexible use
- 26  Cycle path network
- 27  Pedestrian network
- 28  Public transportation routes
- 29  Family friendly city strategy
- 30  Encouraging child participation

POSSIBLE SPATIAL INTERVENTIONS

The role that urban planning and design can play in highlighting the validity and agency of children's geography in planning processes is vital within the changing profile of cities. It is however useful here to distinguish between the following, role of urban planning and design can play in highlighting the importance of children's geographies, the levels of possible interventions, bottom up and top-down, and accommodating for changing demographics in cities.

This can be seen through the issues raised on repeated concerns regarding safety, awareness, maintenance, and more family friendly spaces, which can be addressed at various scales and levels of interventions:

Micro: The smallest level of possible intervention, e.g. street

Meso: An intermediate level of interventions at the district or neighborhood level

Macro: The highest and the most complex level of intervention at the city level

By combining various components, micro, meso, and macro, the toolkit presents possible interventions to achieve child-friendly public spaces. A few possible combinations and results are outlined to showcase how micro, meso, and macro components can come together.*

* These combinations are only examples and the individual components can be integrated differently.

1. SAFER STREETS



Neighborhood child route



Narrowing: visual and physical



Playful street crossings



Alternating pavement

3. PLAYFUL STREETS



Playful street furniture



Street art



Temporary street closure



Sidewalk games

2. DIVERSE PLAYSCAPES



Climbable objects



Junk yard playground



Designing for flexible use



Natural play areas

4. SOCIAL STREETS



Social media community



Temporary street closure



Maintenance & awareness



Lighting

5. RECLAIMING PUBLIC SPACE



Shared space



Community garden



Temporary street closure



Street green

7. CONTACT WITH NATURE



Natural play areas



Living school grounds



Community garden



Street green

6. MULTI-FUNCTIONAL USE



Flexible schoolyard



Use of semi-private spaces



Climbable objects



Sidewalk games

8. CHILD POLICIES



Family friendly city strategy



Maintenance & awareness



Neighborhood child route



Encouraging child participation

9. EASY ACCESS



Shared space



Cycle path network



Public transportation routes



Pedestrian network

10. SERVICES FOR CHILDMINDERS



Seating possibilities



Free Wi-Fi zone



Coffee bar



Stroller friendly streets



HOW TO READ THE TOOLKIT?

Short description of the component

Type of space

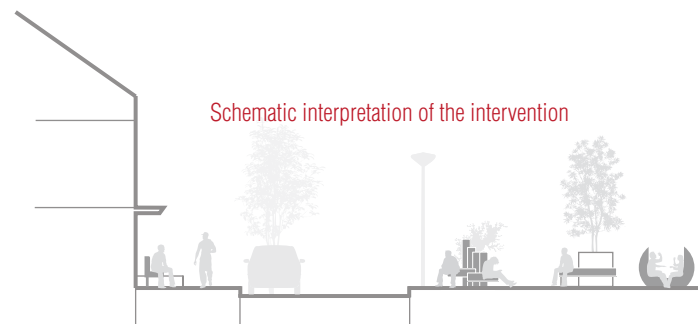


Scale	Interventions on the level of the smallest, largest or in between scale
Domain	Physical intervention, social or policy based
Complexity	
Age group	
Theme(s)	Correlating theme(s) from pages 9-11
Example	Selected places where the intervention can be found

Compatible components

- Component #1
- Component #2
- Component #3
- Component #4

Other components that can easily be part of this intervention



Schematic interpretation of the intervention

Why?

Short background why this intervention is relevant

How?

Description how this intervention can be realized

MICRO SCALE

The smallest level of possible intervention, E.g. street, in front of your house



01



PLAYFUL STREET FURNITURE

Sit in front of your house



Scale Micro

Domain Spatial

Complexity ○ ● ○ ○ ○

Age group ○ ○ ○ ○ ●

Theme(s) Playful streets

Example Meeting bowls, New York (USA)

Compatible components

Street art

Temporary street closure

Sidewalk games

Seating possibilities



Why?

Streets are potential places for children to learn and play. Research identifies adding street furniture around the neighbourhood could facilitate observing children at play. Adding a bench between the street and home can play two functions, a buffer between private and public functions, and increase opportunities to connect with neighbours and others children.

How?

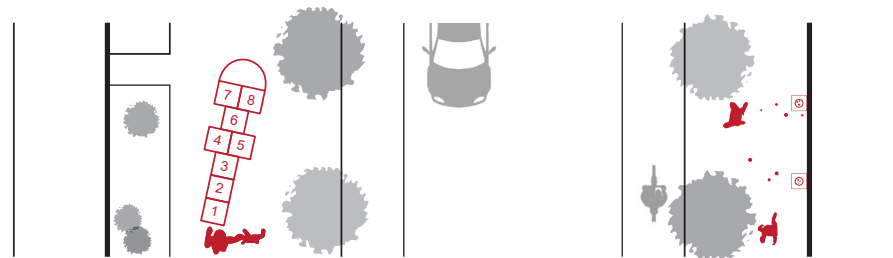
In more Congregational spaces of play, picnic tables can be added. Possible elements of urban furniture include, wooden pallets, benches with multiple functions, meeting bowls etc. These items can also become play elements, so think of adding colourful and playful pieces.

02



SIDEWALK GAMES

Take ownership your sidewalk by encouraging play



Scale Micro

Domain Spatial / Social

Complexity ● ○ ○ ○ ○

Age group ● ● ○ ○ ○

Theme(s) Playful streets, Multi-functional use of space

Example Colourful Crossings, London (UK)

Compatible components



Playful street furniture



Street art



Temporary street closure



Use of semi-private spaces



Climbable objects

Why?

Outside play is not restricted to designated play spaces only, but should extend to public space at large. Playing games on the sidewalk encourages more types of social play, introduces a larger variety of play themes, and increases social interaction. Sidewalks also provides access to all children to use it as a play space.

How?

Take ownership of the sidewalk and reclaim it by playing small games. Chalk lines can be drawn on the sidewalk to play hopscotch. Or replace a regular paving stone for a paving stone with a little dimple to play marbles - bought at the DIY-store. The sidewalk can be much more than just a place for pedestrians to go from A to B. Make it your playground!

03



STREET GREEN

Bring (small scale) greenery to your street



Scale: Micro

Domain: Spatial

Complexity: ○ ● ○ ○ ○

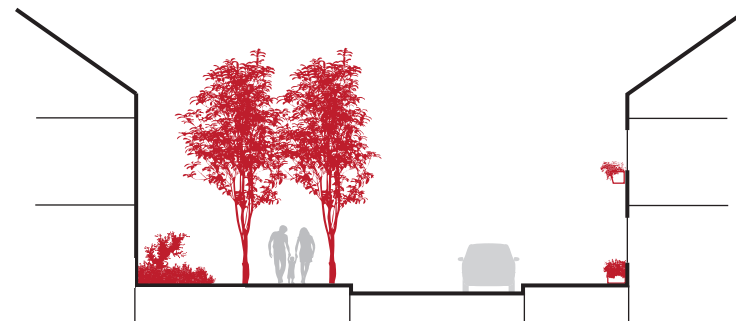
Age group: ● ● ● ● ●

Theme(s): Contact with nature, Reclaiming public space

Example: Mission Green Delhi, Delhi (IN)

Compatible components

- Natural play areas
- Living school grounds
- Community garden
- Shared space
- Temporary street closure



Why?

Literature shows that the design and management of urban green does not always reflect the needs and preferences of children. Underlining this, neighbourhood residents plea for small scale greening. The importance of turning hard grey urban spaces to softer, natural aesthetics is vital.

How?

Greening the street can start with the residents themselves, by replacing the paving stones in front of homes with natural lawns, plants or by hanging flower boxes out of windows. On a municipal level larger trees and plants can be planted on the sidewalk creating a green canopy, providing shade and a green neighbourhood environment.

04



SOCIAL MEDIA COMMUNITY

Keep in contact with other residents through social media



Scale Micro

Domain Social

Complexity ● ○ ○ ○ ○

Age group ○ ○ ○ ○ ●

Theme(s) Social streets

Example Peerby platform (Various countries)

Compatible components



Temporary street closure



Maintenance & awareness



Lighting



Free Wi-Fi zone



Why?

Citizens aspire to live in locations that are physically and socially attractive. To create a community, individuals need to feel connected and this can be encouraged through activities on a location. Next to neighbourhood associations, online neighbourhood communities are also on the rise. The use of social media can further improve existing connections, while also creating a neighbourhood watch.

How?

Various online platforms are available to create communities - they vary from messaging services like WhatsApp to platforms that facilitate a shared neighbourhood economy like Peerby. Closeby living nannies can be found easily, and that neighbourhood barbecue can be organized by getting everyone together through WhatsApp or lending a barbecue through Peerby.

05



NATURAL PLAY AREAS

Facilitating play in green environments



Scale	Micro
Domain	Spatial
Complexity	○ ○ ○ ● ○
Age group	○ ● ● ● ○
Theme(s)	Contact with nature, Diverse playscapes
Example	Tumbling Bay Playground, London (UK)

Compatible components

- Climbable objects
- Designing for flexible use
- Living school grounds
- Community garden
- Street green



Why?

Children's access to local green spaces supports healthy development, physically active free play and awareness for the environment. Natural play areas are more suitable for different age groups and offer another type of play-space and meeting space. Creating softer alternatives to urban landscapes.

How?

Simple elements like a climbing tree, or creating a natural slope offer limitless possibilities for children to play. Creating ground modelling (gentle slopes), fast growing planting that are native and resilient, using trunks of fallen trees, boulders, shallow ditches that catch water are some examples.

06



TEMPORARY STREET CLOSURE

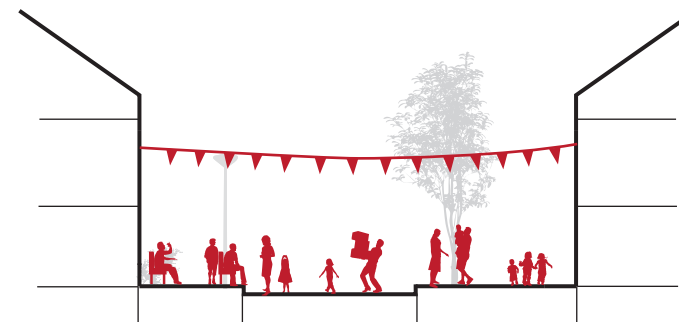
Temporary space for play



Scale	Micro
Domain	Spatial / Social
Complexity	● ○ ○ ○ ○
Age group	● ● ● ● ●
Theme(s)	Social street, Reclaiming public space. Playful streets
Example	Playing Out initiative, Bristol (UK)

Compatible components

- Social media community
- Playful street furniture
- Sidewalk games
- Street art



Why?

Streets safety is a repeated concern for families in urban areas. A temporary solution is the closure of a street for a day (once a month for example) to create a play-street. Due to its temporary nature residents can be stimulated to create a festive day to set an example for alternate possibilities.

How?

While the municipality needs to approve temporary street closures, residents can actively participate in street activities. Rent a jumping castle for the children, organize classic jeu-de-boules competition with the neighbours, have a street barbecue, let children create street decoration, the possibilities are endless!

07



CLIMBABLE OBJECTS

A tree, piece of art and other equipment to climb on



Scale	Micro
Domain	Spatial
Complexity	○ ○ ○ ● ○
Age group	○ ● ● ○ ○
Theme(s)	Diverse playscapes, Multi-functional use of space
Example	Crabapple Trees, Corkscrew willow

Compatible components

- Junk yard playground
- Designing for flexible use
- Natural play areas
- Sidewalk games



Why?

Any object can become an element to scramble up on: a piece of art in the park, some steel objects on the sidewalk, a tree. For children, climbing on objects is more than just fun. Scaling an object teaches them vital lessons, such as dexterity, risk assessment, focus and planning. They have to decide how high they're comfortable to climb and find the best way to get there.

How?

Though anything can become a climbable object in theory, it is the multi-functionality of these objects that facilitate play. A piece of art along the sidewalk can be (when designed to) both a piece of art or a play element. By placing a tree whose branches spread out instead of only vertically, the tree becomes a multi purpose element: it not only provides the basic features shade, green, etc., but it also becomes an adventurous, natural play element.

08



STREET ART

Color up your environment



Scale Micro

Domain Spatial

Complexity

Age group

Theme(s) Playful streets

Example Street art in George Town, Penang (MY); Streetart, Bogata (CO)

Compatible components



Playful street furniture



Temporary street closure



Sidewalk games



Why?

Street art can change communities perspective of their surrounding environment. Visually by using street art, communities can merge creativity and culture, express community concerns, wishes, wants, and captures people's imagination.

How?

Occupy or identify a piece of property (school walls, playgrounds), and explore the world of urban art. This can be done by involving children of all ages through class projects, after-class activities etc. These art installations can also be changed periodically. Examples include, street murals, graffiti, decorating street furniture and painting way finding signs.

09



SHARED SPACE

Spatial quality and democratic use of space



Scale	Micro
Domain	Spatial
Complexity	
Age group	
Theme(s)	Reclaiming public space Easy access
Example	New Road, Brighton (UK)

Compatible components

- Pedestrian network
- Street green
- Cycle network
- Stroller friendly streets



Why?

A recurring observation within urban communities is the amount of cars on the street and the attitude of the drivers. When streets are not considered safe to play in, less play happens on streets. One way to increase safety levels and at the same time improve the walk-ability streets is through the introduction of shared space concepts.

How?

As an urban planning approach, shared space aims to minimise the segregation between vehicular traffic and pedestrians. By eliminating surface marking, signs, lights, kerbs etc., the approach advocates for higher awareness of road users and reduction in car speeds. The responsibility of safety is shared with the aim to give street space back to various activities.

10



ALTERNATING PAVEMENT

Informal demarcation of space



Scale Micro

Domain Spatial

Complexity  ○ ○ ● ○ ○ 

Age group  ○ ● ● ● ● 

Theme(s) Safer streets

Example Le Medi, Rotterdam (NL)

Compatible components



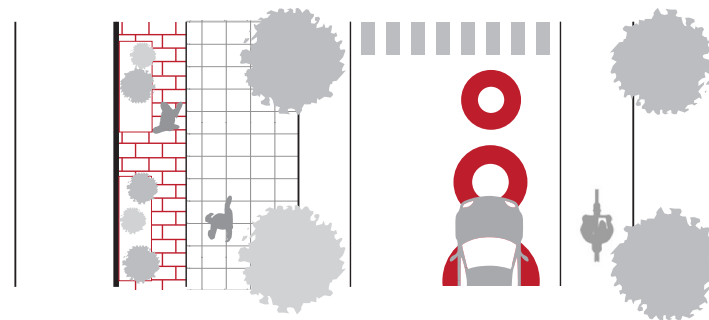
Neighborhood child route



Narrowing: visual and physical



Playful street crossings



Why?

Creating playful patterns through colourful tiling on the sidewalk can visually create multiple areas, to walk and play. Paint, chalk marking etc. can create visual cues to make drivers more aware of their environment.

How?

Traffic safety and awareness levels can be addressed in many ways, one of the easier DIY solutions is creating awareness through design interventions. Informal demarcations of space within pavement areas through alternating tile patterns, using colours within pavements, painting, greening etc.

11



NARROWING: VISUAL AND PHYSICAL

Smart design for traffic safety



Scale Micro

Domain Spatial

Complexity 


Age group 

Theme(s) Safer streets

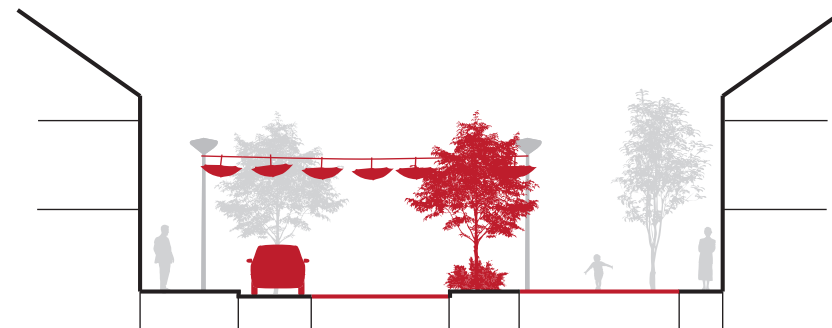
Example Umbrella sky project, Namur (BE)

Compatible components

 Neighborhood child route

 Playful street crossings

 Alternating pavement



Why?

The attitude of drivers is an important determinant when trying improving the traffic safety. Physically and visually narrowing the street can help to reduce the speed of drivers.

How?

Physical narrowing and improving pedestrian movement can be done in various ways, trees and shrubs, street painting, urban furniture, or using creative ways to cover the street, e.g. umbrella project.

12



LIGHTING

Illuminating the neighborhood



Scale Micro

Domain Spatial

Complexity ○ ○ ○ ○ ●

Age group ● ● ● ● ●

Theme(s) Social streets

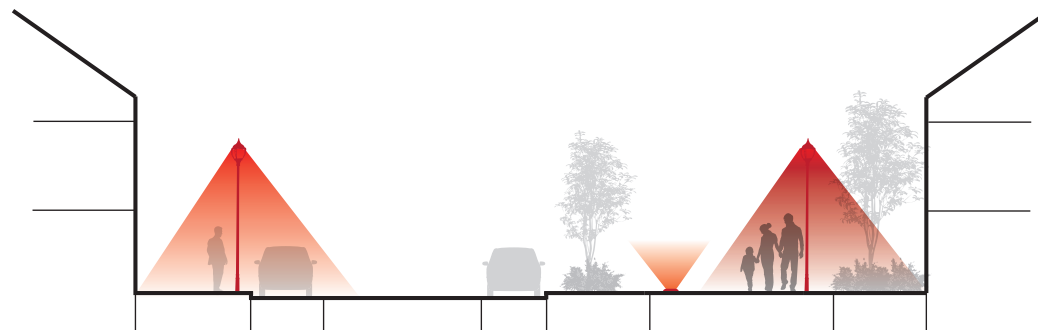
Example City Touch lighting, Jakarta (ID)

Compatible components

Social media community

Temporary street closure

Maintenance & awareness



Why?

Perceived safety especially from dusk till dawn is a point of concern for residents. Walking around the neighbourhoods with young children in the evening in badly lit places deters exploration and play after dark.

How?

Adding better street and floor lighting is a solution that can have immediate effect. Through the use of adaptive and LED lighting, neighbourhoods can create special atmospheres and increase safety. One could also think of creating an illuminated path (with various colours) along the child route, resulting in a pleasant route by day and night.

13






MAINTENANCE & AWARENESS

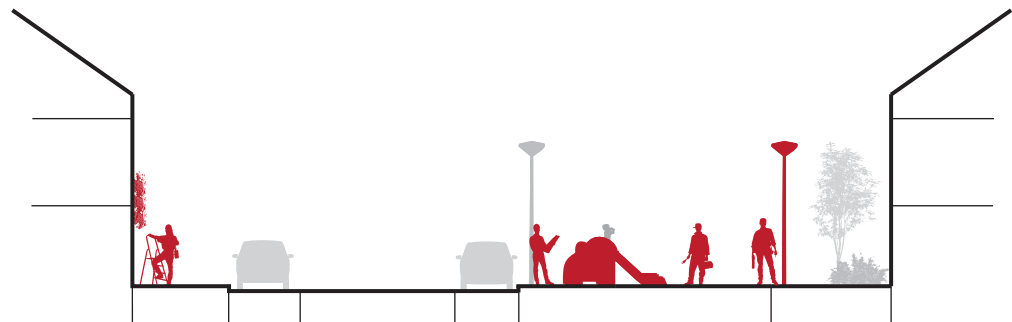
Keeping the neighborhood clean



Scale	Micro
Domain	Government / Social
Complexity	
Age group	
Theme(s)	Child policies, Social streets
Example	Buiten Beter application (NL)

Compatible components

-  Lighting
-  Social media community
-  Temporary street closure



Why?

Concerns related to dirty and depreciated play equipment, pet faeces in play spaces, old sidewalks and general neglect of play equipment and play spaces can be deterrents to play. Clean streets, attractive open and green spaces, well maintained signs, buildings, and roads all contribute to high spatial qualities of a neighbourhood.

How?

Both the residents and governments can contribute to maintaining a clean neighbourhood. Municipalities can provide designated pet places, repeated maintenance of play equipment and the sidewalk (replace broken pavement tiles). Residents can individually or collectively actively contribute by maintaining the sidewalk in front of their house, picking up after pets, cleaning their yards or gardens, etc.

14



LIVING SCHOOL GROUNDS

Bringing nature and play to school



Scale Micro

Domain Spatial

Complexity ○ ○ ○ ○ ●

Age group ○ ● ● ● ○

Theme(s) Contact with nature

Example Green schoolyards America,
Berkeley (USA)

Compatible components

Natural play areas

Community garden

Street green



Why?

Living school grounds are richly layered outdoor environments that aim to strengthen local ecological systems. They are also learning resources for children that foster exploration and adventure, and provide a wide range of play opportunities.

How?

Greenification of the school yard is an ongoing trend around the world, which serves as a great example of facilitating the conversion of grey areas to green. This can be done through, natural carpets, boulders, tree trunks, mounds, and natural play surfacing. These can become diverse play environments and educational spaces.

15






USE OF SEMI-PRIVATE SPACES

Play in an protected environment



Scale	Micro
Domain	Spatial
Complexity	● ○ ○ ○ ○
Age group	● ● ● ● ○
Theme(s)	Multi-functional use of space
Example	Neighborhood Detective Public Space Cards, Barcelona (ES)

Compatible components

-  Flexible schoolyard
-  Climbable objects
-  Sidewalk games



Why?

Semi-private spaces are transition spaces between private and public spaces. These can include, internal courtyards, lobbies, etc. The use of these spaces can be intensified by increasing possibilities for play, recreation and meeting. Importantly, these spaces can have good line of sight for the parents with younger children.

How?

Semi-private spaces can be opened up for the residents of the neighbourhoods. Internal courtyards can become safe spaces for play for children. This can be done for example by, opening them at specific times during the week, creating a network of courtyards for alternate use.





16






FLEXIBLE SCHOOLYARDS

A schoolyard that has flexible accessibility



Scale	Micro
Domain	Spatial
Complexity	 ○ ○ ○ ○ ● 
Age group	 ○ ● ● ● ○ 
Theme(s)	Multi-functional use of space
Example	OBS Roombeek, Enschede (NL)

Compatible components

-  Use of semi-private spaces
-  Climbable objects
-  Sidewalk games



Why?

School yards are locations that are only used at certain times of the day and mostly only during weekdays. School yards have a potential to become much more than just playgrounds during school hours. For example they can be opened up for bringing and dropping of kids at school, play spaces in the weekend, etc.

How?

An example of such a flexible solution is found in Roombeek (Enschede, NL). It is a shared space with multi-functional use: for picking and dropping of kids and as a playground that can also be accessed in the weekend. This requires collaboration between school authorities, parents and municipalities with regards to maintenance, safety, costs etc.

17



PLAYFUL STREET CROSSINGS

Cross the road in a playful way & increasing awareness



Scale Micro

Domain Spatial

Complexity  ○ ○ ● ○ ○ 

Age group  ● ● ● ● ○ 

Theme(s) Safer streets

Example Colourful Crossings, London (UK)

Compatible components



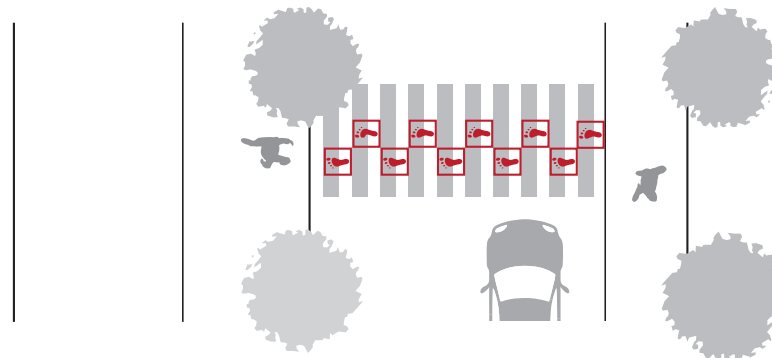
Neighborhood child route



Narrowing: visual and physical



Alternating pavement



Why?

Mundane street crossings can become pieces of art or stories or even invite you to explore the wider neighbourhood. By creating interesting street crossings, neighbourhoods can increase their aesthetic appeal, benefit pedestrians and raise awareness.

How?

Cities today are actively aiming to improve their neighbourhoods through a multitude of interventions. Streets crossings can be community projects, art installations by famous artists, or children's school projects. The scale and scope depend on its residents.

18



JUNK PLAYGROUND

Playground for creative forms of play



Scale Micro

Domain Spatial

Complexity  ○ ○ ● ○ ○ 

Age group  ○ ● ● ● ○ 

Theme(s) Diverse playscapes

Example Emdrup Junk Playground,
Copenhagen (DK)

Compatible components



Climbable objects



Designing for flexible use



Natural play areas



Coffee bar

Why?

Originating in the mid-twentieth century in Denmark, junk playgrounds have gained global popularity. Encouraging undirected play and aimed at developing the 4C's, communication, collaboration, critical thinking, and creativity, these spaces are powerful learning environment.

How?

Identifying an optimal location and creating a junk playground with minimum investment: junk, tools, physical space, and trained "play workers" will act as lifeguards. Old doors, lawn chairs, old exercise equipment, boats, wooden planks, sewage pipes, anything unused can become a part of undirected play.

19



COMMUNITY GARDEN

Reclaiming space through urban gardening



Scale Micro

Domain Spatial / Social

Complexity ● ○ ○ ○ ○

Age group ○ ● ● ● ●

Theme(s) Reclaiming public space

Example Hortas Cariocas, Rio de Janeiro (BR)

Compatible components



Shared space



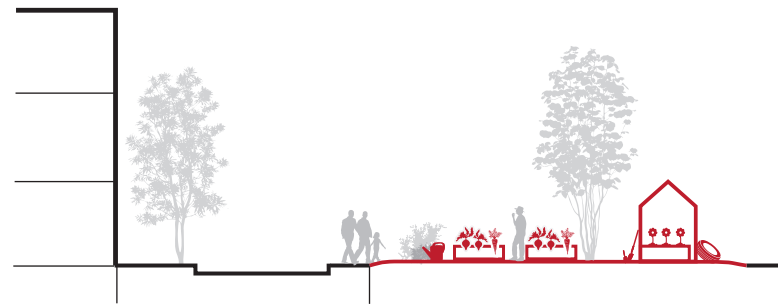
Temporary street closure



Street green



Coffee bar



Why?

Community gardens are lands that are gardened collectively by a group of people. Generally developed in unused land and space, community gardens aim to raise awareness of food production, health and wellness while also performing educational functions for children and adults.

How?

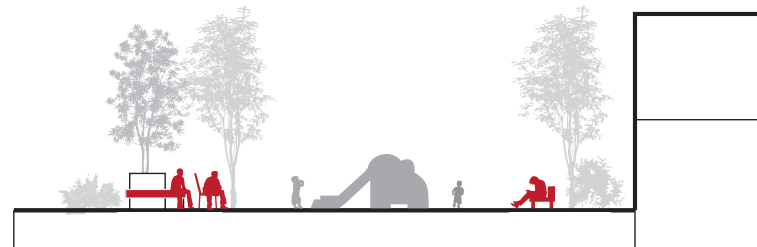
Identifying a group of people in the neighbourhood interested in creating community gardens, outlining available resources, identifying a possible locations, organizing the process, identifying the role of children in gardening, and creating a vested community.

20



SEATING POSSIBILITIES

Have a seat while watching the children play



Scale	Micro
Domain	Spatial
Complexity	
Age group	
Theme(s)	Services for childminders
Example	Salamander Playground, Quebec (CA)

Compatible components

- Playful street furniture
- Shared space
- Designing for flexible use

Why?

Parents are mostly not as active as their playing children, and seating can make the wait comfortable. Seating can have multiple purposes, spaces to wait, meet other parents, can also act as climbable objects, etc.

How?

Larger seating elements can be provided by the municipality or neighbourhood boards, like benches or picnic tables. Seating can vary from a luxury chair to just a stone wall at the edge of the playground. Simpler options include collecting a few folding chairs and placed around play areas or even bringing your own folding chair to the park!

21



FREE WI-FI ZONE

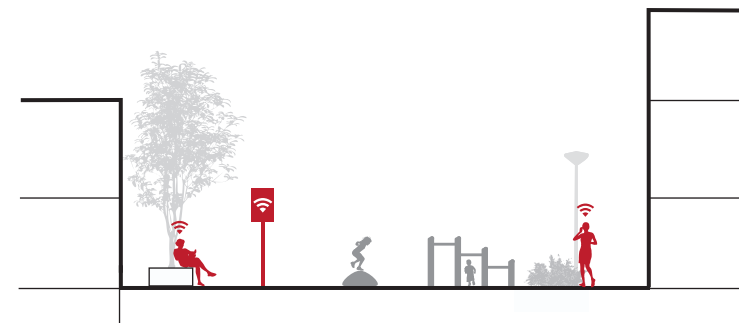
Free use of Internet



Scale	Micro
Domain	Social
Complexity	○ ○ ○ ○ ●
Age group	○ ○ ● ● ●
Theme(s)	Services for childminders
Example	Brisbane Parks, Brisbane (AU)

Compatible components

- Social media community
- Playful street furniture
- Lighting
- Coffee bar



Why?

While children enjoy the playgrounds and make new friends, parents watching their children can use this time to catch up on work or the news, or check social media. This creates amicable waiting environments for parents, and can further encourage the use of neighbourhood spaces by different ages.

How?

By creating Wi-Fi hotspots around child-oriented places that provide free use of Internet fits into a number of urban agendas. While these facilities are provided by municipalities, encouragement by the residents can push these ideas. Providing services in multiple locations can initiate more frequent use of outdoor spaces.

22



COFFEE BAR

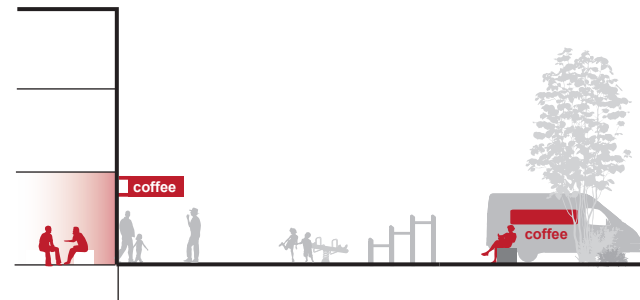
Refreshments for parents and children



Scale	Micro
Domain	Spatial / Social
Complexity	
Age group	
Theme(s)	Services for childminders
Example	Cafe at Tumbling Bay Playground (London, UK)

Compatible components

- Designing for flexible use
- Pedestrian network
- Junk yard playground
- Temporary street closure
- Free Wi-Fi zone



Why?

Our research showed that when thinking of play spaces the interests of childminders are often overlooked. Playgrounds can be designed as multi-functional spaces that do not only allow for play but also serve a location for informal gatherings. Public places like cafés, food trucks etc. can provide an excellent opportunity for childminders to meet and enjoy a cup/snack while waiting for their children.

How?

Providing a coffee pick up point or a terrace that overlooks the children playing can make playgrounds much more attractive to childminders. While accompanying their children they can have a cup of coffee and chat up with other parents or other interested residents. By providing opportunities to drink or eat, it encourages people to spend more time at the playground before going home.

MESO SCALE

An intermediate level of interventions at the district or neighborhood level



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STROLLER FRIENDLY STREETS

Easy accessible streets for strollers



Scale	Meso
Domain	Spatial
Complexity	
Age group	
Theme(s)	Services for childminders
Example	Global Street Design Guide (Global)

Compatible components

	Neighborhood child route
	Pedestrian network
	Shared space
	Narrowing: visual and physical



Why?

Research showed that navigating through the neighbourhood with a stroller can be problematic. The sidewalk can be filled with obstructions like garbage containers and bicycle racks. Absence of slopes on pavement can also decrease the accessibility of the streets.

How?

Removing unnecessary objects can help to reduce the number of obstacles with neighbourhood walkways. Furthermore a flat surface with lowered sidewalk curbs can make walks with the stroller easier. Conditions like these also benefit children with roller-blades and wheelchairs for example, and older demographics.

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NEIGHBORHOOD CHILD ROUTE

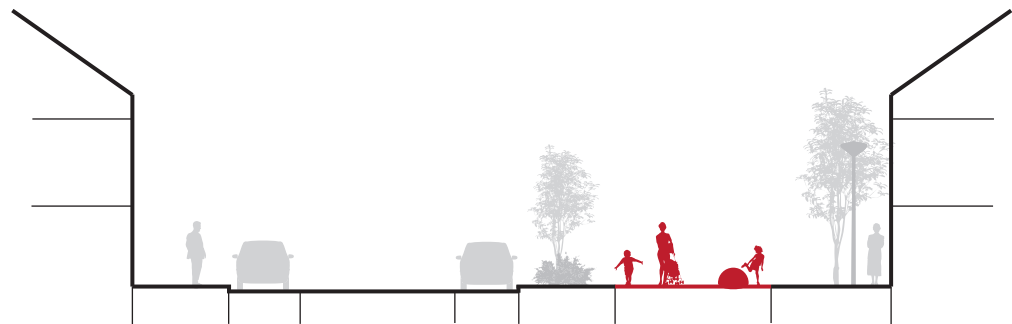
A safe traffic route that connects facilities for kids



Scale	Meso
Domain	Spatial
Complexity	
Age group	
Theme(s)	Safer streets, Child policies
Example	Kindlint, Amsterdam (NL)

Compatible components

-  Playful street crossings
-  Alternating pavement
-  Family friendly city strategy
-  Stroller friendly streets
-  Pedestrian network



Why?

A safe route for children that encourages independent mobility through the neighbourhood is often missing. Schools, play areas, the park for example are spatially disconnected from each other, creating a barrier to go independently from one to another for children.

How?

The Kindlint in Amsterdam and Eindhoven are examples of neighbourhood child routes. It includes, painted sidewalks and streets, sidewalk games, climbable objects, greenery, narrowing of streets, creating a safe route for children to move independently through the neighbourhood.

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DESIGNING FOR FLEXIBLE USE

Diversification of playgrounds



Scale	Meso
Domain	Spatial
Complexity	
Age group	
Theme(s)	Diverse playscapes
Example	Katanning all ages playground, Katanning (AU)

Compatible components



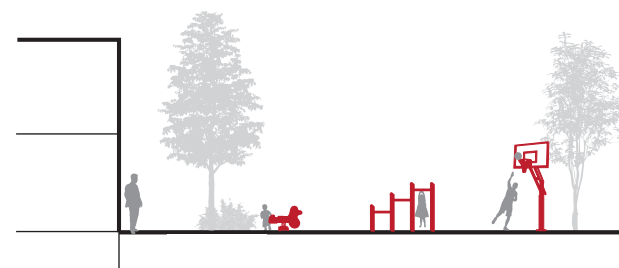
Climbable objects



Junk yard playground



Natural play areas



Why?

Designing playscapes for various abilities rather than age, can include elements for both younger and older children, without being prescriptive on age or who uses what. By being flexible on the design of various elements, settings, context, available facilities, playscapes can cater to multiple ages (young children to young adults).

How?

Identifying current and future needs of the community is key. Playable spaces are many, and can include formal and informal features where needs of all users are respected and accounted for. Specific elements include: creating boundaries, inclusive play equipments, planting, surfaces, etc.

26



CYCLE ROUTES

Creating cycling routes through the neighborhood



Scale Meso

Domain Spatial

Complexity ○ ○ ○ ○ ●

Age group ○ ○ ● ● ●

Theme(s) Easy access

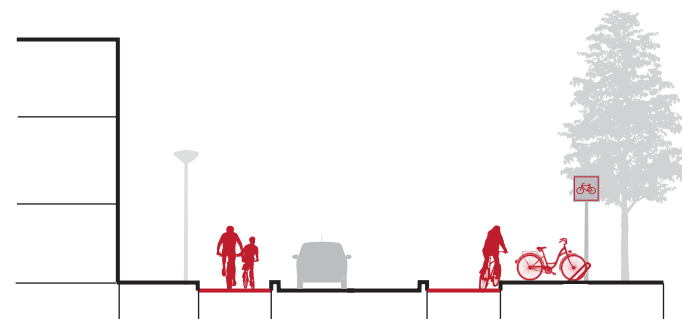
Example CycleCities project, Lisbon (PT)

Compatible components

Shared space

Public transportation routes

Pedestrian network



Why?

Providing space for cycling creates efficient and attractive places to live, and many cities around the world are capitalizing on the resurgence of the cycle. Offering attractive streets-capes, alternate mobility options, economics of land, inclusiveness, healthy lifestyles, the benefits of cycling are many.

How?

Creating cycling routes through neighbourhoods and cities can be done through various ways. Some important factors include, making space for cyclists, identifying user needs and experiences, taming traffic, visibility, becoming a part of the urban street network, separating traffic, technical requirements of the path, signage, and maintenance.

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PEDESTRIAN NETWORK

Linking slow traffic in the neighborhood



Scale Meso

Domain Spatial

Complexity

Age group

Theme(s) Easy access

Example Pedestrian Network Analysis Project, Portland (USA)

Compatible components



Shared space



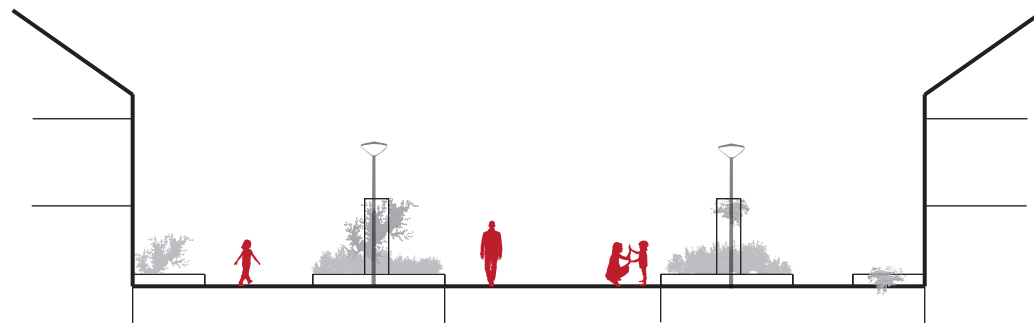
Cycle path network



Public transportation routes



Stroller friendly streets



Why?

Traffic safety and the relation between children and automobiles is a reoccurring topic of concern. An often mentioned improvement is to make streets car-free. One way to do this is complete separation of the two by creating zones only designated for slow and specific times for fast traffic. The pedestrian street is an example of such a design intervention.

How?

The pedestrian street provides a conflict free zone in front of the house. Entrances to the houses are located directly on the street. Young children can specifically benefit from this as they can play directly in front of their home. Creating space for vibrant family-friendly activities on streets.

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PUBLIC TRANSPORTATION

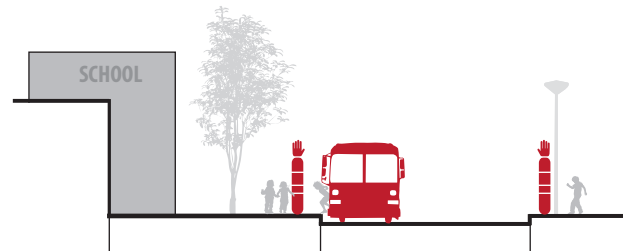
Public transport adjusted for children's destination



Scale	Meso
Domain	Spatial
Complexity	
Age group	
Theme(s)	Easy access
Example	Julie © (Creative bus stops, various cities in the Netherlands)

Compatible components

- Shared space
- Cycle path network
- Pedestrian network
- Free Wi-Fi zone



Why?

Development of an adequate and accessible public transportation system is essential for achieving regional sustainability. Family friendly infrastructure needs to include access to amenities within and outside the neighbourhood, and public transportation can play a key role.

How?

Access to various facilities and activities aimed at children and their parents can be supported by a network of public transportation and bus stops close to these activities. Creative bus stops can make street-side waiting fun for families with children and create more inclusive neighbourhoods. These can also act as markers as signage for child-friendly activities.

MACRO SCALE

The highest and the most complex level of intervention at the city level





FAMILY FRIENDLY CITY STRATEGY

Designing the city and its public space with children in mind



Scale	Macro
Domain	Governance
Complexity	
Age group	
Theme(s)	Child policies
Example	Child Friendly Strategies, family-friendly housing, Vancouver (CA)

- Compatible components
- Maintenance & awareness
 - Neighborhood child route
 - Encouraging child participation

Why?

Cities are growing in attraction for families with children, renewing interests in child geographies. Cities are now responding to this growing trend by actively looking at family friendly developments. Though there is a long way to go to create family friendly cities, incremental shifts can create more awareness.

How?

A family friendly strategy starts with various public and private stakeholders; governments, developers, NGO's, residents. Strategies can take various forms, Rotterdam (NL) is a successful example in developing and evaluating Child Friendly Cities, creating child-friendly housing estates as seen in Vancouver (CA). Incremental steps towards a larger strategy can enable Child Friendly Cities.

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ENCOURAGING CHILD PARTICIPATION

Creating places that belong to children by children



Scale Macro

Domain Governance

Complexity

Age group

Theme(s) Child policies

Example City council for kids, Tirana (AL)

Compatible components

Family friendly city strategy

Maintenance & awareness

Neighborhood child route

Why?

Children are often overlooked when it comes to decision making. Adults decide for children what needs to be done or how it should look like. The rich local knowledge of children and families often remains an untapped source of information.

How?

Cities can apply precise policies to make the involvement of adults and children an inherent part of the planning process. Urban design can also benefit from the involvement of children. Designers asking children what their environment should look like can result in fruitful and creative outcomes, maps, stories, visuals, etc. invisible to a general observer.

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Create your own intervention!

Scale Micro / Meso / Macro

Domain Spatial / Social / Governance

Complexity  ○ ○ ○ ○ ○ 

Age group  ○ ○ ○ ○ ○ 

Theme(s)

Example

Compatible components

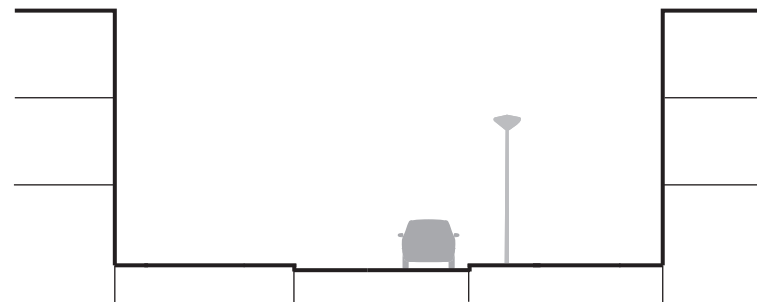
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Why?

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How?

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Urban design toolkit

To promote child-friendly urban environments, this toolkit provides a wide array of design interventions to develop more inclusive play spaces. By mixing and matching ideas ranging from the street to the neighbourhood, DIY solutions to more elaborate urban interventions, it is a guide to creatively engage with planning for child-friendly environments.



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