

Brain development of young children and need for neighbourhoods that support healthy early childhood development

Design pilot project to support 0-5-year-old children and their caregivers

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If you could experience the city from 95cm – the height of a healthy 3-year-old – what would you change?

URBAN95





## The importance of the early years

The prenatal period and the first five years of a child's life are an important window of opportunity.

Decades of research from public health, neuroscience and economics shows that investing in babies' and children's early years can translate to:

- Better health
- Greater ability to learn and work with others
- Higher incomes in adulthood





## The importance of the early years



#### **Brain building**

One million synapses are created in a baby's brain every second.



#### Scale of the problem

#### 250 million children under 5

across almost every
country in the world – do not
receive the care they need to
reach their full potential.



#### The potential

**USD 6.40– 17.60:** estimated return for every USD 1 spent on high-quality early years programmes.



## Early experiences shape the brain – and the future

The early years (ages 0 to 5) are when the brain is developing most rapidly: babies form one million neural connections every second.

The way these connections form sets the foundation for good health and learning in later childhood and adulthood.





For optimal brain development, young children need plenty of love and attentive care from caregivers, as well as opportunities for play, proper healthcare, nutrition and protection from harm.

Together with our partners we find opportunities to give babies, toddlers and their caregivers the support they need: to foster nurturing environments and encourage positive caregiving behaviours.



#### A good start in life

Early experiences and environments have lifelong effects.



#### Health

Significant adversity in childhood is connected to increased risk of a range of adult health problems, including diabetes, hypertension, stroke, obesity and some forms of cancer.

#### **Education**

Studies have shown that stunted children who received home visits promoting caregiver—infant play and verbal interaction had significantly better long-term outcomes: in school attendance, college education and income as adults.

#### **Economics**

High-quality early childhood programmes for disadvantaged children can deliver a cost-benefit return of USD 6.40 – 17.60–10 for every USD 1 spent, through savings in health, welfare and special education, as well as increased income.

#### **Environment**

A healthy and inclusive environment is essential for babies, toddlers and those who care for them. Access to nature and clean air leads to better development and improved caregiver wellbeing.



## Babies, toddlers and caregivers experience the city differently

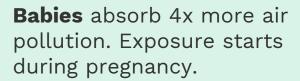


More than a billion children live in cities, and rapid urbanisation means that number is growing.

Babies, toddlers and caregivers experience the city in unique ways, which can impact their development and have lifelong effects.









**Toddlers** need double the amount of time to cross streets compared to ablebodied adults.



Young children experience reduced stress and better physical and mental development when they have regular access to nature.





This means babies and toddlers need cities with a safe and healthy environments, where important services are easily accessible; one that allows for frequent, warm, responsive interactions with loving adults and offers stimulating and protected spaces to play and explore.

We encourage partners and others to empathise with the needs of children and caregivers. This is the starting point for creating better spaces, better services and better cities.

#### Caregivers are crucial

Babies and toddlers do not wander through cities by themselves – Their caregivers decide where they go and how long they stay.

- Caregivers provide for young children's most basic needs.
- They create the opportunities for love, play, conversation and nurture, which helps to build brains.
- They provide a stable presence, protecting children from stress.

Therefore, the cities designed for the wellbeing of caregivers and encourage healthy interactions have a **defining impact on a child**.





## Caregivers are crucial

Therefore, the wellbeing and behaviours of caregivers have a defining impact on the child.

- They need to be supported by services and networks and have time to engage with the babies and toddlers they care for.
- They need access to healthy and stress-free environments.



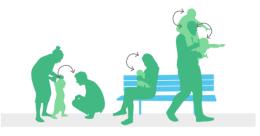
## The goal: healthy connections

Better urban environments are the means by which we build strong, healthy connections at every level.

- Frequent, warm, responsive interactions with loving adults are possible
- Important relationships are nurtured
- Communities are improved



Between neurons



Between child and caregiver



Between children



Between caregivers



Between caregivers and children with their surrounding space



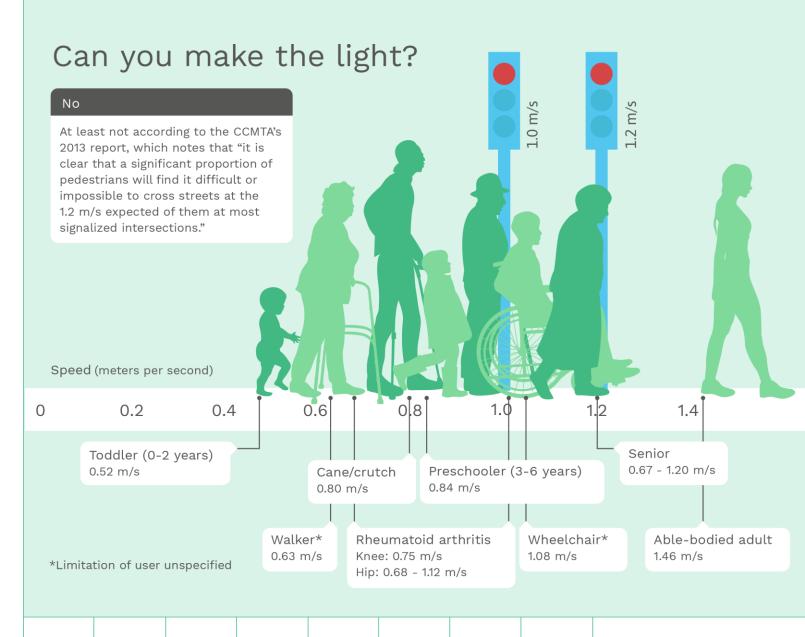
Between caregivers and children and their destinations



# Taking a toddler's perspective

Urban95 encourages partners and others to understand, empathise and take account of everyone's needs, abilities and priorities – but especially pregnant women and babies and toddlers aged 0-5.

 For example, this might mean rethinking timings at pedestrian crossings.

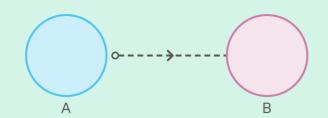


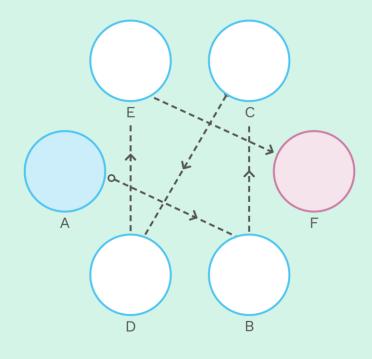


Or take a few minutes to think about how differently infants and caregivers move around their neighbourhood or their street, their neighbourhood, or their city, compared to commuters.

#### Lone person, peak commute

**Infant& caregiver journey** 





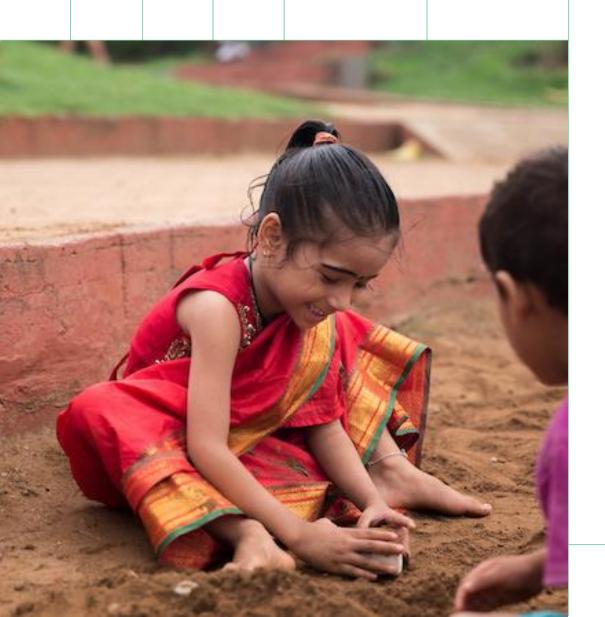
At the city scale, Urban95 journeys include more destinations in different parts of the city.

If you could experience the city from 95cm — the height of a healthy 3-year-old — what would you change?

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#### This is the question that Urban95 tries to answer on behalf of babies, toddlers, and the people who care for them.

- Children and caregivers experience cities differently.
- Urban environments impact caregiver wellbeing and caregiving behaviours - two crucial factors in child development.
- → We partner to identify and scale-up cost-effective and cross-sectoral ways to improve how families with small children live, play, interact and move through cities.
- We support our partners to use data, design and behavioural science to create cities that are healthier, safer and happier for babies, toddlers and their families.

#### Five lessons for toddler-friendly cities

From over five decades of working with partners in cities we've learned five valuable lessons.



# What a toddler-friendly city looks like: The Urban95 Manifesto



#### An Urban95 city is a place where...

1.

#### Babies, toddlers and the people who care for them

are seen, heard, counted and considered. 2.

#### Caregivers

are given the time and respect they need to provide vital care and support.

3.

#### Vulnerable families

receive the extra support they need to thrive.

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#### Children's routes

help families travel safely and comfortably wherever they wish to go. City agencies

work together, and with the community, to support families with small children.

#### Early years services

are located within a 15 minutes' walk from where families live. 5.

#### **Public spaces**

prompt singing, conversation and play.

**6**.

#### Shared streets

are dedicated to cleaner, safer and fairer modes of transportation.

#### Neighbourhoods

bridge cultural divides and provide spaces for socialising. 10.

#### Clean air, pure water and refreshing nature

surround and nurture every resident.

#### By experiencing the city as a toddler would

we can help tackle the enormous challenges facing city leaders every day.

#### By supporting cities that promote

loving behaviours and healthy brain development at every scale, we can help improve the lives of millions, both now and for the future.



"Urban planning and development must enhance the talent, creativity, and aspiration of children"

Venkaiah Naidu, Honourable Vice President of India



### Thank you!

**Learn more at:** 

bernardvanleer.org/urban95



