Alternative Approaches to Sustainability & Metrics

If Sustainability is the answer what is the question?

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Urban Sustainability Research at UniSA

- The potential role of transit-oriented development in Australian cities: a critical assessment using a suburban rail corridor

  Land Management Corporation, Delfin

  Lend Lease, City of Salisbury, City of Playford,

  Town of Gawler, DTEI

- Carbon Neutral Communities: Making the Transition

  City of *Playford   & RMIT*

- Lifetime Affordable Housing

  Land Management Corporation & RMIT

An integrated model for the assessment of urban sustainability

Partner Organisations

- SA Dept of Transport Energy & Infrastructure

- SA Dept of Families & Communities

- City of Onkaparinga

- SA Dept of Planning & Local Government

An integrated model for the assessment of urban sustainability

" build a model that will enable planners and decision-makers to minimise resource usage (land, materials energy, water), lower greenhouse gas emissions, reduce waste and deliver affordable housing and services to families and communities in ways that are socially, economically and environmentally sustainable."

Research Objectives

- Are dense and 'urbanised' patterns of infrastructure development (including TODs) more cost and resource efficient than more dispersed 'suburbanised' patterns, when both constructed and operational aspects are taken into account?

- Will clustering and co-location of various government services, as in TODs, deliver affordable housing, improved service outcomes and improved cost and resource efficiency of infrastructure?

- How might urbanised developments, characterised by clustered government services and higher density housing, deliver community well being and social sustainability in comparison with dispersed 'suburbanised' developments?

- Will urban development that utilises existing built infrastructure be more cost and eco-efficient, when taken over its lifecycle, than greenfield development?

- How can we assess the relative social, economic and environmental impact of urbanised and suburbanised development?
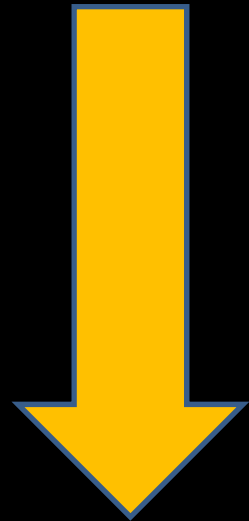
What do we mean by Sustainability?

- Problems of integrating different dimensions
- Need for Trade offs
- Need to define our ethical standpoint
- A contested concept
- Lack of public consensus
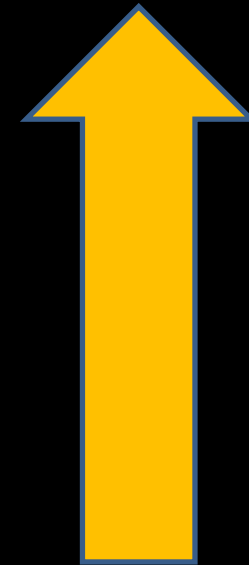- Governance & Power v rationality

- We cannot have it all!

How to address sustainability?

Top Down?

OR

Bottom up?

Melbourne Principles for Sustainable Cities (UNEP, 2002)

1. Provide a long-term vision for cities based on: sustainability; intergenerational, social, economic and political equity; and their individuality.

2. Achieve long-term economic and social security.

3. Recognise the intrinsic value of biodiversity and natural ecosystems, and protect and restore them.

4. Enable communities to minimise their ecological footprint.

5. Build on the characteristics of ecosystems in the development and nurturing of healthy and sustainable cities.

6. Recognise and build on the distinctive characteristics of cities, including their human and cultural values, history and natural systems.

7. Empower people and foster participation.

8. Expand and enable cooperative networks to work towards a common, sustainable future.

9. Promote sustainable production and consumption, through appropriate use of environmentally sound technologies and effective demand management.

10. Enable continual improvement, based on accountability, transparency and good governance.

30 Year Plan for Greater Adelaide

Liveability	Competitiveness	Sustainability & Climate Change Resilience
Spending less time in cars and having more leisure time	Attract jobs & investment	Re-engineer urban growth towards sustainability & climate change resilience
Vibrant arts, culture and sporting life	Keep people in South Australia	Massively improve water & energy efficiency
Affordable housing and living costs	Welcomes international & interstate migrants	Preserve natural environment
Urban form and design which represents best elements of past & present	Excellent education facilities	Maximise competitive advantage in renewable and clean energy

Underpinning Principles of Adelaide Plan

- A compact and carbon efficient city
- Housing diversity and choice
- Accessibility
- Transit focused & connected city
- World class design and vibrancy
- Social inclusion and fairness
- Heritage and character
- A healthy and safe city
- Affordable living
- Economic growth and competitiveness

Where does this all take us?

- What do we mean by the term? Is there a consensus view?

- Can we reconcile the internal tensions which exist within most definitions?

- Can we arrive at a workable acceptable definition within the neo-liberal framework which currently drives our thinking on the economy and urban development?

A political economy typology of interpretations of sustainability

	neoliberal	liberal	social democratic	radical
Limits to economic growth		√	√√	√√√
Substitutability of capitals	√√√	√√	√√	
Role of technology	√√√	√√	√√	√
Power relationships	√	√	√√	√√√

Davidson, K. (2010). Reporting systems for sustainability. What are they measuring?, Social Indicators Research, in press.

The way forward

A political decision on where Australia stands on the spectrum of sustainability. Development of Strategic Tools

Frameworks, tools, standards and trade offs

The sustainability of new urban development

http://www.unisa.edu.au/isst/Research/featuredproject/ARC_linkage.asp