

# Planning for People and Outcomes: planning as decision-support not a substitute for action

**C**onsulting in  
**A**ppplied  
**T**ransport  
**A**ccess and  
**L**and use

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## More Action and Less Planning?

- Planning as a substitute for action:  
a case case study of bicycle planning  
- Liz Ampt (1983)
- Do the planning well
  - Detail
  - Inclusion
  - Document
- Hand over the baton

Former Olympic Swimmer Percy Oliver is greeted by the Mayor of the Town of Vincent at Beatty Park Aquatic Centre, which was a venue for the 1962 Commonwealth Games.  
Image by prpix.com.au



## Creating Innovation and Change

*“When a scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is probably wrong” - Arthur C Clarke*

*“It may well be that the impossible at any given moment can become possible only by being stated at a time when it is impossible” - Leszek Kolakowski (Polish philosopher)*

*“The reason truth is so much stranger than fiction is that it doesn't have to be consistent” - Mark Twain*

*“The future is formed less by the grand edicts of planners or politicians than by the multitude of decisions made by people as individuals and as members of organisations” - Future Perth (1992)*

## Importance of Individual Decisions

- Complex outcomes are often based on very simple 'rules' or behaviours
- Computer simulation of the Flocking of Birds
- Three 'behaviours':
  - Maintain (at least) a minimum distance from other objects in the environment (including other 'boids')
  - Attempt to match velocities with other 'boids' in its neighbourhood
  - Try to move toward the perceived centre of mass of 'boids' in its neighbourhood

## Decline of Professional Fundamentalism

*“...it’s almost impossible for a scientist not to specialise ... he gains a great knowledge of his own area of specialisation, but knows comparatively little about the progress of even closely-related scientific branches and virtually nothing about those sciences not very directly connected with his own.”*

Allan W Ekhert, *The HAB Theory*

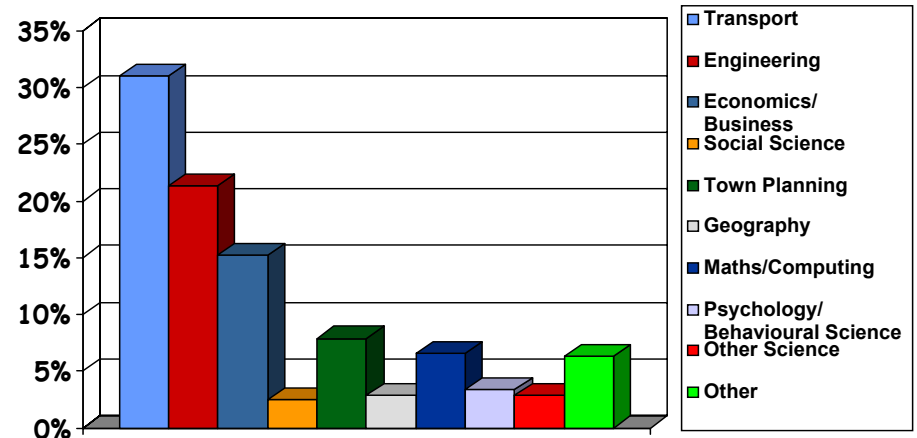
*“To make the requisite connections between radically diverse bodies of subject matter, we were obliged to adopt and develop a more comprehensive approach, based on synthesis rather than on conventional analysis”*

Michael Baigent, Richard Leigh & Henry Lincoln,  
1996 Introduction to *The Holy Blood and the Holy Grail*

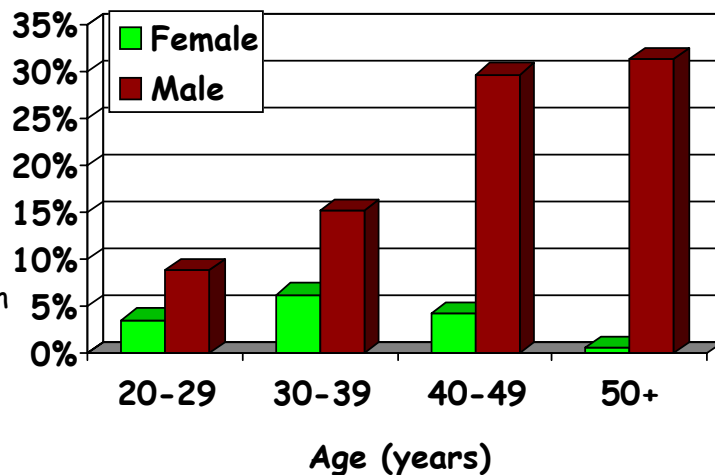
# Changing of the Professional Guard

- An ageing profession
  - In need of renewal and revitalisation
- Fewer engineers, planners and economists
- More from the behavioural sciences

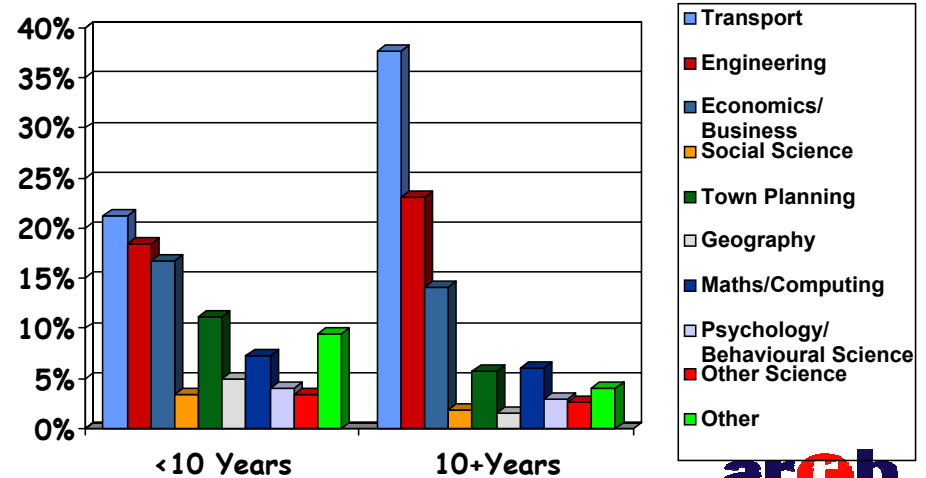
Qualification Disciplines



Aging? Male-Dominated?



Qualification Disciplines



C Consulting in  
 A Applied  
 T Transport  
 A Access and  
 L Land use

## Innovations

- Travel Behaviour Change
  - Pricing
    - Area Pricing - Singapore, London, Oslo (but not Edinburgh)
    - Infrastructure pricing - ITS in toll collection (e-Tag)
    - Global positioning systems
  - TravelSmart
    - Household/community
    - Workplace
    - Schools
    - Activity centres
  - None so blind ...

## Innovations: None so blind ...

- Four stages of opposition to innovation
  - Ridicule and violent opposition
  - It may be true but it's not relevant
  - It may be true and relevant but it's not original
  - Acceptance as self-evident

Arthur Schopenhauer

- *For those who believe, no explanation is necessary.  
For those who do not, none will suffice.*

Joseph Dunninger



## Innovations

- Travel Behaviour Change
  - Pricing
  - TravelSmart
- Externalities
  - Environmental
  - Social
    - ‘Pro-poor’ transport appraisal (TRL, 2004)
  - Positive as well as negative externalities

## Innovations

- Travel Behaviour Change
  - Pricing
  - TravelSmart
- Externalities
- Outcome-Based Assessment
  - New Approach to Appraisal (UK)
  - Guide to Transport System Management (Australia)
  - ‘Double-counting’ no longer an issue
  - Decision-support’ not ‘decision-making’

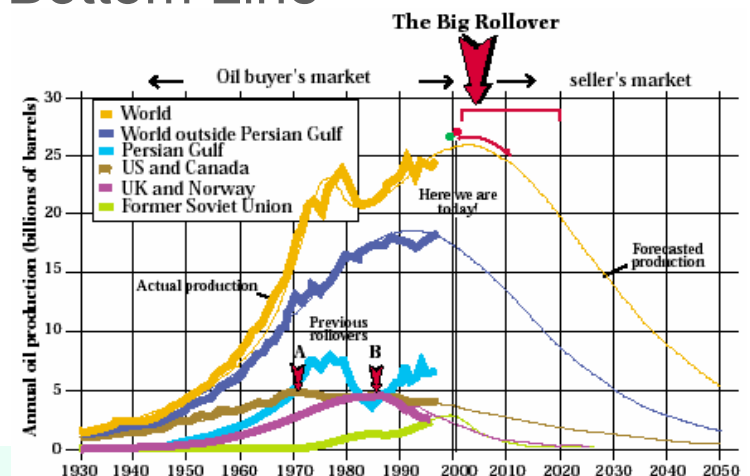
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- Sustainability is more than Triple Bottom Line

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  - Guide to Transport System Management (Australia)
- Sustainability is more than Triple Bottom Line
- A New Global Focus
  - Peak Oil reinforces Greenhouse
  - Implications for economic development

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## Peak Oil and Transport

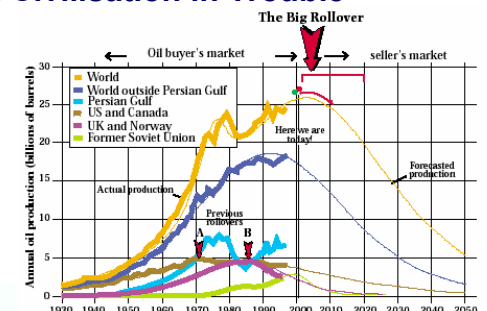
*“If China one day has three cars for every four people, US style, it will have 1.1 billion cars. The whole world today has 800 million cars.”*

*“It would need 99 million barrels of oil a day. Yet the world currently produces 84 million barrels a day and may never produce much more.”*

*“To provide the roads, highways and parking lots to accommodate such a vast fleet, China would have to pave an area equal to the land it now plants in rice.”*

Lester R Brown (2005)

Plan B2.0: Rescuing a Planet Under Stress and a Civilisation in Trouble



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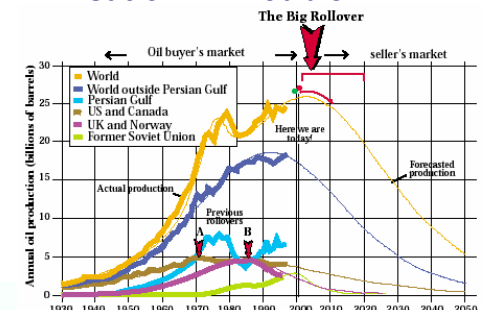
# Peak Oil and Economic Development

*“The western economic model – the fossil-fuel-based, auto-centred, throwaway economy – is not going to work for China. If it does not work for China, it will not work for India, which by 2031 is projected to have a population even larger than China’s.*

*Nor will it work for the 3 billion other people in developing countries who are also dreaming the ‘American Dream’.”*

Lester R Brown (2005)

Plan B2.0: Rescuing a Planet Under Stress and a Civilisation in Trouble

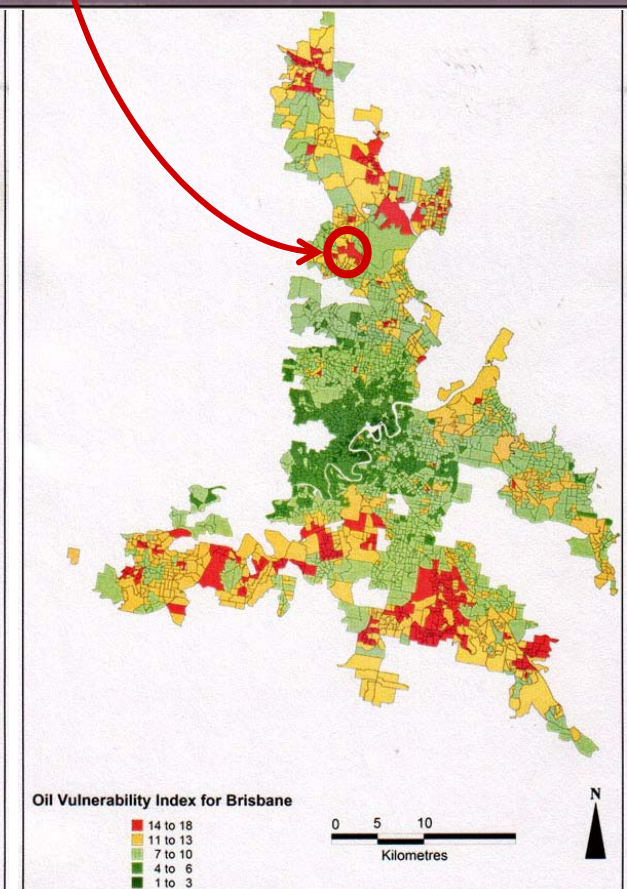
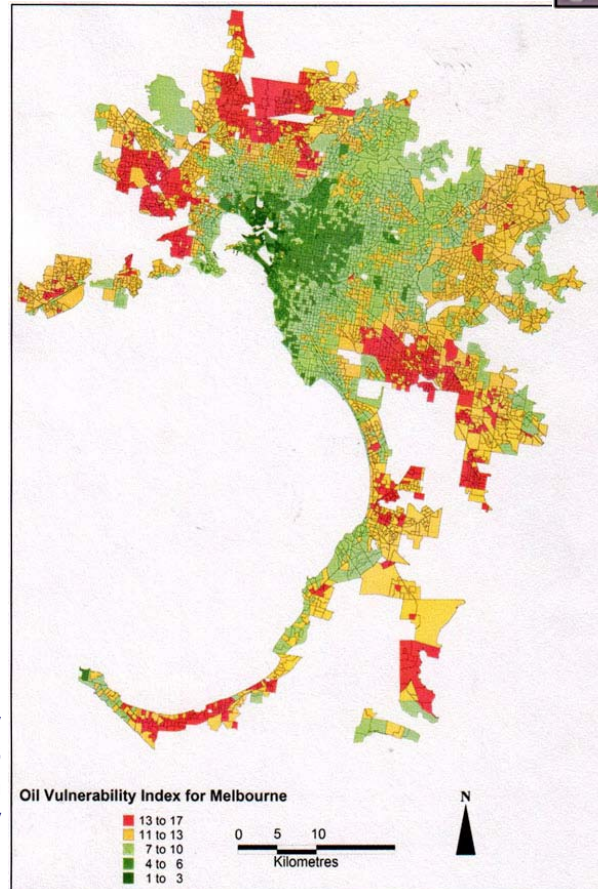
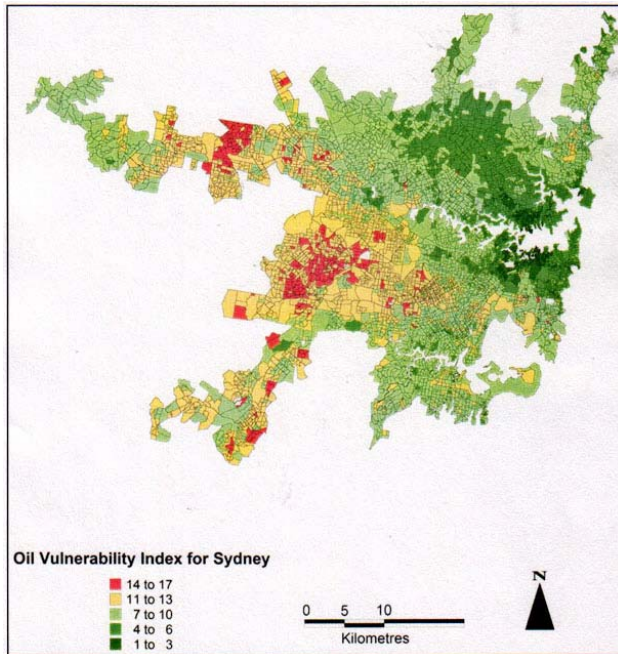


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# Measuring Oil Vulnerability in Cities

- Household socio-economic status
- Household car ownership
- Car use for journey to work



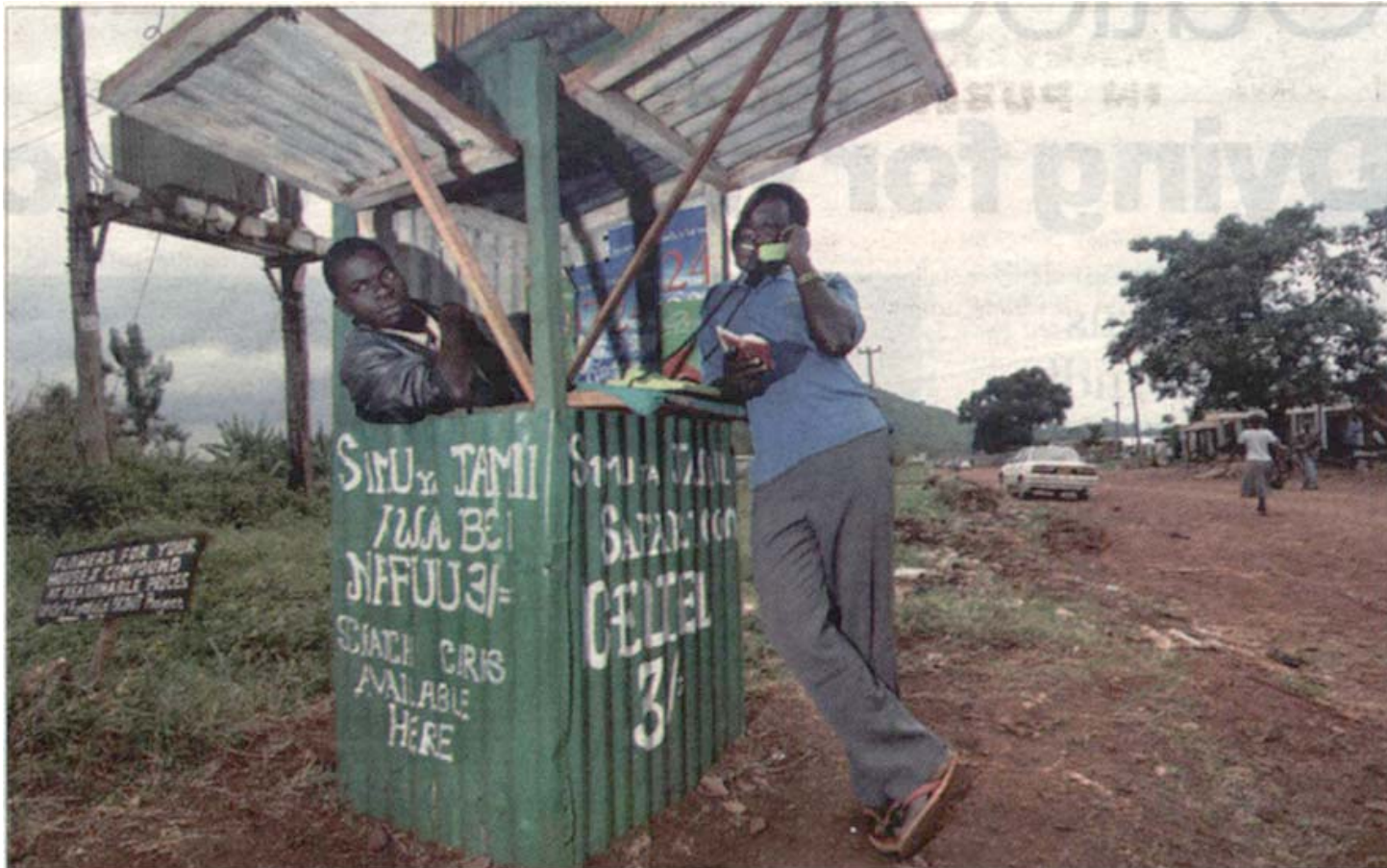
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Source: Dodson and Sipe (2005).  
Oil Vulnerability in the Australian City  
Research Paper 6  
Urban Research Program  
Griffith University  
Brisbane, Queensland



## Innovative Transport Planning - New Priorities, Finding a Balance

*"The future is formed less by the grand edicts of planners or politicians than by the multitude of decisions made by people as individuals and as members of organisations" - Future Perth (1992)*



One of three phone booths in Funyula, run by adapting landline handsets to accept mobile signals Photo: Sven Torfinn

Source: Guardian Weekly, September 23-29, 2000

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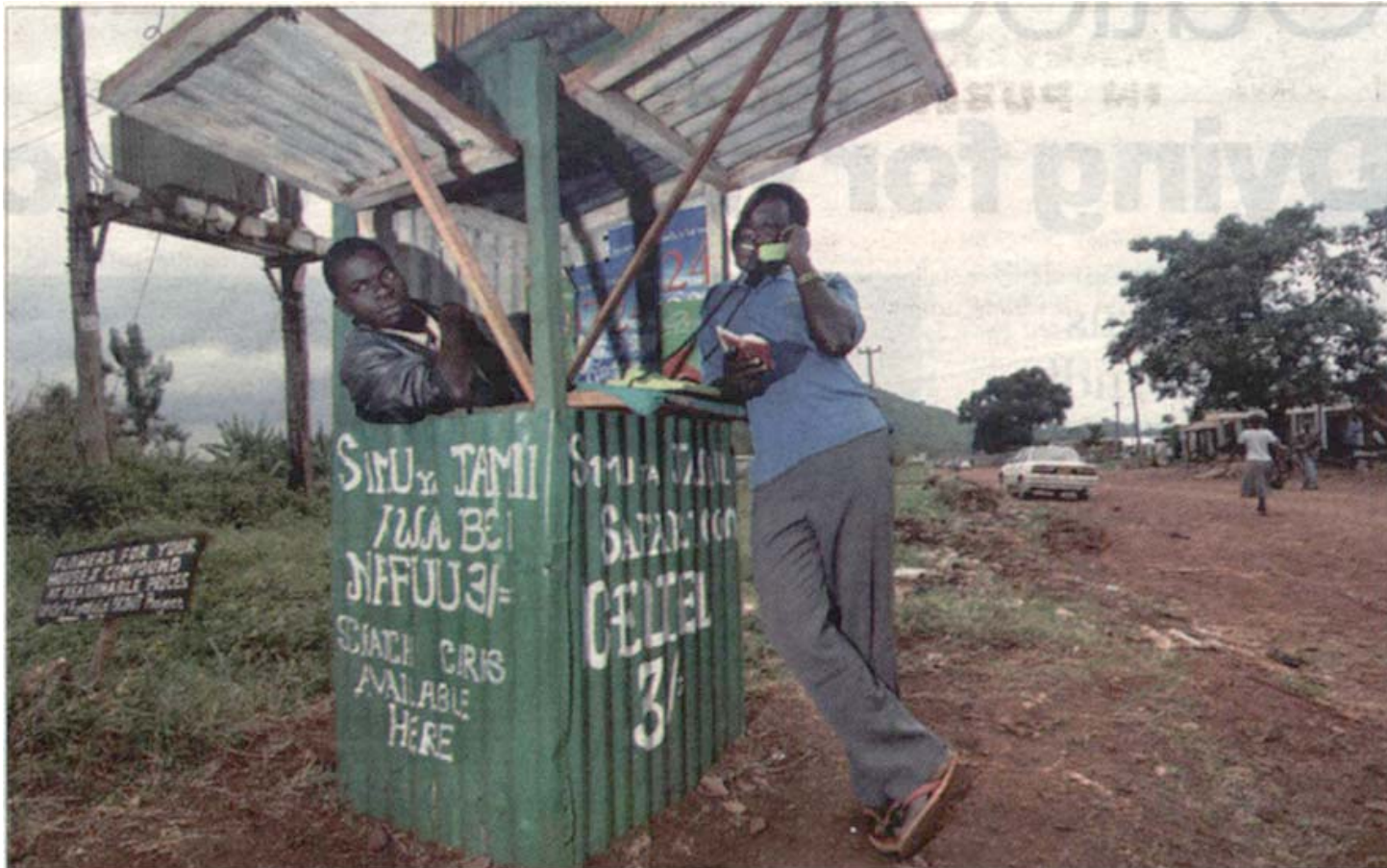
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## Innovative Transport Planning - New Priorities, Finding a Balance

*"In a culture where people travel long distances to find work, the mobile [phone] has become the most useful and ubiquitous piece of technology since the bicycle" Guardian Weekly, September 23-29, 2005*



One of three phone booths in Funyula, run by adapting landline handsets to accept mobile signals Photo: Sven Torfinn

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## Assessing Bicycle Initiatives

- General agreement on value of getting people out of cars
- Mode shift strategies at all levels of government
- Cycling promotion programs at all levels of government
- Plenty of experience from overseas on 'how to do it'
- Infrastructure is crucial

BUT we have:

- Incomplete networks
- Poor data on usage
- Inability to model demand and usage

# **BALANCE: Bicycle infrastructure Assessment with Life-cycle And Network Completion Effects**

- Recognise various roles
  - Project Proponent
    - Applies for funding to develop a cycling infrastructure project.
    - Prepares the proposal consistent with the decision-maker's required methodology.
  - Project/Program Analyst
    - receives applications from proponents
    - adds relevant information
    - applies the assessment methodology for the decision maker
  - Decision-Maker
    - determines the allocation of funding to projects, in principle through comparing proponents' proposals and prioritising them based on summarised and consistent information provided by the analyst

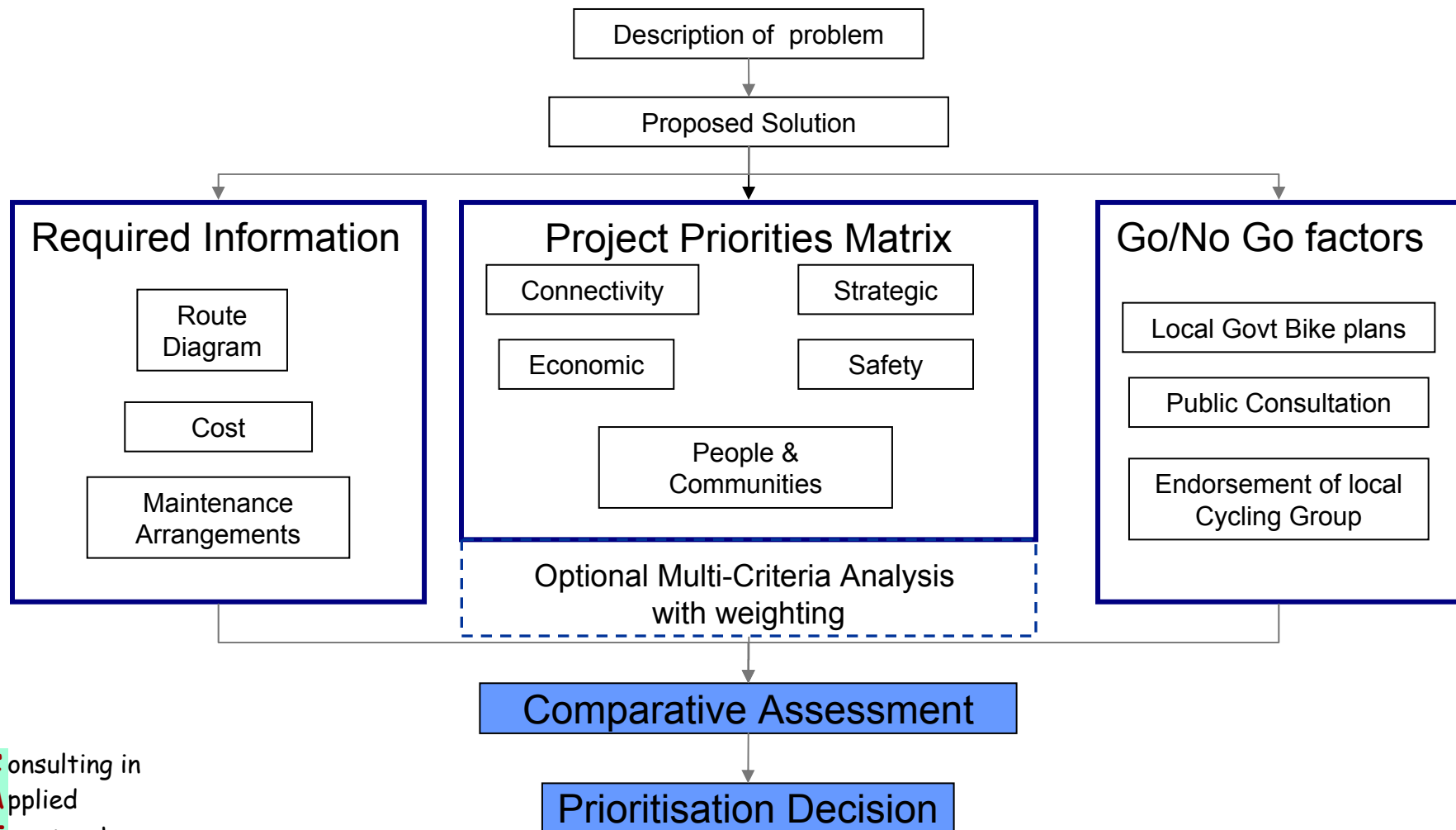
# **BALANCE: Bicycle infrastructure Assessment with Life-cycle And Network Completion Effects**

- Recognise various roles
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  - Analyst
  - Decision-Maker
- Decision-Support rather than Decision-Making
  - Information on outcomes
  - All relevant outcomes, including
    - Social, environmental as well as economic
    - Externalities
    - Intermediate and final outcomes
  - Not unique ranking or value
    - But can be used to derive rankings if required

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- Able to use incomplete and non-quantitative information
  - Descriptive
  - Qualitative
  - Pictorial

# Assessment Methodology



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# Innovative Transport Planning - New Priorities, Finding a Balance

## Vital Components

- Planning documentation
- User amenity
  - Bikeability
    - Australia:
      - Area-based or route-based checklist
      - <http://www.travelsmart.gov.au/bikeability/index.html>
    - USA: <http://www.bicyclinginfo.org/pdf/bikabilitychecklist.pdf>
  - Level of Service
    - On-road: Bicycle Compatibility Index (US FHWA) <http://www.hsrc.unc.edu/research/pedbike/bci>
    - Off-road:
  - Potential for conflict where sharing
    - With pedestrians (shared paths)
    - With motor vehicles
- Whole-of-life costing
  - Capital and maintenance
  - Long term and short term
  - Budget -support

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### BIKEABILITY TOOLKIT

The Bikeability Toolkit includes checklists and resource materials that will help create physical and social environments to encourage cycling. The resource materials include references, guidelines and other resources to assist in the implementation of local bikeability audits and actions. Local Government is a vital stakeholder in providing supportive environments for cycling. The Bikeability Toolkit provides guidelines, information and role communities and local government to assess the bikeability of their community. They will be able to develop better integrated cycle planning policies and implementation strategies.

This will result in safety improvements, enhanced access to cycling, changes in mode share of short trips from car to bicycle, improved livability and increased physical activity through active transport.



#### Why cycle?

Cycling, whether for transportation or recreation, is a great way to get some exercise. It's good for the environment, and saves money. Particular benefits include:

- Reduced traffic congestion
- Reduced parking problems
- Road and parking facility cost savings
- Reduced crash risk to other road users
- Improved mobility options for car-drivers
- Support for local area sustainability objectives
- Energy conservation
- More livable communities
- Increased health and fitness
- Consumer cost savings
- Improved public spaces where people interact
- Air and noise pollution reductions

#### Aims of the Bikeability Toolkit

- To provide a simple, easy to use checklist that identifies and provides further resources
- To allow local government to assess its strengths and identify areas where improvement can be made to encourage and promote cycling
- To provide ideas and 'ways to succeed' resources for further information

#### How do I use this Toolkit?

How you use this Toolkit will depend on your particular situation. For example, if you are doing a full review of your LGA's bike plan or preparing a new one, you will probably want to complete the Detailed LGA Checklist. Then you may wish to assess key links in your route network using the Route Based Checklist. If you simply want to assess a particular route you can go straight to the Route Based Checklist.

By completing the checklist you will identify issues to be addressed. You can then use the resources to suggest possible improvements.

Carrying out these improvements will involve sourcing funding and prioritising expenditure.

#### Who should use the Bikeability Toolkit?

Local Government: Traffic engineers, planners, councillors, sustainability officers  
State Government: Infrastructure/planners, road authorities, education authorities, bodies leading TravelSmart programs, greenhouse offices  
Developer: Town planners, urban designers, traffic engineers, property developers  
Community: Local bike groups, community groups, recreational residents – to provide input to Councils



Bikeability Toolkit - Detailed LGA Checklist



Australian Government  
Department of Environment and Heritage  
Australian Government Office



Department of Transport

## Bikeability Checklist

### How bikeable is your community?

#### Riding a bike is fun!

Bicycling is a great way to get around and to get your daily dose of physical activity. It's good for the environment, and it can save you money. No wonder many communities are encouraging people to ride their bikes more often!

#### Can you get to where you want to go by bike?

Some communities are more bikeable than others: how does yours rate? Read over the questions in this checklist and then take a ride in your community perhaps to the local shops, to a friend, or even to work. See if you can get where you want to go by bicycle, even if you are passing around the neighborhood to get some exercise.

At the end of your ride, answer each question and, based on your response, circle an overall rating for each question. You can also note any problems you encountered by checking the appropriate box(es). Be sure to make a careful note of any specific locations that need improvement.

Add up the numbers to see how you rated your ride. Then, turn to the pages that show you how to begin to improve those areas where you gave your community a low score.

Before you ride, make sure your bike is in good working order; get on a helmet, and be sure you can manage the ride or route you've chosen. Enjoy the ride!



NHTSA  
National Highway Traffic Safety Administration



National Transportation Research Board



U.S. Department of Transportation

## Concluding Thoughts

- The Future is formed by actions not plans
- *Life is what happens to you while you're busy making other plans* John Lennon
- Assessment is about **Decision-Support**  
**NOT**  
**Decision-making**
- Approximate measures of relevant items are preferable to 'precise' measures of irrelevant ones
- Don't ignore what you can't measure



**Planning for People and Outcomes:**  
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*Thank You*

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