

NP 5003

'RESILIENT WALKING CITIES' CONTRIBUTION TO THE LOW CARBON CITY

Research Question

“What are the key urban place characteristics that improve walkability and resilience in the built environment, and that provide directions for urban interventions in the existing settlement?”



Port Philip Hume Moreland Melbourne

Figure 1 – Local case studies



Figure 2: Framework of the 'Resilient walking City.'

Methodology

This research focuses on ways to face the challenges of fossil fuel scarcity and how resilient our neighbourhoods are to it. The methodology combines qualitative and quantitative methods used in different parts of the same study becoming a “convergent parallel mixed method”. Below is one example, Hume City Council area.

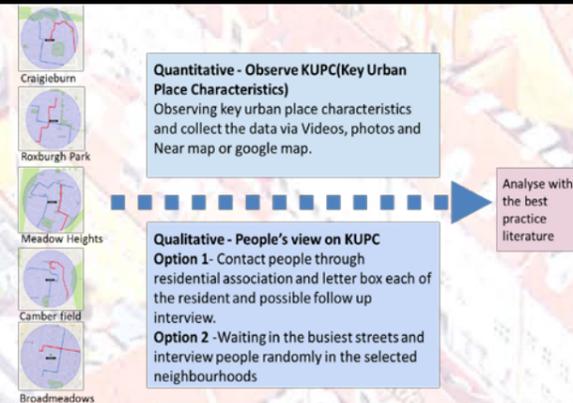


Figure 3: Quantitative & Qualitative methods.



Figure 4: Measuring Key Urban place characteristics

Results

Analysis of resilience and walking values using key literature provides opportunities to discover the most resilient walkable neighbourhood in the case studies. These case studies show assessment of existing resilience level of neighbourhoods in terms of fossil fuel scarcity.

The key urban place characteristics which represent the most 'resilient walkable neighbourhood' can be taken

as an example to improve the neighbourhoods towards less fossil-fuel dependent scenario. It will make the future cities resilient to fossil fuel.

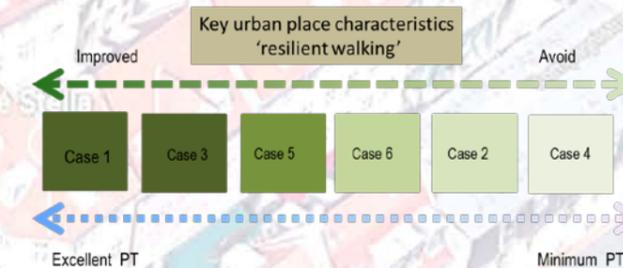


Figure 5: Indicative results show the least and the most resilient walking case studies

Conclusions

This research result will help to develop neighbourhoods that indicate scenarios with lesser fossil fuel.

Planners and designers can understand the levels of resilience Melbourne neighbourhoods have against fossil fuel scarcity. The results will reveal the level of resilience of oil scarcity. These results can be used to redevelop or improve key urban place characteristics towards 'walking resilient neighbourhoods'. It will make future cities more resilient to oil scarcity and could lead to low carbon living.

Anticipated impacts

Climate change, oil vulnerability, traffic congestion, obesity and other health problems are just some of the issues related to high usage of automobiles in the past few decades. Most cities are designed and planned to facilitate automobiles but not for human beings.

Therefore most people avoided walking along the street and are now used to travel by vehicles. Can planners and designers be proactive in addressing these problems? Are we doing the right thing? What is missing in the neighbourhood? What should influence to our neighbourhood? Are we misinterpreting or ignoring human requirements and basic needs?



Sweden - Malmo Freiburg – Vauban

Figure 6- International case studies

Back to missing links

Walkable neighbourhoods do not work just because of the pathways and trees along the streets. It is more than that. Building a safe and secure, comfortable and convenient, attractive and proximate resilient walking environment is encourage people to walk more than is currently. It creates healthy communities and future low carbon living cities.

Further Information;

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