

**AUSTRALIAN PROPERTY INSTITUTE INC.**

**SUBMISSION TO THE**

**PRODUCTIVITY COMMISSION**

**ON**

**PUBLIC INFRASTRUCTURE**

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**TABLE OF STATUTES CITED:**

*Environmental Planning and Assessment Act* 1979 (NSW)

*Local Government (Town and Country Planning) Amendment Act* 1945 (NSW)

*Land Acquisition (Just Terms Compensation) Act* 1991 (NSW)

# PREFACE

This submission to the Productivity Commission has been prepared by the Australian Property Institute, NSW Division (API) with the assistance of the Spatial Industries Business Association, NSW Regional Management Group (SIBA), as part of ongoing joint collaborative research efforts and dissemination of factual and dispassionate information about property rights and spatial information in Australia.

This close disciplinary collaboration between the property profession and spatial science professionals has been further strengthened through the preparation of this submission to the Department. In addition, API and SIBA record their appreciation for the invaluable and numerous discussions that occurred during the preparation of the submission with members of the Submission Committee. This submission however does not necessarily represent the views of any of the individual members of the Submission Committee.

# INTRODUCTION

This submission constitutes a response by API to the document entitled *Public Infrastructure: Issues Paper* (*Issues Paper*) releasedby the Productivity Commission in November 2013 for public consultation and input by 23 December 2013.

The overall need for an inquiry into the financing of major public infrastructure is supported by API. In particular it is noted with approval that the inquiry is also to examine the scope for reducing the costs associated with the provision, funding and financing of major public infrastructure.[[1]](#footnote-1)

It is also noted with approval that the inquiry by the Commission

*...will provide the basis for the Commission to make recommendations to improve outcomes in infrastructure provision for the benefit of the community as a whole.[[2]](#footnote-2)*

In analysing the content of the *Issues Paper*, API has formed the view that there aretwo distinct elements embedded within the various matters canvassed: firstly land costs of infrastructure projects, and secondly other costs associated with such projects. With this understanding, this submission has been prepared recognising both elements have a number of aspects that require careful consideration. These aspects are dealt with in the main body of this submission following the introductory comments below.

API notes attempts at reservation of land for infrastructure projects (notably roads) were arguably contained within the first significant planning legislation in Australia, being the *County of Cumberland Planning Scheme Ordinance (Ordinance)[[3]](#footnote-3),* passed by the NSW Parliament on 27 July 1951. Apart from planning and zoning of land introduced by the *Ordinance,* reservations for infrastructure such as “county roads” were also incorporated, including compensation provisions for those owners injuriously affected by zoning (and in particular infrastructure reservations):

*... [l]egislation providing for planning must ensure that those injuriously affected by a scheme and those from whom land is compulsorily acquired will not be unjustly treated, but the legislation must also ensure so far as possible that the community will not be forced to pay unreasonably. In order to achieve these results, there must be carefully detailed clauses in the Act saying whether compensation is or is not payable in particular circumstances, and just how the assessment of compensation is to be determined.*

*Town and country planning legislation almost invariably provides that owners of property which is injuriously affected and loses value when the scheme comes into effect will be entitled to payment of compensation by the responsible planning authority, usually the local governing authority, or council.[[4]](#footnote-4)*

Nevertheless, in 2013 the reservation of land for public infrastructure is increasingly viewed as a significant cost, notably where projects are to be constructed in metropolitan areas and even in peri-urban areas. As the nature of settlement patterns continues to change with demographic shift, API believes the provision of major public infrastructure to service the core of major Australian cities will also result in increasingly large costs being incurred for the acquisition of land. It is a truism that the cost of land acquisition rises as public infrastructure projects are located closer to the core of Australian metropolitan areas.

This is evidenced by recently announced projects such as the Sydney West Connex which will be constructed primarily in sub-stratum to ameliorate surface acquisition cost. Notwithstanding, it is reported at least 100 properties will be compulsorily acquired for the West Connex project, and this number of properties still represents a potential significant financial cost for the NSW Government and the project proponents.

SIBA has offered the following comments:

*SIBA members have a strong history and experience in supporting the construction and maintenance of a wide range of infrastructure projects across Australia. Through this experience SIBA members have seen the evolution within the construction industry away from project based approaches to deploying whole of lifecycle systems to reduce construction time and costs.*

*Location is the foundation of modern infrastructure projects from planning through to operations and maintenance. An effective location-based framework for the entire infrastructure lifecycle allows all tiers of government and private organisations to achieve the following:*

* *Use evidence-based techniques to forecast infrastructure demands and predict impact of projects on communities, the environment as well as macro and micro economic measures*
* *Allow for well-targeted data acquisition programs including accurately surveyed land parcels with ownership and valuations, register of intent on land and current planning instruments from local, regional, state and federal. Leading to much shorter and accurate land acquisitions cycles*
* *Underpin environmental impact assessment and significantly improve stakeholder engagement from government to citizen to businesses through rich interactive mapping platforms that enable crowd sourcing of information relevant to the project’s success as well as a direct community feedback channel.*
* *Support the design process by sharing accrued data, increasing the accuracy, efficacy and speed of design by the private sector e.g. suitability analysis, geological assessment and 3D modeling*
* *Reduce construction cost through minimisation of errors, speed of access to information and ability to rapidly rerun analyses to better respond to on the ground construction challenges*
* *Provide a ready platform to collate as built data that provides a foundation for effective operation and maintenance systems that will protect private investments and support the handover to the public of healthy infrastructure during the transfer stage*

*Providing a location platform for infrastructure has positively impacted construction costs and is rapidly becoming standard operating practice for many engineering construction firms that have first-hand realised the value of a location based approach and are applying it to many of the own internal business processes.*

Finally, API would be pleased to discuss any of the matters raised in this submission or provide any additional information that may be requested. Arrangements can be made by contacting Ms. Gail Sanders OAM, API NSW Divisional Executive Officer on telephone number 02 9299 1811.

# COMMENTS AND RECOMMENDATIONS

The following comments and recommendations have been framed to respond to the sequence of the pages and headings in the *Issues Paper*:

### What is public infrastructure?

Does the proposed definition of public infrastructure capture all forms of infrastructure that should be considered by this inquiry?[[5]](#footnote-5)

**Response:**

The definition of public infrastructure arguably is caught by the phrase *economic infrastructure*[[6]](#footnote-6), however the other two descriptions (nationally *significant infrastructure* and *major infrastructure projects)* appear to be only marginally different, especially in the area of major or significant projects.

It is noted however by API that the phrase *economic infrastructure* is regarded as distinct from social infrastructure and yet there is a clear melding between economic and social infrastructure. An example of this is in the provision of major projects, such as hospitals which in themselves represent a melding of economic and social infrastructure.

What types of nationally significant economic infrastructure should be within the scope of this inquiry?[[7]](#footnote-7)

**Response:**

Please see above.

## The importance of public infrastructure

### Trends in infrastructure delivery

What mechanisms are in place to identify and measure the infrastructure needs of the community?[[8]](#footnote-8)

**Response:**

API considers that strategic planning for infrastructure projects currently in place is the primary mechanism where the infrastructure needs of the community are identified and measured. However, given that most infrastructure projects involve the use of land, the strategic planning for such projects tends to be reflected in reservations of land in statutory regimes such as *Environmental Planning and Assessment Act* 1979 (NSW). The proponent of such public infrastructure presumably identifies and measures the need at an early date, which results in the reservation of the land corridor.

How effective are they and what other mechanisms could be used?[[9]](#footnote-9)

**Response:**

The reservation of land corridors referred to above can be inadequate in size, too large, inappropriate in plottage, or incorrectly located. This issue is also commented upon later in this submission under **Costs of infrastructure projects**.

What are the circumstances that might lead to governments over- or under-investing in infrastructure?[[10]](#footnote-10)

**Response:**

Please see above.

What is the appropriate distinction between the funding and financing of public infrastructure?[[11]](#footnote-11)

**Response:**

API concurs with the distinction between funding and financing as proposed by the Commission.

How is public infrastructure currently funded and financed in Australia, including by the Commonwealth, the states and the private sector?[[12]](#footnote-12)

**Response:**

API offers no comment.

How has the composition of different forms of funding and financing of public infrastructure in Australia changed? In particular, how has the role of the private sector in the provision of public infrastructure changed?[[13]](#footnote-13)

**Response:**

API offers no comment.

What information is available to show trends in public infrastructure investment, funding and financing in Australia, including different levels of involvement by the public and private sectors, and different types of infrastructure?[[14]](#footnote-14)

**Response:**

API offers no comment.

## The provision of public infrastructure

What models can be used to provide public infrastructure?[[15]](#footnote-15)

**Response:**

API offers no comment.

How do alternative models vary in their ability to address real or perceived limitations compared with more standard forms of public sector procurement?[[16]](#footnote-16)

**Response:**

API offers no comment.

How adaptable are the different models between different types of infrastructure?[[17]](#footnote-17)

**Response:**

API offers no comment.

How do different models influence the efficiency of provision, funding and financing of public infrastructure?[[18]](#footnote-18)

**Response:**

API offers no comment.

What is the extent of the use of PPP models in Australia for different types of public infrastructure including in comparison to other countries and over time?[[19]](#footnote-19)

**Response:**

The committee was advised that until the 1990s, typically a major healthcare project in Australia would be expected to be delivered in an 8 year timeframe – 4 years planning and 4 years delivery. Projects were delivered primarily by the public sector, with construction undertaken using traditional lump sum contracts. In response to the need for major investment in the 1990s and a political desire to be seen to be delivering projects within the electoral cycle, projects began to be delivered using increasing private sector involvement in the planning and management stages to compress the process to around 4 years by overlapping the design and constructions stages. Procurement methods including construction management and fast-track were used, with significant time benefits, however the cost risk was borne by government. As a response, a number of subsequent projects were delivered using procurement methods which sought to shift the cost risk onto the contractor, allowing the contractor to control the design process and drive innovation to reduce cost.

Design and Construct and Design Development and Construct were typical project delivery mechanisms from the mid 1990s onwards. These contracts used outline ‘performance’ documentation to define requirements to be delivered for a lump sum. However in a number of cases these failed to properly define quality resulting in facilities which were seen as not being ‘fit for purpose’, or at best being seen as basic, utilitarian facilities that met minimum standards. High quality design, whole of lifecycle costs and long term flexibility were not considerations, with the lowest capital cost and timely delivery the primary focus. Recurrent costs such as labour, energy and maintenance were disconnected from the capital process – the legacy being buildings which are inefficient and expensive to operate.

The drive to provide greater project cost certainty for the government was applied to the engagement of private sector design consultants, with a move to completive fee tendering based on an estimated or agreed project value, rather than a fee based on a percentage of final cost. As a result, design consultants took greater commercial risk for correctly defining the required work to deliver the services and manage their activities within that fee. The move to competitive tendering also had the impact of significantly lowering consultants fees, impacting on profitability of practices and in some cases leading to reduced quality of services, using less qualified staff etc. A further impact on design consultants has been the adoption by public sector authorities, which in some cases look to transfer commercial risks onto the consultants beyond that established in industry-standard contract forms.

The move to increased private sector involvement has included operational as well as capital approaches, with mixed results: at Port Macquarie in NSW, a new hospital was delivered in 1995 using a BOOT (Build Own Operate Transfer) contract which includes a 10 year service component to operate the public hospital, reverting to the State in 2005. The concept was that the private sector could plan and deliver health services more cost-effectively, with the physical infrastructure planned to support its operational requirements rather than prescriptive guidelines used in the planning of public facilities. A similar approach was implemented at Latrobe Hospital in Victoria.

A criticism of the BOOT approach at the time was that it failed to ensure that sufficient emphasis was placed on defining the service requirement that the private operator was required to deliver on behalf of the state, and that the transferred facility would be a viable long-term asset. As result, until recently there has been reluctance by governments to return to contracting with the private sector for operation of public healthcare facilities.

Since the mid-2000s, the committee was informed the significant wave of investment in healthcare infrastructure (in particular) significantly progressed the shift to private sector involvement, particularly for larger flagship projects of over $1 billion project value. PPPs have been the preferred model for many of these including the New Children’s Hospital in Melbourne, Royal Adelaide and Sunshine Coast Hospitals. It is noted Managed Contracts using Guaranteed or Maximum Construction Sum have been used on similar scaled projects such as Fiona Stanley Hospital in Perth and Gold Coast University Hospital. A history of unsatisfactory outcomes of infrastructure PPPs in NSW (particularly in the transport sector) has caused a reluctance to adopt PPPs. The committee was informed that over time, PPPs are now gaining greater acceptance as the level of experience in PPPs across Australia has increased and the model has become more refined and better configured.

PPPs are typified by highly developed output specifications defining performance and quality requirements, usually incorporating a reference design, aggressive risk transference, contractual milestones and a protracted tender assessment and negotiation process, involving an Expression of Interest and Request for Tender, followed by a preferred tenderer. This results in significant bid costs for each stage, in particular the formal RFT which requires a full design for detailed costing and assessment by the project sponsor. While a fee is paid to each tenderer, these typically do not reflect the actual costs of preparing the bid and as a result these costs must be reflected in the business cost structures, also limiting the number of PPPs that can be tendered.

Similarly only tier one contractors can readily carry the finance for such projects. As a result, the available pool of potential PPP tenderers is limited, although the number of PPPs is likely to increase significantly in coming years, notably on projects a small as $50 million.

A significant aspect of PPPs has been the incorporation of long-term facilities management components to maintain the asset and also provide non-clinical services such as catering, engineering, linen and waste management. Over the life of the contract this represents a significant part of the operational cost of the facility. Similarly the engineering and building maintenance costs are considered on a whole of life basis, rather than a pure capital cost, meaning that additional cost of energy efficient design, sophisticated building management and control systems and higher quality, durable materials can be supported through appropriate life cycle cost analysis, leading to higher quality facilities that are less costly to operate.

A major impact of the PPP process is the tying up of significant resources at the bid stages, preventing these being available to work on other projects. As these are usually high value, high profile projects, the two to four tenderers will to assemble teams of the highly experienced and talented consultants, the result of this being that other projects will have to be serviced from a diminished pool of potential consultants. This represents a major risk to those projects, particular with less experienced consultants combined with low fees, aggressive delivery programs and limited preliminary planning work being undertaken prior to the commencement of the project.

Typically a medium sized healthcare project of $100-200 million is planned for delivery in 3-4 years. This compares with up to 4 years on projects planned before the 1990s, with the result that projects are frequently initiated and budgets set with only limited preliminary planning work having been undertaken. Therefore, there is a risk of changes during design and construction as project requirements become more clearly defined, with potential impacts on both cost and time. Lump sum contracts for both design consultants and contractors in some instances seek to transfer risk for design change, although neither party is necessarily positioned to manage this risk.

What is the nature and scale of efficiency benefits from PPPs, including those arising from bundling the design, construction and operation phases?[[20]](#footnote-20)

**Response:**

The committee is aware that there has been greater acceptance of PPPs as the level of experience across Australia has increased and the model has become more refined and better configured. Similarly the experiences from the UK, where the shortcomings of some of the original PFI projects in the 1990s were addressed through more sophisticated and better designed procurements models such as Supply Chain Alliances which provided for a more efficient use of private sector resources in addition to better quality outcomes for the built facilities, has been brought into the design of these models.

The consensus opinion is that the number of PPPs is seen to be likely to increase significantly in coming years, potentially on projects as small as $50 million. Contracting specific clinical services, such as imaging, pathology and pharmacy, to private operators co-located within public health facilities is well established. Future developments are likely to include elective surgical, cardiology, rehabilitation, cancer services and casualty, potentially within primary healthcare settings as well as acute facilities.

Two significant PPP healthcare projects, Midland in Perth and Northern Beaches in NSW are currently being developed to provide combined public and private health services to be delivered by private providers with a long term concession. These projects in some respects are a reinterpretation of the original BOOT model, but with significant emphasis on addressing the perceived shortfalls of that model both in the specification of service requirements and also the physical infrastructure to ensure that the asset that is returned to the state at the end of the concession is maximised in its future value. The model further builds on the whole of life considerations that are able to be embedded into PPPs by the operator developing the design of the facility to reflect their organisational model and workplace culture. In addition, the impacts of improved workplace design and high quality environments are able to be measured, both in terms of clinical outcomes and staff attraction and retention with significant cost benefits to the operator.

What are the costs or weaknesses of PPP models?[[21]](#footnote-21)

**Response:**

Please see above.

Should the risks associated with PPPs be shared appropriately between governments and the private partner?[[22]](#footnote-22)

**Response:**

Please see above.

What principles should guide the consideration of the most efficient model for delivery and operation of public infrastructure (by the public or private sectors)?[[23]](#footnote-23)

**Response:**

The committee was informed that there are significant lessons to be drawn from the experiences in social infrastructure delivery over the past two decades. In particular, UK experience suggests that the low-cost, low-risk approach of early PFI/PPP projects has matured into a more sophisticated approach that considers the capabilities of the private sector to best provide value, balances the availability of resources of the industry, better defines client requirements, values design to innovate and deliver high quality and sustainable facilities and more appropriately apportions commercial risks to those best placed to manage them.

It is recognised that the above comments are focused heavily on healthcare infrastructure, however it was accepted that broader current Australian experience appears to be building on that approach.

Are current systems for raising revenue for public infrastructure services providing appropriate signals for efficient use and for new investments? If not, what scope is there to improve these systems?[[24]](#footnote-24)

**Response:**

API offers no comment.

Are there any coordination issues between the different levels of government and the private sector in the provision of public infrastructure? If so, what implications does this have for funding and financing decisions?[[25]](#footnote-25)

**Response:**

API has noted above the protection of proposed public infrastructure corridors through statutory land use planning may not necessarily provide the optimum land corridor. The API is uncertain whether coordination between the different levels of government necessarily occurs when an infrastructure corridor is reserved (and/or maintained). Clearly the private sector can be affected by this possible lack of coordination.

To what extent do coordination issues present barriers to efficient investment in public infrastructure?[[26]](#footnote-26)

**Response:**

Please see above.

Does the scope for each level of government to impose user charges or taxes and other charges affect the provision of public infrastructure, and/or the funding and financing mechanisms used?[[27]](#footnote-27)

**Response:**

API offers no comment.

What factors affect a government’s capacity to effectively contract with the private sector for the delivery of public infrastructure, including the expertise required to enter into complex and lengthy contracts?[[28]](#footnote-28)

**Response:**

API offers no comment.

What are the roles of the different levels of government in the implementation of different funding and financing mechanisms for public infrastructure?[[29]](#footnote-29)

**Response:**

Apart from the comments above, the API offers no comment.

What are the strengths and weaknesses associated with the current arrangements by which different levels of government interact?[[30]](#footnote-30)

**Response:**

Please see above.

Do these arrangements create any perverse incentives or influence the choice of different funding and financing mechanisms?[[31]](#footnote-31)

**Response:**

Please see above.

### Decision-making and institutional arrangements

What are the strengths and weaknesses of the current institutional environment within which decisions about the provision of public infrastructure are made?[[32]](#footnote-32)

**Response:**

SIBA has provided the following comments:

*Location-based information and more specifically geographic information systems that are used to capture, manage, analyse and disseminate location information have a rich tradition across the globe in evaluating the risk associated with infrastructure investment by providing an evidenced based framework that builds accurate demand models*

*This approach would include the use of a rich and powerful ‘layering’ technique of the available data sources on the map canvas. Then fusing these sources into an effective representation of the potential market and risk associated with the planned infrastructure whilst allowing for multiple “what-if’ analysis. Data sources can include but not limited to:*

* *Current demographic data*
* *Forecasted demographic data*
* *Current infrastructure with performance metrics*
* *Planned infrastructure*
* *Overall current infrastructure projects e.g. NSW State Government 2020 plan*
* *Property ownership and valuations*
* *Planning instruments from all tiers of government*

How does this differ for different types of public infrastructure?[[33]](#footnote-33)

**Response:**

Please see above.

How does this influence the extent to which efficient investments are prioritised?[[34]](#footnote-34)

**Response:**

Please see above.

What decision-making and policy frameworks do governments and the private sector use to determine whether to invest in public infrastructure, and in particular, to evaluate the risks associated with infrastructure investment?[[35]](#footnote-35)

**Response:**

Please see above.

## Funding mechanisms

What alternative funding mechanisms for public infrastructure should be considered in this inquiry?[[36]](#footnote-36)

**Response:**

API offers no comment.

What are the strengths and weaknesses of each, trade-offs to consider, and what principles should guide their use?[[37]](#footnote-37)

**Response:**

API offers no comment.

What are the different types of revenue streams that can be created to attract private sector finance for public infrastructure projects, such as user charges, availability payments and any other mechanisms?[[38]](#footnote-38)

**Response:**

API offers no comment.

How widely are these currently used for different types of public infrastructure?[[39]](#footnote-39)

**Response:**

API offers no comment.

What costs and benefits should be taken into account when considering the suitability of user charging for public infrastructure?[[40]](#footnote-40)

**Response:**

API offers no comment.

What impediments exist to the wider application of user-pay funding arrangements for public infrastructure, and how does this differ for different infrastructure types? How could such impediments be addressed?[[41]](#footnote-41)

**Response:**

API offers no comment.

What are the interrelationships between project-specific risks (such as construction or demand risk) and funding and financing decisions?[[42]](#footnote-42)

**Response:**

API offers no comment.

How are these inter-relationships different for greenfields development as opposed to projects that augment existing facilities or networks?[[43]](#footnote-43)

**Response:**

API offers no comment.

What is the scope for further privatisation or ‘capital recycling’ of existing government assets to fund new public infrastructure?[[44]](#footnote-44)

**Response:**

API offers no comment.

What principles and processes should guide these decisions, and what trade-offs need to be taken into account?[[45]](#footnote-45)

**Response:**

API offers no comment.

To what extent could widespread use of this approach create incentives for governments to over-invest in infrastructure irrespective of efficiency considerations?[[46]](#footnote-46)

**Response:**

API offers no comment.

## Financing mechanisms

What are the different types of private financing models? What are the advantages and disadvantages of these models?[[47]](#footnote-47)

**Response:**

API offers no comment.

To what extent is unavailability or cost of private financing for public infrastructure projects an impediment to efficient investments taking place?[[48]](#footnote-48)

**Response:**

API offers no comment.

What are the relevant costs and benefits that should be taken into account in weighing up the choice between public and private sector financing mechanisms?[[49]](#footnote-49)

**Response:**

API offers no comment.

How effective are existing arrangements and tools used to compare different financing mechanisms for public infrastructure?[[50]](#footnote-50)

**Response:**

API offers no comment.

To what extent does the early commitment of financing reduce or eliminate the potential development of efficient funding mechanisms (charges and taxes), particularly user charging systems?[[51]](#footnote-51)

**Response:**

API offers no comment.

To what extent do different types of project risks change across a project’s lifecycle, how does this differ depending on the type of infrastructure, and what implications does this have for the funding and financing mechanisms used?[[52]](#footnote-52)

**Response:**

API offers no comment.

Under what circumstances are specific risks better left to government to manage or bear (for example, due to the nature of the infrastructure service or the government’s greater ability to pool risks) or transferred to the private sector?[[53]](#footnote-53)

**Response:**

API offers no comment.

What has been the experience in Australia of risk allocation in public infrastructure projects for different infrastructure sectors?[[54]](#footnote-54)

**Response:**

API offers no comment.

What is the capacity and willingness of private sector investors to take on and manage different types of risks?[[55]](#footnote-55)

**Response:**

API offers no comment.

Do governments have the capacity to resist accepting risks allocated to private providers, such as bailing out a private partner at risk of bankruptcy?[[56]](#footnote-56)

**Response:**

API offers no comment.

What are some of the alternative risk allocation models that can be used for public infrastructure, both for publically and privately financed projects?[[57]](#footnote-57)

**Response:**

API offers no comment.

What principles should guide the allocation of different types of project risks in public infrastructure projects?[[58]](#footnote-58)

**Response:**

API offers no comment.

So called ‘Alliance’ contracts are said to be effective risk-sharing mechanisms. Does experience bear this out?[[59]](#footnote-59)

**Response:**

API offers no comment.

Is there any evidence of government policies or regulation impeding private sector participation in the provision and financing of infrastructure projects?[[60]](#footnote-60)

**Response:**

API offers no comment.

What are the components, and the total size, of transaction costs associated with the use of private financing models such as PPPs?[[61]](#footnote-61)

**Response:**

API offers no comment.

What is the extent of competition in the market for private financing of public infrastructure projects, what factors influence this and does this differ by the type of infrastructure?[[62]](#footnote-62)

**Response:**

API offers no comment.

What are the impediments to greater private sector involvement and financing of public infrastructure by institutional investors, such as superannuation or pension funds (for example, taxation arrangements)?[[63]](#footnote-63)

**Response:**

API offers no comment.

What is the scope for superannuation funds to benefit from financing more public infrastructure, and the reasons why they are not already doing so?[[64]](#footnote-64)

**Response:**

API offers no comment.

What has been the effect of the National PPP framework and guidelines, endorsed by the COAG in 2008, in assisting the public and private sectors to improve delivery of public infrastructure assets?[[65]](#footnote-65)

**Response:**

API offers no comment.

Is there scope for further reform to PPP processes, and if so what measures should be considered?[[66]](#footnote-66)

**Response:**

API offers no comment.

What is the likely effect of recent changes to the taxation treatment of business losses made by eligible infrastructure project entities?[[67]](#footnote-67)

**Response:**

API offers no comment.

What is the rationale for such concessional tax arrangements?[[68]](#footnote-68)

**Response:**

API offers no comment.

## Financial risks to the Commonwealth

What are the main factors that determine financial risks to the Commonwealth from the use of alternative funding and financing mechanisms?[[69]](#footnote-69)

**Response:**

API offers no comment.

Do these risks to the Commonwealth differ from the financial risks faced by state and local governments and the private sector when they fund or finance infrastructure, and if so, how?[[70]](#footnote-70)

**Response:**

API offers no comment.

How are public infrastructure projects accounted for in government budget statements under different funding and financing models, including those financed by the private sector?

**Response:**

API offers no comment.

How does this differ between jurisdictions within Australia and internationally?[[71]](#footnote-71)

**Response:**

API offers no comment.

What is the potential for mechanisms such as availability payments to impose limits on the Australian Government’s total payment obligations and exposure to contingent liabilities?[[72]](#footnote-72)

**Response:**

API offers no comment.

Are there alternative mechanisms for funding and financing that will minimise financial risks to the Commonwealth?[[73]](#footnote-73)

**Response:**

API offers no comment.

Would more transparent budget treatment provide more certainty around financial risks to the Commonwealth?[[74]](#footnote-74)

**Response:**

API offers no comment.

Do concessional taxation provisions for infrastructure projects present a financial risk to the Commonwealth?[[75]](#footnote-75)

**Response:**

API offers no comment.

## Costs of infrastructure projects

### Trends in costs in construction

How does the cost of land vary in the provision of different infrastructure projects?[[76]](#footnote-76)

**Response:**

As mentioned in the introduction, the location of an infrastructure project rather than the specific infrastructure type has a crucial influence upon the cost of land to be acquired. Where land is relatively cheap in rural and regional areas of States and Territories, the acquisition of freehold rights for the infrastructure project tends to be the primary method of securing the infrastructure corridor, except for aerial high tension transmission lines which are traditionally secured by way of an easement. However, in more closely settled areas, notably along the Australian coast, the cost of securing land corridors for the construction of public infrastructure rises significantly. As the infrastructure is located closer and closer to major city centres so the balance shifts between the increasing cost of freehold surface acquisition of corridors and the option of subsurface acquisition (and construction).

Given Australia has arguably the most urbanised population per capita globally, the cost of land acquisition for urban and inner-urban infrastructure projects will increasingly need to be addressed.

How significant is this cost as a share of the total costs of infrastructure projects?[[77]](#footnote-77)

**Response:**

As stated above, as the infrastructure projects are located closer and closer to Australian city centres so the cost, as a share of the total cost of the project, must rise. API is unable to provide information as to the actual share of total cost attributable to land acquisition. However the increasing cost of land acquisition is evident through the propensity of inner urban and CBD projects to be located in the sub-stratum, rather than at ground level requiring freehold land acquisition.

What policies might be relevant to lowering the costs associated with land acquisition and access (including reducing delays)?[[78]](#footnote-78)

**Response:**

As stated in the introduction, since 1951 reservations of land corridors were facilitated in NSW by the *County of Cumberland Planning Scheme Ordinance*, and by similar planning legislation in the other five Australian States. Such reservations for infrastructure projects present a dichotomy in terms of adequacy for corridor protection. Beneficially, the reservation of such corridors many years prior to the use for infrastructure enables the constructing authority to be assured of: firstly guaranteed access to the required land, and secondly acquisition at a historically lower cost than that which would have ordinarily been paid when construction actually commenced. Detrimentally, the early reservation of such corridors may be found when required to be either inadequate in size, too large, inappropriate in plottage or incorrectly located.

Much land required for infrastructure projects, notably in rural and regional parts of Australia is held in private ownership, and the prospect of future acquisition to facilitate the construction of a specific project may blight the land owner’s property rights for many years. There is the recent example of the decision by TransGrid in April 2013 not to proceed with the acquisition of the corridor for 132kV high tension transmission line between Stroud and Taree. Private land owners along the route of the proposed corridor were arguably subject to blight since publication of a Needs Document by TransGrid in 2002.[[79]](#footnote-79)

Surface acquisition of easements for such facilities requires the payment of compensation in all States, Territories and the Commonwealth[[80]](#footnote-80). However, where such infrastructure corridors are acquired in sub-stratum, compensation is not payable, except for actual damage done in the construction of the infrastructure.[[81]](#footnote-81) Clearly, infrastructure corridors acquired primarily in sub-stratum lower the costs associated with land utilisation, however anecdotal evidence suggests land owners above the affected sub-stratum can in some circumstances experience loss of property value.

SIBA has also provided the following comments:

*There is no doubt in the professional opinion of SIBA that an open data policy that specifically targets the release of land based government information will have a significant impact on the lowering the costs associated with land acquisitions and access. These include planning instruments comprising of local, regional and State environmental planning information and Federal instruments such as native title.*

*SIBA has been active across the country in supporting the various evolutions of open data policies in each State and in particular, we suggest the following key issues being emphasised in Open Data Policy:*

* *For Open Data to be of real value to the community, it needs to be available through non-proprietary APIs (Application Programmable Interfaces’) not electronic ‘paper’ formats like PDF’s, or equivalent to 3 Star maturity rating as per the 5 Star Linked Open Data model. We propose the policy emphasises this as a minimum maturity target;*
* *SIBA applauds the State and Federal Government focus on data quality and data quality (metadata) statements. However, as users are the ones who can determine if data quality levels are fit for their purpose, we suggest that the policy stresses that publishing data (with a quality statement) should take priority over improving data quality;*
* *Prioritisation of high-value datasets for publication should be done in consultation with industry and the community, through established forums such as the Location Intelligence ThinkTank community in NSW.*

Are there lessons from the experiences of different Australian jurisdictions and overseas about how to best cater for the land use and acquisition requirements for major infrastructure projects?[[82]](#footnote-82)

**Response:**

API considers that a number of examples provided to the submission committee suggested a lack of strategic planning for infrastructure projects resulting in inadequate provision of land. An example was provided of the Homebush Olympic site, part of which was owned by the NSW Government, subsequently sold and then rezoned, and then repurchased by the NSW Government for the construction of the Olympic Games facilities at an increased cost of land acquisition.

 SIBA has also offered the following comments:

*The former Rail Infrastructure Corporation of NSW had a strong policy of collating a survey accurate location database of all land in and around its holdings. This database included land ownership, planning instruments, contracts and agreements for rights of way to support infrastructure maintenance. It also allowed the former corporation to track parcel history and linage by maintaining the legal recording dates. Combined with their assets in use, retired and planned, the location based system allowed for rapid assessment of land costs to maintain their services and plan for service extensions or withdrawals. It was also a valuable communication tool to its stakeholders including the community on planned maintenance, construction and disruptions via online lightweight consumer oriented mapping tools.*

*This approach should be adopted more broadly allowing for effective overlay of planned construction, project land access issues and what contracts and acquisitions may be required to support design, construction and maintenance phases.*

*Critically this approach will support easing community anxiety as being expressed around projects such as WestConnex and Sydney Light Rail project by providing mapping as a common language between citizens, government, engineers and other stakeholders mitigating local political disruption and infrastructure delays which turns into added cost.*

What factors have contributed to the recent productivity growth in the construction industry?[[83]](#footnote-83)

**Response:**

The committee was informed that in 1985-86 the Australian construction workforce represented 7 per cent of the overall workforce, whereas in 2012-13 this percentage had risen to 10 per cent. It was explained to the committee that the recent productivity growth in the construction industry was attributed primarily to the greater use of information technology, smart mechanisation and new construction technology.

Are there impediments that have dampened the potential productivity growth achievable? If so, what are they?[[84]](#footnote-84)

**Response:**

The committee was informed that the recent growth in productivity in the construction industry had been subdued somewhat due to increasing labour costs and design inadequacies attributable to a lack of specialist advice in specific fields.

How does Australia’s productivity growth and levels compare with other countries?[[85]](#footnote-85)

**Response:**

API is not able to offer a comment.

What factors have contributed to the labour cost pressures in the construction industry, and how do these vary by type of activity, location and occupation?[[86]](#footnote-86)

**Response:**

API offers no comment.

To what degree have demand pressures contributed to wage pressures? Are the effects of this localised, for example, to non-metropolitan locations where significant mining-related construction is taking place?[[87]](#footnote-87)

**Response:**

API offers no comment.

To what extent has this occurred and for what types of equipment? Is it a transient phenomenon?[[88]](#footnote-88)

**Response:**

The committee was informed the cost of equipment and other capital used in construction has generally fallen, however some specialised large equipment has risen due to generally high global demand. Similarly, infrastructure and construction are now generally larger, more specialised and not repetitive, unlike the general construction sector.

To what degree are the trends in physical capital costs for the construction sector as a whole representative of those for infrastructure construction? If not, what factors explain any differences?[[89]](#footnote-89)

**Response:**

Please see comments above.

How important are the prices of physical capital inputs for total construction costs?[[90]](#footnote-90)

**Response:**

Please see comments above.

What are the main sources of intermediate input cost pressures and what factors lie behind these pressures?[[91]](#footnote-91)

**Response:**

The committee was informed the construction sector counts for 30 per cent of intermediate inputs, manufacturing/professional accounts for 25 per cent of intermediate inputs, while scientific/technical services accounts for only 16 per cent of intermediate inputs. The committee was also informed that the cost of such inputs has risen in recent years due to increased global demand, and that interest rates fluctuation can often affect the price of imported inputs.

To what extent has increased intermediate input costs placed pressure on total infrastructure construction costs?[[92]](#footnote-92)

**Response:**

Please see comments above.

To what extent have changes in the international market supply of intermediate inputs created cost pressures?[[93]](#footnote-93)

**Response:**

Please see comments above.

What are the major drivers of overall infrastructure construction costs in Australia?[[94]](#footnote-94)

**Response:**

API offers no comment.

What factors have kept aggregate infrastructure construction output price rises to similar levels observed for all goods and services in the economy, and how can this be reconciled with the micro-evidence on rising construction costs for major projects?[[95]](#footnote-95)

**Response:**

API offers no comment.

What is the role of the demand pressures on costs associated with the resources boom, and what are the anticipated impacts as commodity prices and mining investment activity abates?[[96]](#footnote-96)

**Response:**

API offers no comment.

The Commission seeks information on profitability along the supply chain and its importance for the total cost of projects.[[97]](#footnote-97)

**Response:**

API offers no comment.

What is the typical distribution of costs across the various phases of infrastructure projects, and what are the key factors that affect these costs (such as planning and environmental approvals, delay, procurement problems, specification variations and industrial action)?[[98]](#footnote-98)

**Response:**

API offers no comment.

To what extent can government policy address any of these factors?[[99]](#footnote-99)

**Response:**

API offers no comment.

What significant changes, if any, have occurred in the cost structures of major infrastructure projects over the last ten years? Are these changes specific to Australia or part of broader international trends?[[100]](#footnote-100)

**Response:**

API offers no comment.

### International comparisons

To what extent does reliable and methodologically sound data exist on construction cost differentials across countries, and what cost differentials and trends do these reveal?[[101]](#footnote-101)

**Response:**

API offers no comment.

What does the available evidence show about Australia’s ranking with regard to the cost of major construction projects?[[102]](#footnote-102)

**Response:**

API offers no comment.

Which countries are the best comparators for Australia in regard to major project construction costs?[[103]](#footnote-103)

**Response:**

API offers no comment.

### Workforce issues

What are different unions’ coverage across major public infrastructure projects? How does this vary across jurisdictions and project types?[[104]](#footnote-104)

**Response:**

API offers no comment.

What is ‘best practice’ in the bargaining process between employers and employees and are there ‘win-win’ options that have not been fully exploited? How can these opportunities be exploited?[[105]](#footnote-105)

**Response:**

API offers no comment.

What is the quality of training for negotiations (for both employers and employee representatives)?[[106]](#footnote-106)

**Response:**

API offers no comment.

To what extent have bargaining arrangements (or their breakdown) between employees (and their nominated representatives) and management:

* Reduced innovation and flexibility
* Increased wages above levels of comparable employees in other sectors
* Resulted in inefficient input choices
* Led to project delay, and lower labour and capital utilisation
* Led to industrial disputes, ‘work-to-rules’, go-slows, bans (such as on overtime), and employer ‘lock-outs’?[[107]](#footnote-107)

**Response:**

API offers no comment.

What has been the associated impact on costs, and how do they compare with other factors creating cost pressures? Have such costs changed over time, and if so, why?[[108]](#footnote-108)

**Response:**

API offers no comment.

How do work practice and industrial relations affect the costs of different types of construction:

* By the area of infrastructure (rail, roads, ports, airports etc)?
* By the value of the project?
* By the project duration?
* Between different jurisdictions?
* Greenfield versus brownfield projects?[[109]](#footnote-109)

**Response:**

API offers no comment.

Why do these differences arise?[[110]](#footnote-110)

**Response:**

API offers no comment.

What have been the primary causes of industrial unrest?[[111]](#footnote-111)

**Response:**

API offers no comment.

How quickly have matters been resolved, and by what mechanism (consensus between parties, actions suspended by the Fair Work Commission, intervention by the former Australian Building and Construction Commission, or in cases of unprotected actions, through civil litigation)?[[112]](#footnote-112)

**Response:**

API offers no comment.

To what extent do employee-employer relations vary with the characteristics of construction contractors, such as their size, profitability, cash flow risks, and position in the subcontractor chain? How do any such variations directly or indirectly affect construction costs?[[113]](#footnote-113)

**Response:**

API offers no comment.

More broadly, to what extent does the market structure of the construction industry – and in particular, the relatively small number of prime contractors – affect employer/employee bargaining arrangements, and with what effects on costs?[[114]](#footnote-114)

**Response:**

API offers no comment.

To what extent has there been unprotected industrial action (actions not covered by a Fair Work Commission protected action ballot) or the threat of such actions?[[115]](#footnote-115)

**Response:**

API offers no comment.

Is there any evidence that the abolition of the Australian Building and Construction Commission affected workplace outcomes in the construction of major infrastructure?[[116]](#footnote-116)

**Response:**

API offers no comment.

To what extent have there been union rivalries and demarcation issues, and what have been the impacts?[[117]](#footnote-117)

**Response:**

API offers no comment.

To what extent are such flexibilities used by parties to an agreement, and with what impacts on costs?[[118]](#footnote-118)

**Response:**

API offers no comment.

Are there material and consistent differences between the outcomes of greenfields agreements and other enterprise agreements?[[119]](#footnote-119)

**Response:**

API offers no comment.

What evidence and examples of greenfields agreements should the Commission be aware of, particularly for public infrastructure projects?[[120]](#footnote-120)

**Response:**

API offers no comment.

Is the regulatory process and framework around greenfields agreements appropriate?[[121]](#footnote-121)

**Response:**

API offers no comment.

What have the roles been of governments and employer organisations, and any effects on the outcomes in the relevant part of the construction industry?[[122]](#footnote-122)

**Response:**

API offers no comment.

What is the overall role played by the work practices, the industrial relations system and its institutions in increasing costs in the construction industry?[[123]](#footnote-123)

**Response:**

API offers no comment.

What specific features of that system are at fault, and how could they be corrected?[[124]](#footnote-124)

**Response:**

API offers no comment.

What other associated reforms or cultural changes may be required for effective employee/employer relationships?[[125]](#footnote-125)

**Response:**

API offers no comment.

How can such changes be best implemented?[[126]](#footnote-126)

**Response:**

API offers no comment.

Is there any scope to reduce labour shortages by using less skilled labour or by using technologies that substitute for labour?[[127]](#footnote-127)

**Response:**

API offers no comment.

To what extent have skill shortages contributed to the cost pressures for public infrastructure construction projects?[[128]](#footnote-128)

**Response:**

API offers no comment.

What evidence is there for current shortages among specific occupations?[[129]](#footnote-129)

**Response:**

API offers no comment.

Are skill shortages likely to be persistent?[[130]](#footnote-130)

**Response:**

API offers no comment.

How have 457 visas (and their underpinning arrangements) remedied skill shortages, and with what impacts on costs?[[131]](#footnote-131)

**Response:**

API offers no comment.

What are the appropriate policies to address skill shortages?[[132]](#footnote-132)

**Response:**

API offers no comment.

### Market structure and behaviours

Does whether the client is public or privately owned have implications for the cost of the project? If so, why, and what is the evidence for this? If not, do other client characteristics affect the cost of the project?[[133]](#footnote-133)

**Response:**

API offers no comment.

Are there differences in contracting arrangements across firms?[[134]](#footnote-134)

**Response:**

API offers no comment.

Is it possible to identify ‘best practice’ contracting arrangements?[[135]](#footnote-135)

**Response:**

API offers no comment.

Is the market for major infrastructure projects efficient? If not, what is the source of the inefficiency and how can it be remedied?[[136]](#footnote-136)

**Response:**

API offers no comment.

Does the current market structure lend itself to the efficient provision of infrastructure?[[137]](#footnote-137)

**Response:**

API offers no comment.

What is the combined market share of the major Australian construction groups?[[138]](#footnote-138)

**Response:**

API offers no comment.

How profitable have the major Australian construction groups been in recent years, with particular regard to the domestic market?[[139]](#footnote-139)

**Response:**

API offers no comment.

How does this compare with the profitability of smaller construction groups?[[140]](#footnote-140)

**Response:**

API offers no comment.

Do the divisions of the bigger market players effectively compete against each other?[[141]](#footnote-141)

**Response:**

API offers no comment.

Does either the client or the supplier of the instruction possess market power? If so, what is the extent of the market power and how does it manifest itself?[[142]](#footnote-142)

**Response:**

API offers no comment.

How significant are any obstacles to gaining market share for smaller Australian firms or locally-based international firms?[[143]](#footnote-143)

**Response:**

API offers no comment.

Why have there not been more international firms entering the market? Do local firms, particularly the big two suppliers, have an advantage? If so, what is the nature of this advantage?[[144]](#footnote-144)

**Response:**

API offers no comment.

Does the Australian market have any appreciable barriers to entry? If so, does this barrier apply to both domestic and foreign firms?[[145]](#footnote-145)

**Response:**

API offers no comment.

To what extent does market structure or any conservative procurement cultures affect the optimal uptake of new cost-reducing technologies?

**Response:**

API offers no comment.

To what extent does ‘project’ risk affect the cost of a project?[[146]](#footnote-146)

**Response:**

API offers no comment.

What are the major ‘project’ risks? How are the risks managed, and who bears these risks?[[147]](#footnote-147)

**Response:**

API offers no comment.

 Is there scope for improved management of project risk to alleviate cost pressures?[[148]](#footnote-148)

**Response:**

API offers no comment.

Does the current market structure impose ‘market discipline’ on the delivery of major projects?[[149]](#footnote-149)

**Response:**

API offers no comment.

Are there appropriate incentives for suppliers to deliver contracts on time and on schedule?[[150]](#footnote-150)

**Response:**

API offers no comment.

Is there scope for the greater use of incentives to curtail cost increases?[[151]](#footnote-151)

**Response:**

API offers no comment.

How prevalent is sub-contracting in the provision of major infrastructure?[[152]](#footnote-152)

**Response:**

API offers no comment.

Is there any difference in how the major construction companies, consortia and other smaller constructors sub-contract?[[153]](#footnote-153)

**Response:**

API offers no comment.

Is there market power in sub-contracting markets? If so, which markets and which parties exhibit this power?[[154]](#footnote-154)

**Response:**

API offers no comment.

What is the impact of sub-contracting on the overall cost of a project?[[155]](#footnote-155)

**Response:**

API offers no comment.

### Procurement and project management

To what extent have poor contracting arrangements resulted in cost overruns for major projects? How can this be avoided in the future?[[156]](#footnote-156)

**Response:**

API offers no comment.

How do Australian procurement practices compare to equivalent overseas arrangements and private sector processes?[[157]](#footnote-157)

**Response:**

API offers no comment.

To what extent does the current procurement design favour market incumbents and exclude potential market entrants?[[158]](#footnote-158)

**Response:**

API offers no comment.

To what extent do Commonwealth and state local procurement policies and practices result in higher project development costs? Are these costs justified by increased competition in the supply chain or other possible benefits?[[159]](#footnote-159)

**Response:**

API offers no comment.

Do the government teams responsible for procuring major projects have the correct skill mix? If not, what measures are most likely to ameliorate these deficiencies?[[160]](#footnote-160)

**Response:**

API offers no comment.

### Other cost pressures

Are current regulatory requirements appropriate for businesses tendering for public infrastructure projects?[[161]](#footnote-161)

**Response:**

API offers no comment.

To what extent are major infrastructure projects coordinated in terms of location and timing? Should there be more such coordinating, and if so, how?[[162]](#footnote-162)

**Response:**

API offers no comment.

What other significant cost drivers for public infrastructure construction projects have not been mentioned in this issues paper? What would be the most appropriate role of policy in relation to these drivers?[[163]](#footnote-163)

**Response:**

API offers no comment.

# APPENDIX 1

**AUSTRALIAN PROPERTY INSTITUTE INC.**

The Australian Property Institute, (formerly known as the Australian Institute of Valuers and Land Economists), has enjoyed a proud and long history. Originally formed in South Australia over 87 years ago in 1926, the Institute today represents the interests of nearly 8,000 property experts throughout Australia.

The API, the nation’s peak professional property organisation and learned society, has been pivotal in providing factual, independent and dispassionate advice on a broad range of property issues addressed by the Commonwealth and State/Territory governments and their agencies since the Institute was formed.

In addition, the Institute’s advice has increasingly been sought by international bodies such as the United Nations, the Food and Agriculture Organisation (FAO) and the World Bank, evidencing a level of expertise within the API and its membership, which is recognised regionally and globally.

As a professional organisation the primary role of the Australian Property Institute is to set and maintain the highest standards of professional practice, education, ethics and discipline for its members.

Institute members are engaged in all facets of the property industry including valuation, property development and management, property financing and trusts, property investment analysis, professional property consultancy, plant and machinery valuation, town planning consultancy, property law, research and education.

Membership of the Australian Property Institute has become synonymous with traits and qualities such as professional integrity and client service, industry experience, specialist expertise, together with tertiary level education and lifelong continuing professional development.

# APPENDIX 2

**SUBMISSION COMMITTEE**

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1. Productivity Commission (2013) *Public Infrastructure: Issues Paper* (Melbourne) November, 1. [↑](#footnote-ref-1)
2. Productivity Commission, 1. [↑](#footnote-ref-2)
3. The County of Cumberland Planning Scheme Ordinance was prepared pursuant to the *Local Government (Town and Country Planning) Amendment Act* 1945(NSW). [↑](#footnote-ref-3)
4. Brown A.J. & Sherrard H.M., (1969) *An Introduction to Town and Country Planning* 2nd ed*.* (Sydney: Angus & Robertson Ltd), 365-366. [↑](#footnote-ref-4)
5. Productivity Commission, 4. [↑](#footnote-ref-5)
6. Productivity Commission, 3, Box 1. [↑](#footnote-ref-6)
7. Productivity Commission, 4. [↑](#footnote-ref-7)
8. Productivity Commission, 6. [↑](#footnote-ref-8)
9. Productivity Commission, 6. [↑](#footnote-ref-9)
10. Productivity Commission, 6. [↑](#footnote-ref-10)
11. Productivity Commission, 8. [↑](#footnote-ref-11)
12. Productivity Commission, 8. [↑](#footnote-ref-12)
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64. Productivity Commission, 15. [↑](#footnote-ref-64)
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78. Productivity Commission, 19. [↑](#footnote-ref-78)
79. RPS Australia East Pty Ltd (2013) *TransGrid Review of Public Consultation: Draft Report* (Sydney) October. [↑](#footnote-ref-79)
80. E.g. *Land Acquisition (Just Terms Compensation) Act* 1991 (NSW) sets out at *Division 1* the entitlement to compensation. [↑](#footnote-ref-80)
81. E.g. s.62(1) *Land Acquisition (Just Terms Compensation) Act* 1991 (NSW) [↑](#footnote-ref-81)
82. Productivity Commission, 19. [↑](#footnote-ref-82)
83. Productivity Commission, 20. [↑](#footnote-ref-83)
84. Productivity Commission, 20. [↑](#footnote-ref-84)
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101. Productivity Commission, 25. [↑](#footnote-ref-101)
102. Productivity Commission, 25. [↑](#footnote-ref-102)
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