

Sustainability starts with children: Child friendly precinct design for active travel and active play

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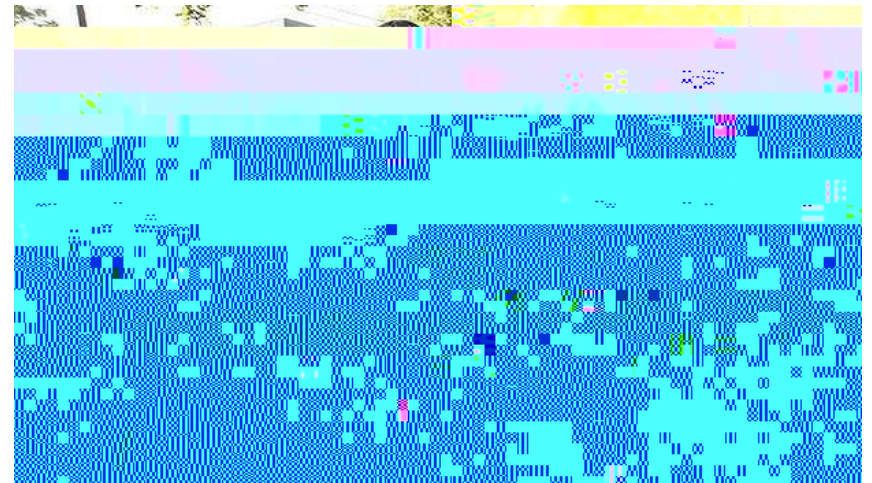
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Overview

- The role of child friendly design attributes for:
 - Carbon reduction
 - Formation of environmentally sustainable lifestyles
- Children aged 10-12 and 15-17
- Policy review, surveys and travel diaries



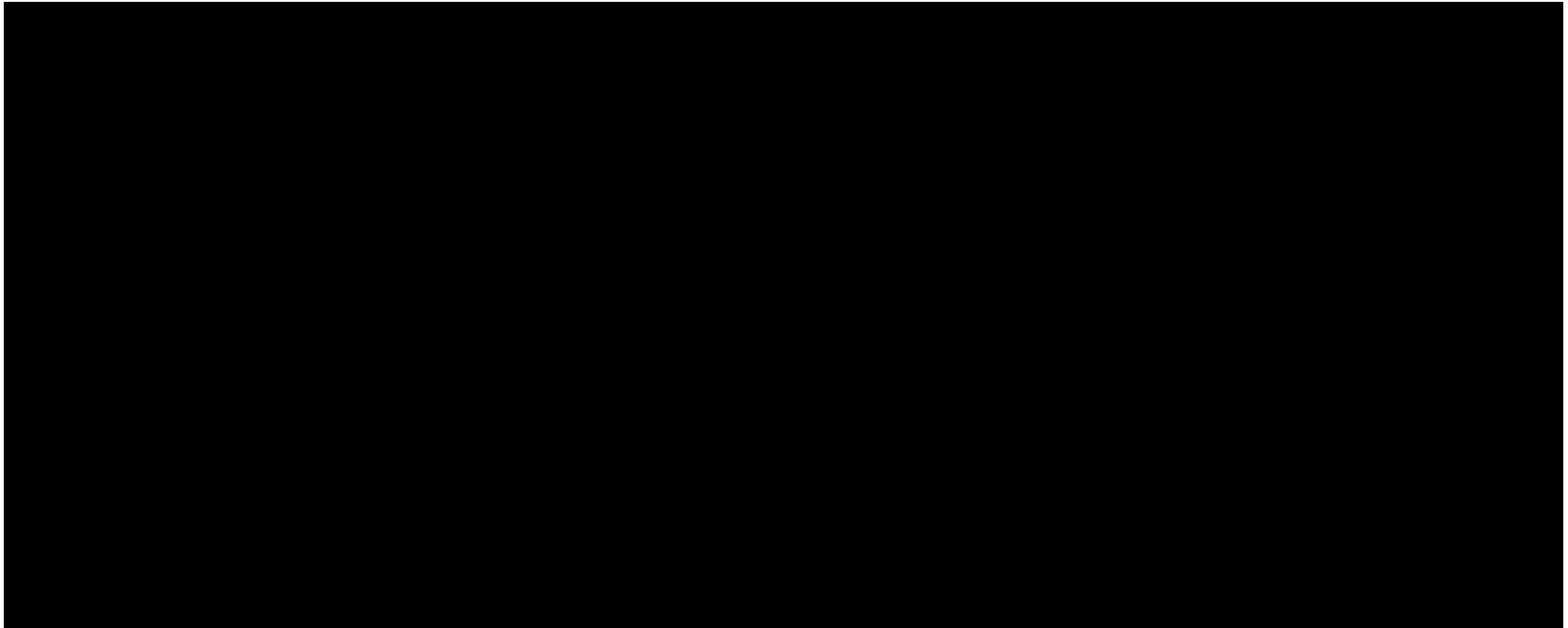
Source: www.essentialkids.com.au

Literature Review: Children in (sub)urban life

Families with children in post-war planning policies:

- Suburban lifestyle, low density, segregated land use and cheap oil
 - Heavily relied on cars for even basic services such as shops and schools
 - Increased traffic safety concerns
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Limited data is alarming



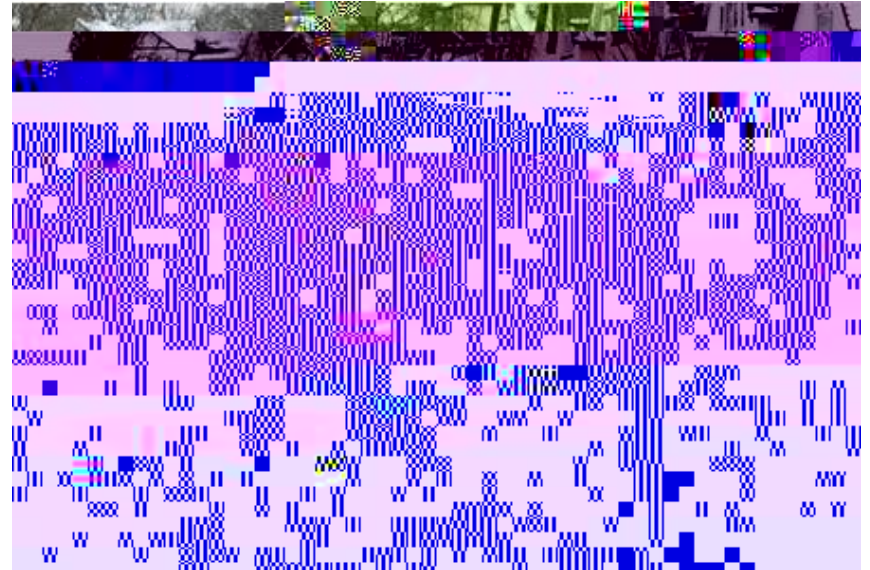
Source: NSW Government 2005,

p 3

- Sydney (2001-2011) education child related car trips +17%
- Melbourne (1994-1999) 71% of children's trips in cars

Carbon reduction associated with car usage

- Children's carbon footprints: increased car dependency among families with children
- Children's capacity to be agents for a sustained change => orchestrating a behavioural change



Source: www.stokesentinel.co.uk

Children in urban life



Source: United Nations Human Settlements Programme (UN-Habitat) 2015

Why sustainability through children

- ❑ Children, not just as future citizens but ‘CHANGE AGENTS’, ‘INDICATOR SPECIES’:

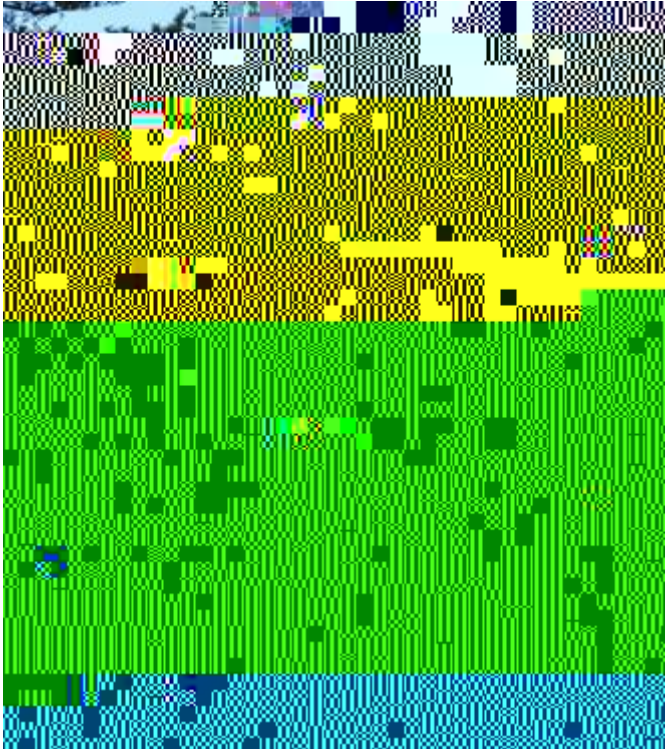
‘If we can build a successful city for children, we will have a successful city for all people’

Enrique Penalosa, former mayor of Bogota, Columbia



Defining the child friendly precinct in the context of active travel and active play

Current approaches are problematic



CHILD FRIENDLY = PLAYGROUNDS

- Segregated from the broader neighbourhoods and cities
- Tokenistic
- Prescriptive
- De-natured

UNICEF – CFC Initiative

A child friendly city is actively engaged in fulfilling the right of every young citizen to:

1. Influence decisions about their city or community
2. Express their opinion about the community they want
3. Participate in family, community and social life
4. Be an equal citizen of their city with access to every service, regardless of ethnic origin, religion, income, gender or disability.
5. Actively supports the vulnerable members of their community to engage with civil society and improve their circumstance
6. Drink safe water and have access to proper sanitation
7. Be protected from exploitation, violence and abuse
8. **Walk safely in the streets on their own**
9. **Meet friends and play**
10. **Have green spaces for plants and animals**
11. Live in an unpolluted environment
12. Participate in cultural and social events
13. Learn about their human rights in schools and community spaces

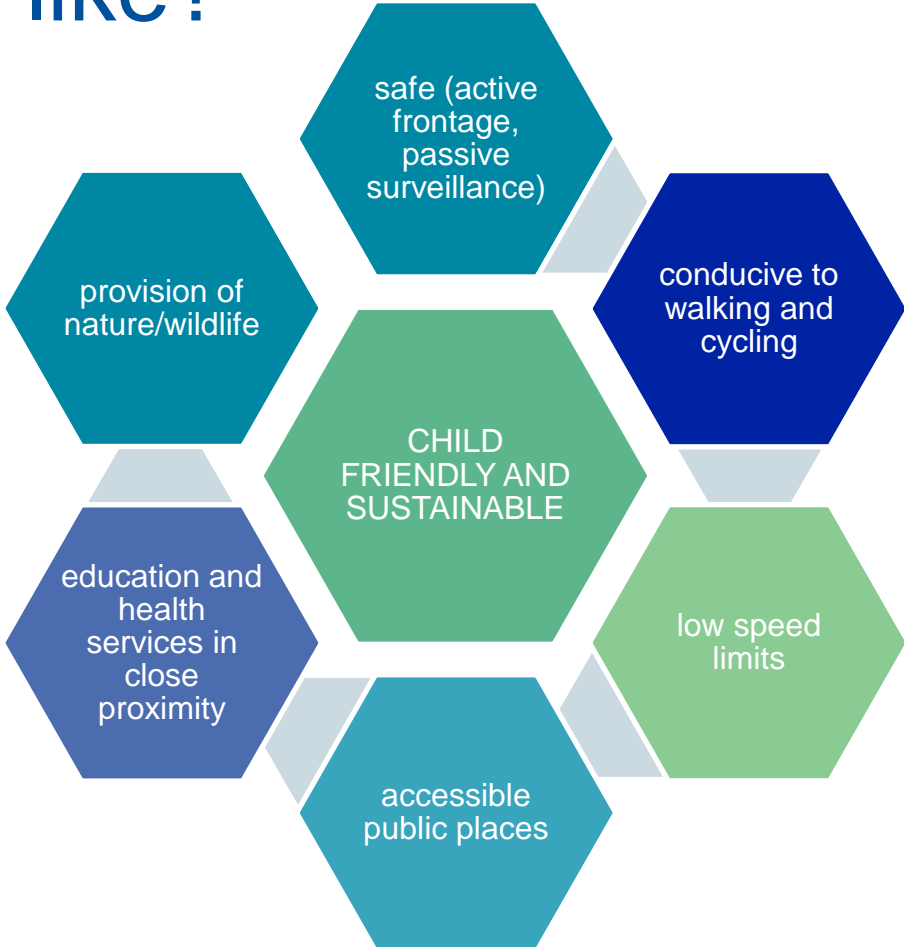
(UNICEF website 2013)



Source: www.childinthecity.eu

- *Positive indicators: Social integration, cohesive community*
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What does a sustainable child friendly place look like?



How to determine child friendliness:
the three concepts of 'ecological
psychology':

- **Affordances:** the perceived opportunities and restrictions concerning the person's action in a given environment but can be expanded to include also the emotional, social and socio-cultural opportunities and restrictions
 - **Behaviour settings:** a basic environmental unit and
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- UN policies
- CFC guidelines:
 - Consideration of sustainability?
- Sustainability policies:
 - Promotion of children's rights?



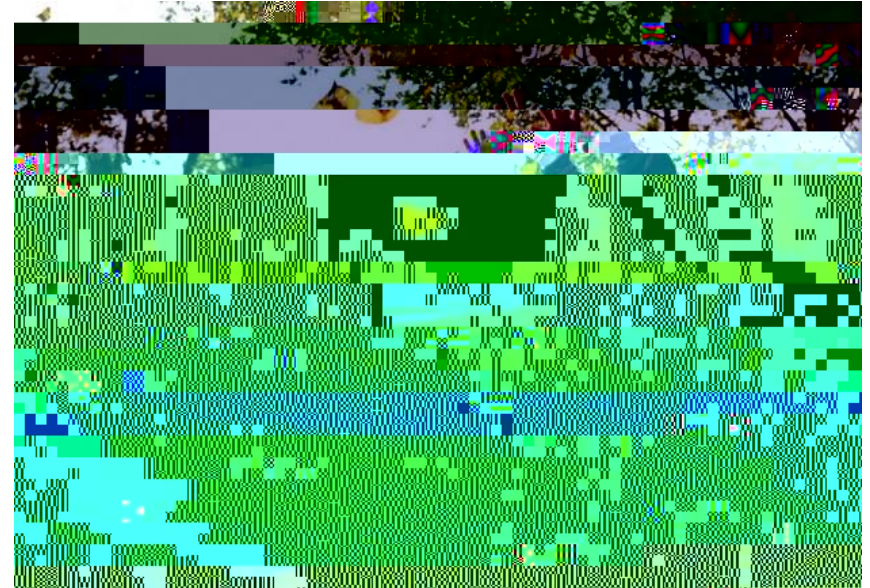
Source: www.newurbanism.org.au

UN policies – children and SDG

Stated link between children's quality of life and the sustainable developments (*UNICEF 1996, 1997 cited in Malone 2001*)

Issues:

- Non existence of unitary public child (O'Brien et al 2000)
- Too broad, limited room for local adaptability
- Difficult to apply, vague benefits for local governments (*Whitzman et al 2009*)



Source: www.childinthecity.eu

CFC Guidelines:

- Emphasis on wellbeing, learning and safety
- Environmental awareness, habitual learning, carbon footprints is missing

Sustainability policies:

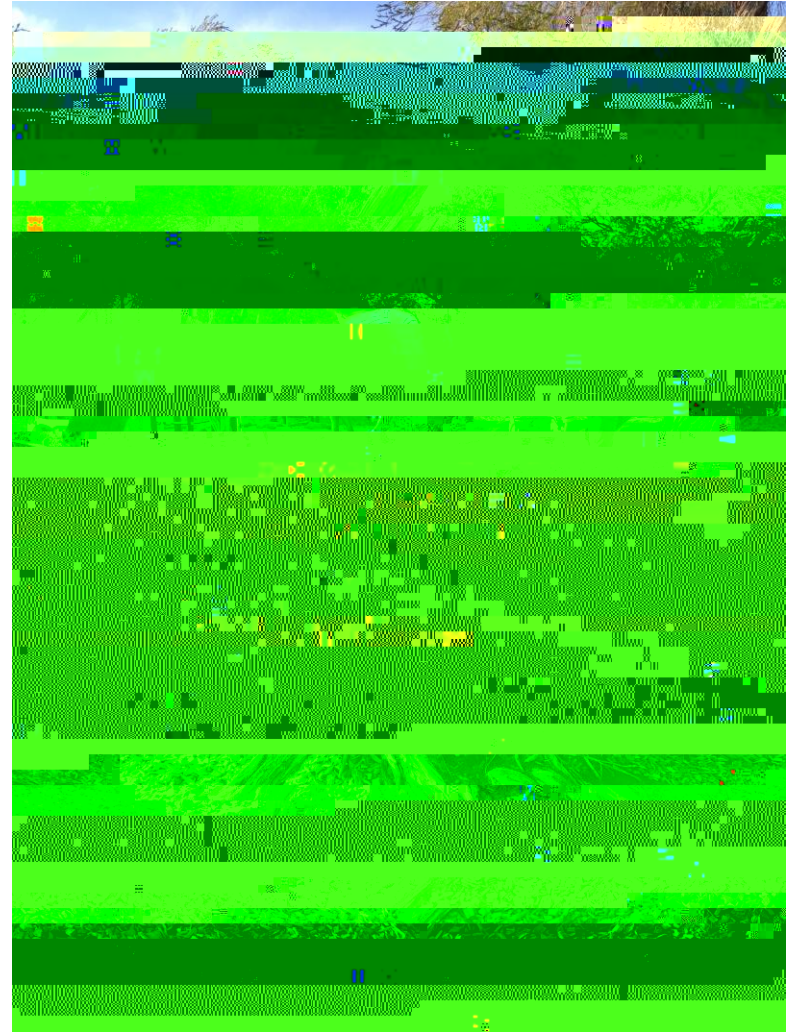
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Evolving towards more tangible agenda

- City level child friendliness index (U-KID) by UNICEF -
SDG reporting
- *'post 2015 SDGs to **purposefully**
rights and needs for economic development, social
development and environmental sustainability'*

Current stage

- Recruitment of schools
- Questionnaires and travel diaries



Source: Author

Anticipated impact

The outcomes of the project will directly inform policy development through:

- the establishment of new guidelines for child friendly low carbon cities and a framework to evaluate the expected performance of various child friendly urban design attributes
- providing evidence base required to improve precinct assessment tools and planning instruments

Thank you!

To find out more, contact:

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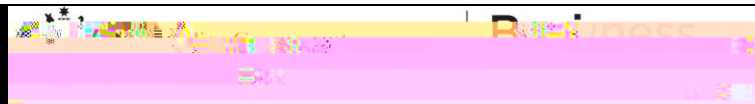
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