



## DISCUSSION PAPER 1: AUSTRALIA'S FUTURE INFRASTRUCTURE REQUIREMENTS

The issues discussed in this paper are based on topics raised during initial discussions between Infrastructure Australia representatives with stakeholders and as a result of internal research.

The issues discussed in this paper do not represent the views of the Government or Infrastructure Australia, but instead seek to raise relevant questions and obtain evidence-based advice from interested members of the community, including individuals who work in industry and government.

### 1. INTRODUCTION

#### 1.1 Infrastructure Australia

Infrastructure Australia is a statutory advisory council with twelve members drawn from industry and government, including five from the private sector. Infrastructure Australia is supported by an Infrastructure Coordinator, within the Australian Government's Infrastructure, Transport, Regional Development and Local Government portfolio.

Infrastructure Australia provides advice to governments, investors and owners of infrastructure on the following:

- Australia's current and future needs and priorities relating to nationally significant infrastructure.
- Policy, pricing and regulatory issues that may impact on the utilisation of infrastructure.
- Impediments to the efficient utilisation of national infrastructure networks.
- Options and reforms, including regulatory reforms, to make the utilisation of national infrastructure networks more efficient.
- The needs of users of infrastructure.
- Mechanisms for financing investment in infrastructure.

Infrastructure Australia's immediate tasks are to:

- Conduct an audit to determine the adequacy, capacity and condition of nationally significant water, transport, energy, and communications infrastructure.
- Produce an Infrastructure Priority List.
- Produce best practice, nationally consistent guidelines for Public Private Partnerships.

Infrastructure Australia is also in a position to provide advice on the harmonisation of policies, and laws, relating to development of, utilisation of, and investment in, infrastructure. Infrastructure Australia will also guide the allocation of the Federal Government's Building Australia Fund. Infrastructure Australia's focus is on infrastructure issues of significance to **national** productivity.

## **1.2 Purpose of this Discussion Paper**

One of the goals of Infrastructure Australia is to facilitate public discussion about how the nation could improve planning and investment in infrastructure to meet our future needs, as well as improving the way we use the infrastructure already in place.

During the early phases of Infrastructure Australia's activities, it became clear that members of the community, including people working in industry and government, have both ideas and information potentially of great value to the work being undertaken.

This discussion paper is intended to prompt evidence-based submissions to inform the tasks and agenda of Infrastructure Australia.

## **1.3 Submissions Process**

Submissions should be evidence-based, no more than 15 pages, and received by 15 October 2008. Submissions are to be sent to [mail@infrastructureaustralia.gov.au](mailto:mail@infrastructureaustralia.gov.au) with "Submission" in the subject field. Although email is preferred, submissions may be lodged via post and should be addressed to:

The Infrastructure Coordinator  
Infrastructure Australia  
GPO Box 594  
CANBERRA ACT 2601  
AUSTRALIA

All submissions will be treated as documents for the public domain unless clearly requested otherwise by the submitter. If you do not want your submission to be made public, please clearly mark "Confidential" on the front page of the submission and tick the relevant Confidentiality box on the cover sheet. Commercial in Confidence unsolicited proposals should be marked as such and will be considered by the Infrastructure Coordinator directly. The cover sheet, this discussion paper, and information about how to prepare and lodge a submission are available at [www.infrastructureaustralia.gov.au](http://www.infrastructureaustralia.gov.au).

## **2. CONTEXT**

Australia has a long and successful history of economic development and growth. It has a high quality of life by world standards, enjoying stability and relative security, making it one of the best places to live, work and raise a family.

In the future, Australia wants to continuously improve the living standards and quality of life of current and future generations by achieving sustainable economic growth, protecting the environment, and providing opportunity and fairness for our most disadvantaged. Infrastructure has played a critical role in Australia's past economic development, and this must continue into the future. Without adequate infrastructure, further enhancement of our standard of living could be severely constrained.

Our national infrastructure — including the roads, rail, ports, airports, pipes, grids, cables and communication networks that criss-cross Australia — is the platform for future growth and prosperity. To build a modern, dynamic economy, Australia needs world-class infrastructure, both through finding ways to better use its infrastructure and to identify opportunities for new capital investment. The development of Australia's infrastructure to improve our standard of living must not, however, come at the expense of our environment and our social objectives.

This discussion paper aims to prompt input regarding how to foster an environment in which infrastructure spending decisions can maximise their effectiveness in delivering on economic, social, and environmental objectives. It is not a requirement for submissions to encompass the entire breadth of national issues. Submissions focused on providing rich detail and evidence relating to a specific concern, industry, or type of infrastructure are very welcome.

It should be noted that this paper does not cover Public Private Partnerships. A separate paper has been prepared to prompt discussion on Public Private Partnerships and is available from [www.infrastructureaustralia.gov.au](http://www.infrastructureaustralia.gov.au).

### 3. ISSUES FOR DISCUSSION

Infrastructure Australia is interested in understanding problems and potential solutions to infrastructure related issues of **national significance**. In order to understand the full nature of a problem, it is important to discuss certain issues. Each of the issues for discussion is presented as questions below. These questions have been put forward this way so that Infrastructure Australia can give the ideas arising from community submissions the deepest consideration possible.

#### 3.1 What are the features and goals of Australian infrastructure?

##### *What is “infrastructure”?*

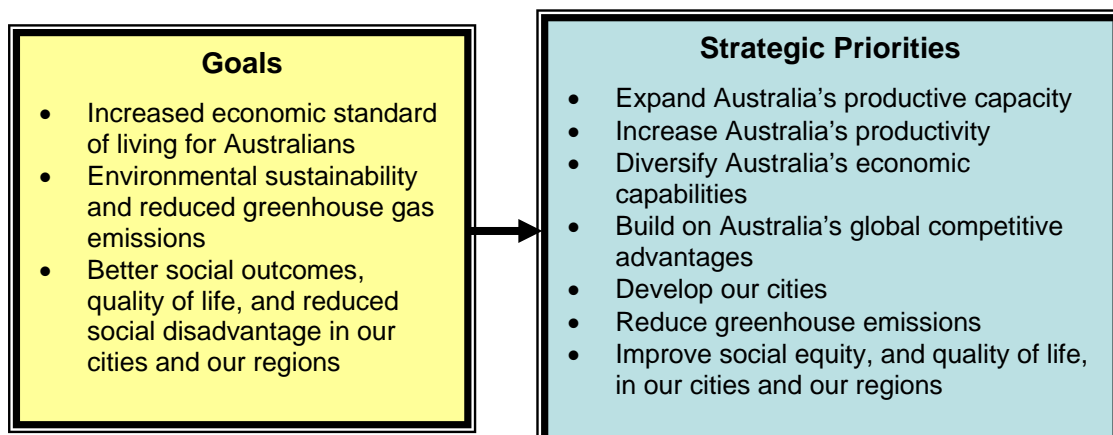
Infrastructure Australia has identified three main types of publicly, quasi-publicly owned, and privately owned infrastructure:

- **Physical Infrastructure:** Includes utilities and facilities such as roads, ports, rail, power lines, water pipes, power generation buildings, sewer plants, and other tangible structures.
- **Digital Infrastructure:** Includes data, satellites, and internet.
- **Collaborative Infrastructure:** Includes communities, networks, regions, business groups, learning networks, and competitive interactions between people, objects, and places.

While the investment focus of Infrastructure Australia is on physical and digital infrastructure, it is clear that each of these types of infrastructure is interlinked and underpins the functioning of Australian society.

##### *Why is it important?*

It is necessary to identify performance criteria against which the adequacy of infrastructure can be assessed. Infrastructure Australia is taking the view that infrastructure does not matter for its own sake: it matters because infrastructure can play a fundamental role in determining whether Australia meets its economic, social and environmental goals. Accordingly, Infrastructure Australia has developed a number of Goals and Priorities to guide our work. The Goals and Strategic Priorities are listed below, and descriptions of each are available at [www.infrastructureaustralia.gov.au](http://www.infrastructureaustralia.gov.au). Comments and advice regarding the goals are welcome.



### **3.2 What are the problems?**

Infrastructure Australia is seeking submissions that identify **nationally significant** infrastructure problems that may hinder the achievement of economic, social, and environmental goals. Such problems could include, but are not limited to, infrastructure adequacy, regulatory environment, competition policy environment, level of market pricing, capacity, condition, operation, planning methods, financial issues, and infrastructure-related services.

Initial stakeholder engagement activities have provided significant insights into the infrastructure challenges facing Australia. Further specification and quantification of inadequacies is necessary in order to identify how to best take targeted and therefore more effective actions. Infrastructure Australia is interested in issues not only relating to specific types of infrastructure, but also other issues including (but not limited to) those of a social, environmental, regulatory, freight, network/intermodal, and/or geographic nature. Similarly, Infrastructure Australia will consider problems pertaining to both the current and potential future infrastructure environment.

### **3.3 What are the impacts of these problems?**

In order to put things in perspective, it is important to understand the costs and other impacts of infrastructure problems and deficiencies. It is particularly important to put numbers against (i.e. to quantify) the economic, environmental, and social costs of infrastructure problems facing Australia. Infrastructure Australia is therefore especially seeking both objective and quantified appraisals of the impacts of deficiencies, because it will help with the identification and prioritisation of the worst problems.

### **3.4 How did these problems come about?**

Infrastructure Australia recognises that an understanding of the causes of problems is necessary for effective and targeted solutions to be created. This includes both the immediate and underlying causes. For example, a lack of investment could be an immediate cause of a problem but it is important to try to identify what specific factors may have caused the underinvestment situation in the first place (e.g. tax/other investment disincentives etc).

What might be the policy, economic, regulatory, or other causes of the problems identified? Infrastructure Australia recognises that there may be non-infrastructure reasons for a problem (e.g. land use patterns, population growth, social changes etc).

### **3.5 How might these problems be addressed?**

Infrastructure Australia recognises that, for any problem, there can be a variety of ways to address it. When canvassing options it is important to draw from a consideration of not only the problem itself, but also its impacts and underlying causes. Ideas often emerge during the process of exploring the nature, impacts, underlying causes of the problem. It is also important to capture and document the full range of options that arise, before narrowing them down. Infrastructure Australia is prepared to consider a range of options broader than “traditional” approaches to infrastructure related issues.

### **3.6 Given the situation, what should be done first?**

Once a full range of options to deal with a problem is identified, Infrastructure Australia recognises that it is then important to develop logical and objective ways to prioritise them. By way of example, considerations might include (but not be limited to) the extent to which options address underlying causes — notably through a comprehensive cost–benefit analysis,

how much of a difference they would make in the short and/or long term, how complicated they are, what constraints exist, how long they would take to make a difference to the problem, costs and other impacts in comparison to the cost and other impacts of the problem. Considerations regarding the interactions between different types of infrastructure are important with respect to the potential for an option to have multiple benefits. At this stage, it is also helpful to provide comments on the options with respect to the potential costs to consider impacts of action or inaction on economic, environmental, and social goals. Infrastructure Australia does not only consider the options themselves to be valuable, but also recognises the value of insights emerging from the methods that may be employed to prioritise them.

#### **4. What Next?**

When each submission is received, Infrastructure Australia will give notice to the submitter that it has been received. Following the receipt and analysis of submissions, Infrastructure Australia will consider how to incorporate the resulting information and ideas into the advice it provides and into the immediate tasks at hand. Submissions may also inform plans for further stakeholder engagement. In addition to incorporating information and ideas into immediate business, Infrastructure Australia will prepare a report for the Council of Australian Governments. Submissions may also be drawn upon to assist with the identification, consideration, and planning of future tasks for Infrastructure Australia's 2009 agenda.

Thank you for taking the time to read this discussion paper.

All submissions in response to this Issues Paper should be received by 15 October 2008 either via email at [mail@infrastructureaustralia.gov.au](mailto:mail@infrastructureaustralia.gov.au) or sent to:

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Infrastructure Australia  
GPO Box 594  
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