

Infrastructure Investment in New Zealand: Frameworks for Decision Making

Some issues addressed in the study

Presented by John Boshier



Purpose – examine evaluation process for infrastructure investment and suggest improvements.

Objectives:

- Examine decision-making frameworks.
- Productivity of the economy;
- Wider economic benefits;
- Improve cost-benefit methodology

Contributing Reports

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- Cost Benefit Analysis; by Arthur Grimes, Motu Economics
- Macroeconomic modelling; by Kel Sanderson, BERL Economics
- Evaluation of the Baseline; by Rob Steel, Opus Consultants
- Social assessments and outcomes; by Peter Phillips, Dialogue Consulting
- Wider Economic Benefits; by Murray Ellis, Dialogue Consulting
- Interviews with eleven decision-making leaders; by Tony Nicklin

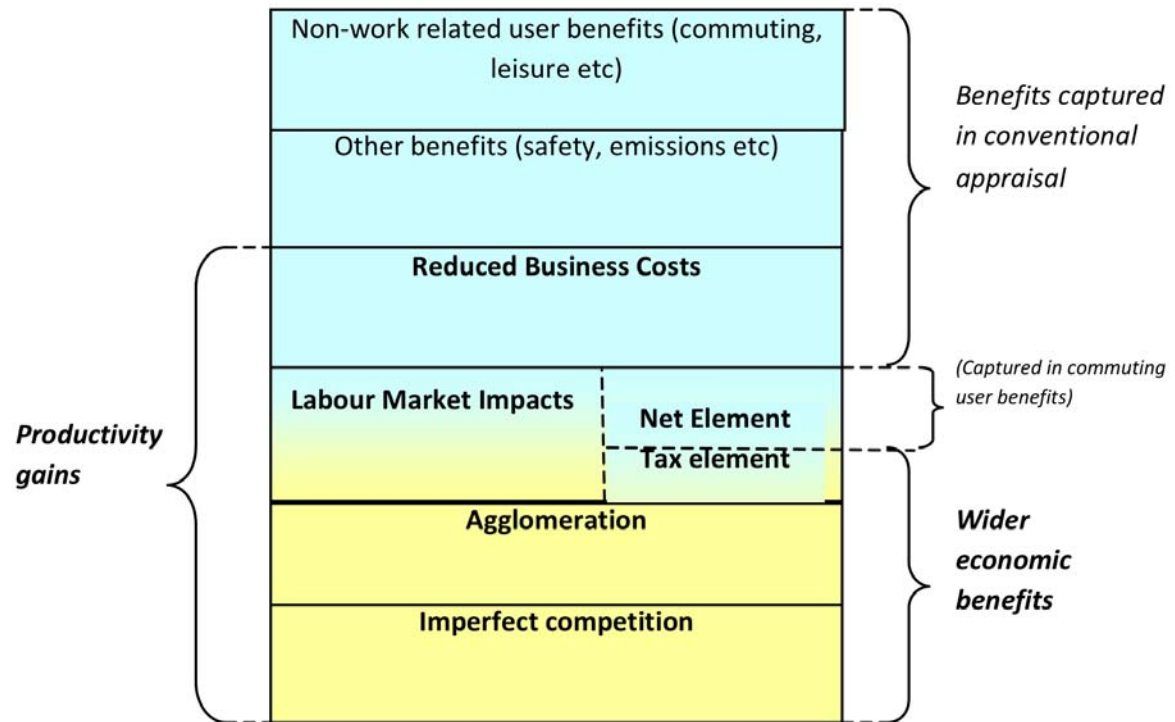
- Four major infrastructure projects :
 - Britomart Transport hub, by Nik Vorster of ARTA;
 - New Lynn Transport Project, by Alan Rodgers-Smith, Waitakere City Council;
 - Waikato Water project for Auckland, by Deborah Corneby & Leanne McKenzie of Watercare;
 - Northern motorway extension from Albany to Puhoi, by Ben King of Ernst and Young,

Categories of affected economic behaviours:

- Location; land use, urban form and density;
- Business;
- Residential and labour participation; and
- Demand for infrastructure services.

Benefits and Gains

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Source: Ellis M, Wider Economic Benefits, CAENZ Project Report 2010

The sources of these effects can be classified as:

- Agglomeration effects;
- Mitigating existing market failures;
- Improved imperfectly competitive markets;
- Technology and knowledge transfer.

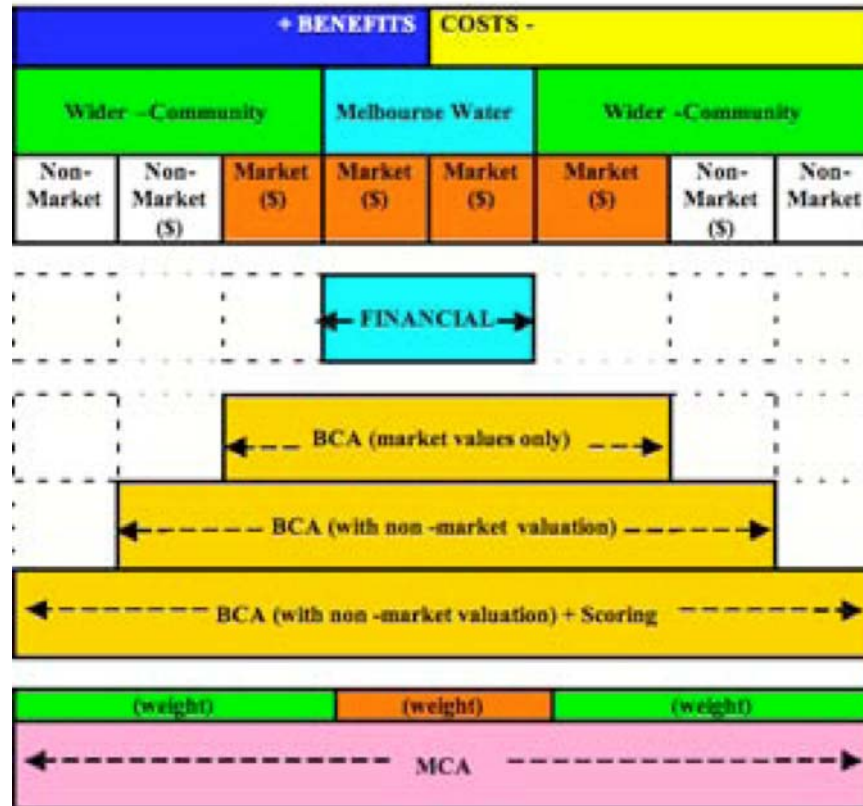
Vickerman and De Bruijn Ch 4&5

Financial NPV Economic NPV⁴	Positive	Negative
Positive	Could proceed with project option, as it is economically and financially viable	Could proceed with project option, if economic NPV sufficiently large
Negative	Should not proceed, except with action to mitigate net economic cost	Should not proceed

Source: Queensland Department of Infrastructure & Planning, Project Assurance Framework – Policy Overview, 2007, <http://www.dip.qld.gov.au/processes-frameworks/project-assurance-framework.html>

Multi-Criteria Approach

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Source: Melbourne Water, p 28, 'Triple Bottom Line Guidelines' 2007

- Results depend on scope of project:
 - Sections of a network have value
 - Full value realised when complete
- Set boundary of analysis:
 - Too wide leads to work of little effect
 - Too narrow will miss the wider benefits
- Can require assessment of multiple network types e.g. New Lynn

- Wider benefits
- Intuition
- Real options
- Network context
- National benefits not realised
- NZTA is leader
- Presentation is vital

Final Report

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- Final Report released 10 August 2010
- Report will cover many issues
- Recommendations on decision-making