



**ACHIEVING SUSTAINABLE URBAN ENVIRONMENTS IN THE 21<sup>ST</sup> CENTURY**

PhD Scholarship – CRC CI Conference 2004  
Ned Wales  
School of Design and Built Environment  
Urban Planning Discipline





Within the body of research work my approach has been to investigate:

- past land use practices,
- concepts of sustainability, and
- perceived barriers to sustainability
- and how local government can incorporate sustainable development principles.




**Objectives** of the research are to identify new measures of adapting Ecological Sustainable Development (ESD) principles to South East Queensland on a regional and local level to obtain better built form outcomes

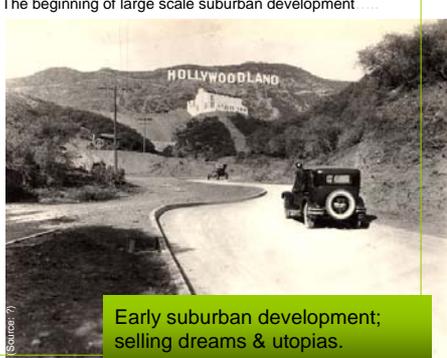



**PhD Through Publication**

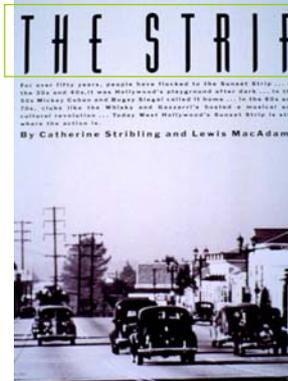
- Paper 1: Planned Unit Development
- Paper 2: Sustainable Development Practices in Master Planned Communities
- Paper 3: The Road to Sustainable Economies in Master Planned Communities
- Paper 4: Information and Communication Technology and the part Urban Planners can play
- Paper 5: Sustainable Economies in Master Planned Communities



The beginning of large scale suburban development ....



Early suburban development; selling dreams & utopias.



**THE STRIP**  
Car dependent environments impact on health, environmental quality, and economic growth.

Separated land uses dominated by the automobile

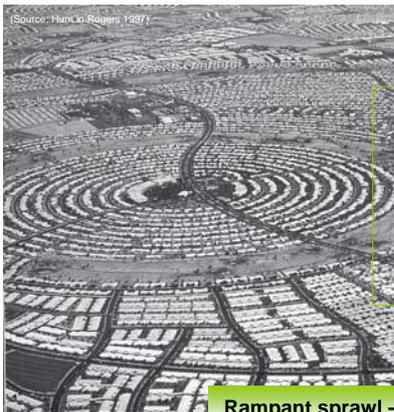


Dependence and depletion



Creating Utopias or hell holes, we make the choice

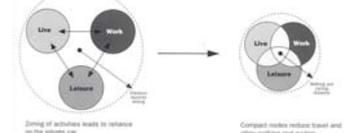
(Source: Hankin Rogers 1997)



Survival of any society has always depended on the balance in equilibrium between population, resources and environment.

Rampant sprawl - and what drives it?

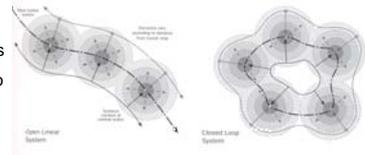
Compact mixed-use nodes reduce journey requirements and create lively sustainable neighbourhoods



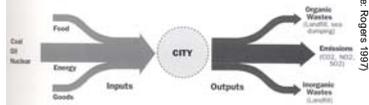
(Source: Rogers 1997)

Because urban environments are changing so rapidly, they are one of the Most important domains in need of conversion to sustainable practices.

Compact nodes linked by mass-transit systems can be arranged in response to local constraints

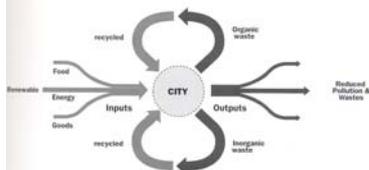


Linear metabolism cities consume and pollute at a high rate



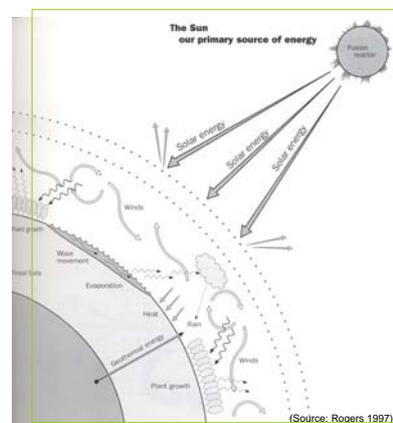
(Source: Rogers 1997)

Circular metabolism cities minimise new inputs and maximise recycling



Urban Relationships

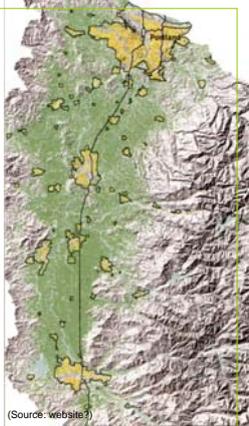
The Sun our primary source of energy



Ecological Planet as a living organism.

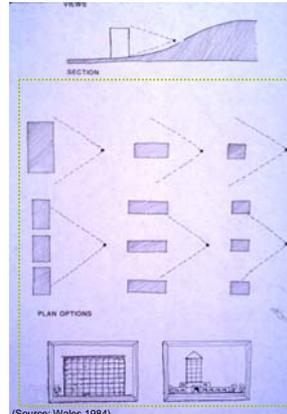
(Source: Rogers 1997)

- We need to set boundaries;
- Rethink our relationship and environmental values based on sustainable principles.
- Importance of Regional Government



These are urban growth boundaries set in Oregon in 1976.

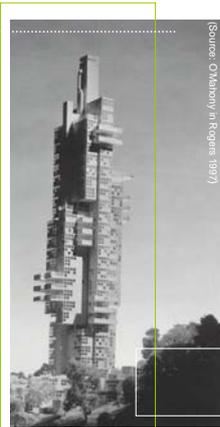
(Source: website)



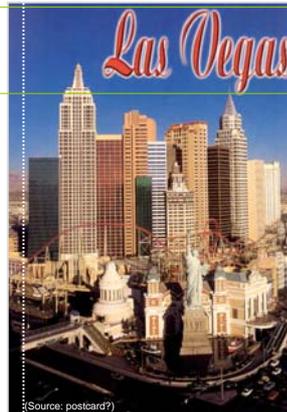
(Source: Wales 1984)

good urban design

What could this look like?



(Source: O'Neil and Rogers 1997)



(Source: postcard?)

To create sustainable communities that benefit local inhabitants.



(Source: Richards/Rogers 1997)

Taking into account the social and economic implications



(Source: Richards/Rogers)

Using case studies of new communities such as Springfield Lakes, Kelvin Grove Urban Village will act as test grounds for success and failures of ESD and the policy implications found within these sites. Are contrasted with ancient communities such as those in Italy

Our own local history, Surfers Paradise in 1910



Cavil Avenue, Surfer Paradise in 1926



Surfers Paradise in the late 1920's



Surfers Paradise in 1965



Surfer Paradise in the late 1960's



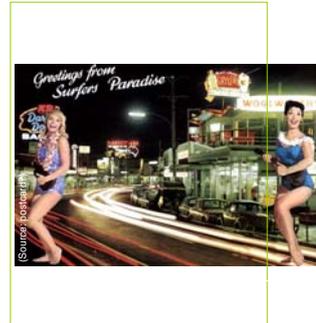
Surfer Paradise in the early 1980's



How to achieve sustainable land uses?



Transition from business as usual to sustainable local government. Beginning with changing the development application process.



Evaluating successful case studies in contrast to unsustainable examples. Gold Coast City and City of Doncaster in Victoria.



What are the barriers?



Conclusion



Thank you, any questions

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