



Conclusions of recent ITF work on strategic infrastructure planning and the challenge for appraisal

ITF Virtual Round table Broadening the Scope of Transport Appraisal to Capture the Full Impact of Investments 29 Sept – 1st Oct 2021

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- Importance of infrastructure in modern economies – correlation/causation with economic growth and wider social benefits
- Clear processes are needed for problem identification, scheme selection, appraisal, decision-making and delivery.
- Processes need to look beyond a single sector such as transport to a more comprehensive assessment of infrastructure needs, including land use and utilities – water, power, other services.
- Strategic infrastructure plans offer a means of addressing these requirements.

Survey of ITF Group members – project identification, selection and appraisal processes



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- Depending on the country, decisions taken in the context of a mix between strategic national infrastructure plans, national transport plans, mode specific national plans and regional plans.
- Project identification undertaken by national/sub-national (often arms' length) transport agencies, and by regional/devolved authorities
- Project selection – more often by ministers/elected representatives with some devolved to officials and often with stakeholder engagement. Business case and alignment with strategic objectives influenced project selection in most responses.
- Appraisal – formal processes undertaken following established methods, usually with some independent quality control and provision for subsequent ex post evaluation.



1 Organisation and governance of the planning authority

- Role – invariably advisory
- Independence from ministers, governance
- Clear objectives and strategic direction
- Frequent updates to ensure relevance – eg to a post Covid world
- Defining sectoral and functional scope – strategy, investment projects etc



- Use of scenarios
- Consultation
- Budget constraint
- Addressing key challenges – resilience, climate change
- Cross sectoral working/coordination of sectoral investment/policies.
- Transparency, including appraisal methods
- Encourage the collection of performance measures



- Infrastructure Australia (established 2008)
- Australian state and regional commissions (post 2008)
- UK National Infrastructure Commission (2015)
- The New Zealand Infrastructure Commission (2019)
- Infrastructure Commission for Scotland (2019)
- Infrastructure Commission for Wales (2018)



- To set evidence based priorities within a budget constraint
- To provide a comprehensive assessment of the impacts of a programme, project or policy over its expected life.
- To reflect society's preferences through measures of willingness to pay, actual payment and accepted valuation for societal impacts
- To draw attention to the consequences of the project/policy for wider policy objectives
- To inform decision makers



- Estimates, using an evidence-based model, of transport users' responses to the proposed changes in the network,
- Quantification and valuation of transport user benefits – time savings (business/working drivers, commuters, leisure), accident savings, changes in vehicle operating costs - over project life
- Quantification and valuation of environmental, societal and health impacts – air quality, noise, climate change, landscape, severance etc
- Comparison of the forecast benefits and costs in the 'with scheme' scenario with a 'do-minimum' counterfactual

- Certain schemes are intended to have impacts extending beyond the transport sector
- If associated with appropriate land use planning and labour market policies, new infrastructure can:
 - Deliver agglomeration based productivity increase
 - Boost local investment through land development dependent on the infrastructure
 - Increase labour supply by reducing the cost of accessing jobs.
- Many countries now have the analytical tools and local evidence to make estimates of these impacts in these circumstances.
- Methods are data intensive and usually require interventions from sectors outside transport

CBA and decision making – the policy background



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- Wider Benefits provides an additional metric – the impact on GDP, a policy priority.
- However, CBA takes no account of place or person and so fails to meet some other key policy objectives.
- Incorporation of policy priorities in the decision process – How does a project meet inter-regional, inter-personal and other policy objectives which are additional to those in the CBA?
- Links between the transport project and these policy objectives need to be articulated.
- Decision makers can be encouraged weigh these intangibles against more certain impacts, for example by adopting switching values as used in the UK.
- Place based transport appraisal challenged by the two way road problem.
- Cross border schemes face specific requirements to ensure success.

- Infrastructure schemes cannot be piloted – each place is different
- Ex post evaluation serves to:
- Provide ministers with information about accountability – did the scheme sponsor deliver what was expected?
- Help analysts learn how successful they have been in estimating transport users' and others' responses to the project.
- Provide evidence to inform future strategy (note that there is rarely the opportunity to redesign the scheme)

- Length of lags:
 - between start of works and opening, disrupting travel
 - between opening and traffic ‘maturing’
- So simple before and after basis for evaluation subject to error
- Uniqueness of place – cross sectional comparisons rarely feasible
- Direction of causation – relationship between changes in economic performance and changes in infrastructure
- Attribution of causal effects to transport when other policy changes have been made

Recommendations of the Strategic Infrastructure WG 1



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- Governments should adopt a strategic approach to infrastructure planning. This should be communicated clearly via an explicit, detailed and periodically updated strategic infrastructure plan
- Strategic infrastructure plans should be linked to explicit infrastructure funding envelopes, with project pipelines identified, at least in broad terms.
- Governments should consider the merits of establishing independent infrastructure advisory bodies to provide transparent, expert advice on long-term, cross-sectoral infrastructure strategy, planning and policy development, as well as priorities for medium-to-longer-term infrastructure investment.
- Arrangements for the establishment of independent bodies should address key governance principles, such as those identified in the OECD's Principles for the Governance of Regulators.
- Infrastructure project appraisal should, as far as possible, be based on a consistent and transparent methodology.
- The OECD/ITF should publish a review of government and private sector infrastructure-related responses to the Covid-19 pandemic.

Recommendations of the Strategic Infrastructure WG 2



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- A formal policy framework should guide decisions on the stewardship of major infrastructure assets
- Governments should review their infrastructure regulatory frameworks.
- Ex post performance assessment should be undertaken for all major projects.
- National infrastructure institutions and statistical agencies should co-ordinate internationally to develop consistent infrastructure performance measures.
- Where cross-border infrastructure projects are adopted, they should be managed by a specific-purpose body with all parties represented. Policy objectives and performance standards should be clearly specified and governance, funding and accountability mechanisms established.