

SHAPING SUBURBIA : THE FORM AND FUTURE OF LOW RISE SUBURBS

WHAT IF WE COULD ACHIEVE ENOUGH PHYSICAL ACTIVITY FOR GOOD HEALTH SIMPLY FROM HOW AND WHERE WE CHOSE TO LIVE?

My research reveals a new connection between physical activity and the built environment. Certain built environments can support citizen wellbeing by making walking to destinations the easy choice. In doing so they can also deliver stronger local economies, low-carbon living built environments, connected communities and 'car-lite' places.

...is walking transport or is it exercise?



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



Figure 2: Walkability varies significantly and at a fine geographic resolution

Title) compared to apartments (Strata Title). The places we seek and choose to live can therefore be said to work against supporting physical activity.

Research Question

Is there a built form that can support sufficient citizen activity for health, deliver low-carbon living and also remain developer/market friendly?

If such a built-form exists, then how can such a built environment be retrofitted in to low-rise middle ring established suburbs in post-war cities?

Methodology

This research connects a codified built environment, an established walkability metric and physical activity data.

Building on the possibility that incidental functional activity alone can provide



Figure 3: How different is walking from walkability?

sufficient physical activity for health (as defined by the World Health Organisation), this project uses the concept of Precinct Proximity connected in a fine-grain place analysis. It allows the walkability and physical activity data to connect to place in a novel way.

Results

There are some valuable insights in better understanding physical activity of existing built environments that can be usefully applied to our cities including current middle-ring low-rise suburbs.

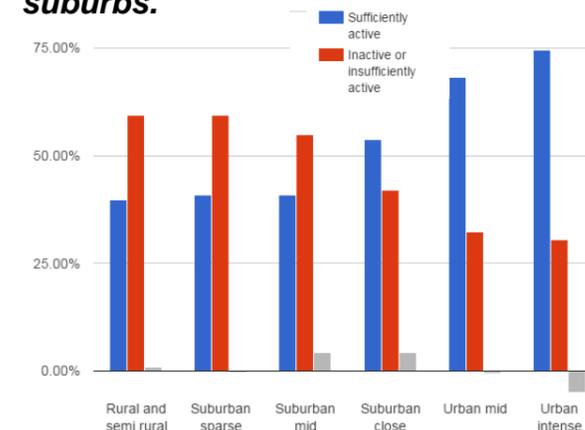


Figure 4: Proportion of people who are sufficiently physically active by residential category.

The preliminary results: extend existing walkability literature and develop 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, and they indicate that high-rise built forms are not required to achieve high levels of citizen

physical activity.



Figure 5: Large areas within post-war cities represent an opportunity to evolve into LCL places

Conclusions + impacts

A new market-friendly development could transform significantly large middle-ring areas of our cities to be low-carbon, healthy places.

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.

...an alternative development model

The findings indicate ways that our suburban, middle-ring suburbs could evolve with 'gentle density' delivering new forms of city growth without alienating existing residents, and in so doing unlock significant areas of our post-war growth cities.

Contact and Further information

Supervisors: S. Thompson & P. Twomey

David BENNETT

david@shapingsuburbia.com

www.shapingsuburbia.com