

Infrastructure Australia Priority List

Minimum information requirements

Infrastructure Australia (IA) has identified a list of infrastructure projects requiring further analysis before recommendations can be made about their suitability for BAF support and a prioritisation between projects can be undertaken. Those projects are identified in the list titled “Projects for further analysis” on page 68 of Infrastructure Australia’s December 2008 Report to Council of Australian Governments, which was published on Friday 19 December.

For each project, States, Territories and other organizations have so far provided headline, summary or preliminary results and information to IA, covering the three pillars of IA’s own assessment methodology:

1. Profiling – the fit with Infrastructure Australia’s seven strategic priorities
2. Appraisal – the objective and quantified economic cost-benefit analysis; and
3. Deliverability - project risk, governance and timing.

To underpin its further analysis of these projects, Infrastructure Australia now requires comprehensive and detailed information on the appraisal and deliverability assessments, to provide robust evidence to support the headline or summary results so far presented.

This document outlines the type and depth of information sought by Infrastructure Australia.

It should be noted that this information will be readily available to organizations that have undertaken serious project development, in the form of the following of documents which are a fundamental part of major project development processes:

- “Strategic options” reports
- “Feasibility studies” including specialist engineering and environmental assessments and outline economic assessments
- Project “business cases”, including demand modeling reports and economic methodology and results reports
- “Delivery” reports, including specific risk, governance and timing assessments.

1. Appraisal - Economic cost-benefit analysis

Organisations are requested to provide further information in two areas to underpin and explain the headline or summary results of the economic cost-benefit analysis (appendix E in the original methodology).

Demand modeling methodology, assumptions and results

Levels of demand are crucial to the viability of infrastructure projects. Infrastructure Australia needs to understand the basis upon which demand estimates have been created. For each project, the following information should therefore be provided:

- A comprehensive list of the detailed assumptions which drive demand, including the rate population growth, employment growth, private vehicle demand, public transport demand; and how these change over the appraisal period;
- Detail of any changes in land use such as residential densification or Transport Orientated Developments (TODs) assumed in the demand modeling;
- The underlying justification for these assumptions and growth rates, particularly the benefit extrapolation approach used in the post forecast period;
- The methodology used to estimate demand – the nature of the transport model used and how knock-on and wider network effects are calculated; plus an explanation of the independence of forecasts and the degree of external or independent scrutiny; and
- A detailed disaggregation - by year, date and user type - of the results of the demand modeling, *including all the information set out in tables 1 & 2 below.*

Typically, this information will usually be contained in a detailed transport modeling report that will have been prepared for State or Territory Governments or other organisations. Wherever possible, organizations should submit this report and then provide page references the key sections containing this information.

Table 1: Traffic modeling summary by forecast year

Reproduce this table for all modes	Base Case			Option		
	Forecast Year			Forecast Year		
	20XX	20XX	20XX	20XX	20XX	20XX
Trip number						
Observation (e.g. AADT, am peak 3-hr etc)						
Annualisation factor						
VHT (no.)						
Observation (e.g. AADT, am peak 3-hr etc)						
Annualisation factor						
VKT (no)						
Observation (e.g. AADT, am peak 3-hr etc)						
Annualisation factor						

Table 2: Traffic modeling summary – market segmentation

Reproduce this table for all modes		Base Case			Option		
		Forecast Year			Forecast Year		
		20XX	20XX	20XX	20XX	20XX	20XX
Trips (annual)	Existing						
	Diverted						
	Induced						
VHT (annual)	Existing						
	Diverted						
	Induced						
VKT (annual)	Existing						
	Diverted						
	Induced						

Economic appraisal methodology, assumptions and results

Infrastructure Australia also needs to understand the economic methodology used in the appraisal. For each project, the following information should therefore be provided:

- Detailed report of the economic methodology used, including all parameters and values used, assumptions, algorithms, population growth, discount rates, etc.;
- Full details of the costs of the project and the basis of costs, including specialist engineering and operations reports; and
- A detailed disaggregation of the results of economic modeling, including a detailed quantitative breakdown and qualitative explanation of each benefit type for each modeled year and the calculation used to derive that benefit, *including all the information set out in tables 3 & 4 below.*

Again, this information will usually be contained in a detailed economic methodology and results report that will have been prepared for State or Territory Governments or other organisations. Wherever possible, organizations should submit this report and then provide page references the key sections containing this information.

Table 3: Undiscounted benefits by item

<i>Reproduce this table for all modes</i>	Base Case			Option		
	Forecast Year			Forecast Year		
	20XX	20XX	20XX	20XX	20XX	20XX
Benefit 1 (\$m undiscounted)						
Benefit 2 (\$m undiscounted)						
Benefit 3 (\$m undiscounted)						
Benefit N (\$m undiscounted)						

Table 4: Calculation of undiscounted benefits by item

Reproduce this table for each benefit item for one forecast year	Base Case	Option
	Forecast Year	Forecast Year
	20XX	20XX
Benefit 1		
\$ (million undiscounted)		
Valuation parameter used (e.g. VOC \$/VKT, VOTT, Value of serious injury)		
Source of valuation parameters		
Algorithm used to calculate total benefit in 200X (combine traffic and economic parameters to replicate benefit in Table 3)		

2. Delivery – project risks, governance and timing

Organisations submitting project information were requested, via the published IA methodology, to complete Appendix F, which requests information in relation to:

- Deliverability – risks, acceptability, staging, governance model surrounding the project, ownership structure;
- Timing; and
- Packaging.

Further, in accordance with the transitional provisions of the Nation Building legislation, Infrastructure Australia is asked to provide advice to Government against interim evaluation criteria. The criteria include an assessment against:

- The Extent of efficiency and co-investment.
 - a) Funding of the project by the Commonwealth may leverage other forms of funding including from the private sector and other levels of government.
 - b) Projects should take account of relevant market structures and pricing mechanisms.
 - c) Project delivers an effective and efficient response to addressing an identified infrastructure need.
- The Extent to which efficient planning and implementation has occurred.
 - a) Project risks have been analysed.
 - b) Consideration has been given to, where relevant, the requirements that will need to be addressed prior to construction of the project including relevant approvals, land acquisition and planning.

Provision of information

The information sought, including source documents, is outlined in the table below.

Organisations should provide references to the relevant sections of any underlying resource documents in any summary information provided. An outline of the likely timetable/handling strategy for addressing outstanding delivery issues should also be provided where a project is at an early stage of development.

Table 1: Deliverability Assessment Information

Criteria	Descriptors
<p>1. Need for Commonwealth funding</p>	<p>Key questions:</p> <ul style="list-style-type: none"> • Does the project deliver an effective and efficient response to addressing an identified funding need? • Has the project taken into account the relevant market structure and pricing mechanism? • Can the private sector partially or fully fund the project in return for the revenues? • Why should the Commonwealth government rather than State or Council government fund the project – what is the national interest? • What is the proposed State/Council funding contribution for the project? • What other sources of Commonwealth funding are being provided for the project? • Where a balance of funding sources is envisaged, does the balance reflect the respective interests of the funders? <p>Information / documents likely to be required:</p> <ul style="list-style-type: none"> • analysis of future revenue streams; • analysis of whether revenue streams can be created if no prices are currently charged; and • data on national impact and justification for public rather than private funds and justification for Commonwealth funds in addition to State/Council funds.
<p>2. Construction risks and budgetary implications</p>	<p>Key questions:</p> <ul style="list-style-type: none"> • Does the project pose particular construction risks due to nature of the engineering, location, geography or geology? • What scale of financial risks do these pose? • Have those risks been adequately assessed in the construction costs assessment? • Can the project be staged to reduce risks / improve manageability? • Is there sufficient capacity to ensure the delivery of the project and realisation of benefits including relevant skills and expertise both during and post construction? <p>Information / documents likely to be required:</p> <ul style="list-style-type: none"> • Detailed engineering report by reputable agency or consultant; and • Descriptive information re project staging plans or potential
<p>3. Consequential construction risks</p>	<p>Key questions:</p> <ul style="list-style-type: none"> • Have any consequential risks to the wider network been identified? • Will delivery require associated works to enable new project to succeed in practical terms? (NB such information should technically form part of the CBA) • What is the scale of likely works? Have these been costed? • Has consideration been given to the requirements that will need to be addressed prior to construction of the project including relevant approvals, land acquisition and planning? • Has the project identified how the infrastructure will be operated and maintained following construction? <p>Information / documents likely to be required:</p> <ul style="list-style-type: none"> • Technical report / operations report • Information provided in CBA

<p>4. Financing risks where private finance is involved and scale of potential public sector exposure</p>	<p>Key questions:</p> <ul style="list-style-type: none"> • What is the scale of private capital required? • Is a competitive market for the provision of private capital likely given the location and type of project? • Have risks been allocated appropriately? • Is patronage risk a major unknown and if so will private financing offer value for money <p>Information / documents likely to be required:</p> <ul style="list-style-type: none"> • Financial advisor report if available; and • Preliminary analysis of funding scale required
<p>5. Environmental risks</p>	<p>Key questions:</p> <ul style="list-style-type: none"> • Have any major environmental impacts or risks been highlighted in the project Cost Benefit Analysis? • What is the potential scale of impact? • Has a mitigation strategy been described? <p>Information / documents likely to be required:</p> <ul style="list-style-type: none"> • Environmental consultants report; and • Environmental Impact Assessment.
<p>6. Social and other risks</p>	<p>Key questions:</p> <ul style="list-style-type: none"> • Have any major social impacts or risks been highlighted in the Cost Benefit Analysis? • What is the potential scale of impact? • Has there been community engagement/consultation? • Has a mitigation strategy been described? • Have political risks been identified and assessed? • Have any other risks been identified and assessed? <p>Information / documents likely to be required:</p> <ul style="list-style-type: none"> • Environmental consultants report (noise, amenity etc); and • Community report / evidence of community engagement / consultation
<p>7. Governance model</p>	<p>Key questions:</p> <ul style="list-style-type: none"> • Is a Governance model specified? • Does the model create the right incentives on all parties? • Does the model allocate risks to those best placed and incentivised to manage them? • Are all relevant parties included or are key players excluded? • What is the proposed ownership or leasing structure? • Does ownership /leasing align with risks and incentives? • Does the ownership structure drive delivery and operational efficiencies? <p>Information / documents likely to be required:</p> <ul style="list-style-type: none"> • Governance plan or Ownership strategy (including any plans for changing ownership during the project lifetime); and • Evidence in other documents that these issues have been considered.