RP3008

# SHAPING SUBURBIA : THE FORM AND FUTURE OF LOW RISE SUBURBS

## Research Questions

***Is there a built form that can support sufficient citizen activity for health, deliver low-carbon living yet remain developer (and by extension "market") friendly? How can such a built environment be retrofitted in to low-rise middle ring established suburbs in post-war cities?***


Figure 1: Walkability: a proxy for low carbon places?

Walking has been described as the single highest-return population-health intervention (Evans, 2014, Beavis 2014). There is good evidence that places with multiple destinations in close proximity of residents correlate with more walkability and activity. In the majority of cases this has been interpreted as a call for high density and specifically high-rise development.

However, the majority of the Australian house-buying public shows a clear preference for single houses (Torrens Title) compared to apartments (Strata Title). The places we seek and choose to live can therefore be said to work against supporting walkable environments.

The adequate amount of activity for health has been thoroughly researched and clearly communicated by the World Health Organisation (WHO).

In addition, the places that support this outcome also tend to deliver a range of other co-benefits such as delivering connected communities, under-represented dwelling products and places that represent low carbon living.

What role can the built environment play in supporting the achievement of these outcomes in post-war western cities?

## Methodology

***This research incorporates a quant method that connects a codified built environment, an established walkability metric and physical activity data.***

Building on the possibility that incidental functional activity alone can provide sufficient physical movement to achieve the WHO health benefits, this project uses the concept of precinct proximity connected in a fine-grain place analysis. It allows the walkability and activity data to connect to place in a novel way.

how can our existing low-rise suburbs evolve to create liveable communities and walkable, low-carbon places?

Figure 2: Large areas of post-war cities represent an opportunity to transform into LCL places.

This research proposes the adoption of a co-benefits methodology unpacking the integrated impacts of walkable places including their carbon intensity. It is proposed that this study will link with another LCL program, Integrated Carbon Metrics (ICM).

## Preliminary Results

Most of the data for this research has been collected and is currently being analysed. The preliminary results:

- support the existing walkability literature and the concept of Precinct Proximity
- reveal a built-environment "threshold minimum" below which activity nor walkability will be supported and above which only marginal benefits can be gained
- reveal that a finer-grained codification of the built environment is critical to such analyses of cities / places
- connect a quantifiable amount that various built-environments might contribute to activity

## Conclusions

***A new market-friendly development could transform significant areas of our cities to be low-carbon, healthy places***

Increased physical activity and by extension improved health, creation of low carbon living 'places' and supporting social capital are more likely to occur in certain built environments. Such places may be able to be delivered via 'the market' and from our living choices, rather than by government regulation of industry or by attempting to change consumer behaviour.

Such places are likely to continue to be keenly sought-after as home buyers seek to live in affordable, safe, healthy, vibrant, connected and walkable communities.

## Anticipated impacts

***This research seeks to demonstrate the possibility of an alternative development model that capitalises on the co-benefits revealed by incidental activity***.

## Contact and Further information

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