

# CHILD FRIENDLY PRECINCT DESIGN FOR LOW CARBON LIVING: IMPROVING POLICIES AND DECISION MAKING TOOLS

## Introduction

Child related car trips are rapidly growing with substantial negative health and carbon emission impacts. Whilst there is an extensive body of research on the role of built environment and urban form in sustainable travel, there is limited research on the car dependent lifestyles of children and the associated carbon emissions.

Framing low carbon living developments through the lens of children's daily lives and integrating sustainability concerns into the child friendly cities policies, this project will develop planning strategies to create precincts which are conducive to walking, cycling and playing – precincts that are *purposely* child friendly.

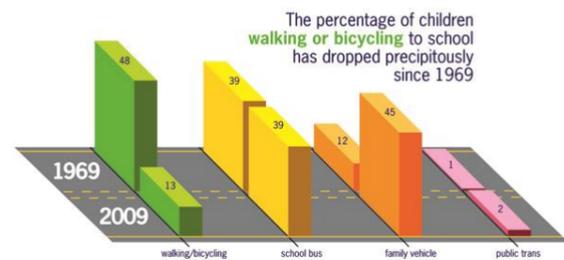


Figure 1: Trends in travel mode to school in the USA (source: <http://saferoutespartnership.org>)

## Methods

- Policy review: Australian local government policy and guidelines on child friendly cities and sustainable cities
- Surveys (children & parents)
- Travel diaries by children aged 10-12 and 15-17



Figure 2: Traffic congestion during school drop off (source: [heraldsun.com.au](http://heraldsun.com.au))

## Research objectives

- Exploring the conditions of higher density neighborhoods to understand the use and non-use of public places
- Exploring the role of child friendly attributes through the increased opportunities for active transport and increased choices for outdoor activities and how they contribute into:
  - carbon reduction
  - formation of environmental attitudes and aspirations for children and youth



Figure 3: School kiss and drop offs (source: [dailyphotograph.com.au](http://dailyphotograph.com.au))

## Preliminary findings

- Child friendly cities initiatives mainly centre around health concerns and are silent in children's lifestyles in the context of low carbon living
- Limited reference to environmental awareness or sustainable behaviours in child friendly cities policies
- Sustainable travel policies tend to ignore children
- Literature in silos: Stand-alone active transport policies and sustainable development policies



Figure 4: Active travel to school (source: [www.essentialkids.com.au](http://www.essentialkids.com.au))

If planning and transport policies are to tackle car dependency, the role of children (and their carbon footprint) in this process needs to be fully understood

## Applications for policy and practice

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. This framework will be suitable for application by Renewal SA and other planning authorities.
- providing evidence base required to improve precinct assessment tools and planning instruments

## Contact

Ms Hulya Gilbert

PhD Candidate

University of South Australia

[hulya.gilbert@mymail.unisa.edu.au](mailto:hulya.gilbert@mymail.unisa.edu.au)

Twitter: @hulya\_gilb