

Draft Report

11 April 2014

Economic Regulation Authority

WESTERN AUSTRALIA

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Economic Regulation Authority Perth, Western Australia Phone: (08) 6557 7900

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Summary of recommendations

Infrastructure

- 1. Apply project evaluation processes, including cost-benefit analysis, consistently and rigorously to all major infrastructure projects.
- 2. Subject all election commitments to rigorous project evaluation processes before being included in the State Budget.
- 3. Publish the outcomes of all major project evaluations.
- 4. Repeal the Royalties for Regions legislation, or restrict regional funding to an amount determined annually as part of the Budget process and guided by appropriate cost benefit analysis on a project-by-project basis.
- 5. Trial a congestion charge for entering the CBD during morning and afternoon peak periods. In order to implement this, further investigation will be required in order to determine the borders of the charging area, the fee structure, the charging and management system and the capacity of the public transport system to handle the likely increase in patronage.
- 6. Progress be made towards implementing fully cost-reflective electricity tariffs for households and small businesses.
- 7. Investigate the feasibility of introducing flexible electricity charging schemes such as time-of-use and critical peak pricing.
- 8. Expand the use and scope of PPP's to procure public infrastructure, particularly in cases that will result in core services being delivered for better value for money.
- 9. Develop a process and guidelines for unsolicited infrastructure proposals from the private sector.
- 10. Conduct a full investigation into the divestment of assets that pass the threshold criteria for private ownership.

Reducing the cost of complying with regulation

- 11. Appoint a lead reform agency (either the Department of Premier and Cabinet, or alternatively the Department of Finance) to work closely with senior departmental staff across all areas of Government to develop regulatory reform targets and monitor, enforce and publish performance against the targets.
- 12. Set Key Performance Indicators for regulatory reform targets for senior departmental staff.

- 13. Establish an Information and Communications Technology (**ICT**) office within Government (the Department of Premier and Cabinet, or alternatively the Department of Finance) to:
 - a. identify technology-based strategies to reduce regulatory burden in Western Australia;
 - b. develop and implement a policy and implementation plan for ICT reform in the State; and
 - c. provide ongoing support to the Western Australian public sector, in the areas of service delivery, strategic ICT policy and planning, public sector innovation, and information management, focusing on reducing the level of regulatory burden.
- 14. Update the Red Tape Reduction Group's 2009 assessment of regulatory burden in Western Australia, to measure current levels of regulatory burden in the State.
- 15. Require departments with a regulatory role to:
 - a. establish a customer service charter with clear and measurable service standards;
 - b. have this customer service charter reviewed by a lead reform agency responsible for the reform programme;
 - c. publish this customer service charter online, and display it in areas where staff provide services to the public;
 - d. include a report on actual performance against the service standards in the departmental Annual Report; and
 - e. set Key Performance Indicators for service standards for senior departmental staff.
- 16. Where regulatory problems are particularly broad or complex, establish working groups that include public, private, and community-sector representatives to assist in developing solutions.
- 17. Replace the Regulatory Impact Assessment Guidelines for Western Australia with a statutory mandate establishing the Regulatory Impact Assessment process, and defining the roles and responsibilities of the Regulatory Gatekeeping Unit.
- 18. Establish a five-yearly recurring review of the implementation and effectiveness of the Regulatory Impact Assessment process, to be undertaken by the Office of the Auditor General.
- 19. Transfer responsibility for the central publication, but not preparation, of Regulatory Impact Assessment documentation to the Regulatory Gatekeeping Unit, including the timely publishing of:
 - a. Preliminary Impact Assessments;
 - b. Consultation and Decision Regulatory Impact Statements;
 - c. Compliance Notices and advice of non-compliance;

- d. statements of the supporting rationale for any non-compliant proposals adopted by Government, to be provided to the Regulatory Gatekeeping Unit by the Government;
- e. notices of exemptions (including the supporting reasons for approval of the exemption);
- f. notices of any changes made between a Consultation Regulatory Impact Statement and the subsequent Decision Regulatory Impact Statement, to be included with the Decision Regulatory Impact Statement; and
- g. a current list of all proposals undergoing Regulatory Impact Assessment, including the status of each, with the exception of cases where Cabinet-in-Confidence restrictions apply.
- 20. Amend the Guidelines (or their legislated replacement) to:
 - a. limit applications for exemptions, including Treasurer's exemptions, to the period immediately after the requirement for a Regulatory Impact Statement has been triggered;
 - b. limit the granting of exemptions to exceptional circumstances (such as emergency situations) where a clear public interest can be demonstrated;
 - remove the capacity for exemptions to be granted in the case of election commitments, except where exceptional circumstances apply; and
 - d. require timely publication of the reasons for all exemptions granted.
- 21. Establish a training and resourcing initiative to ensure that all Government departments involved in the preparation of Regulatory Impact Statements and Preliminary Impact Assessments have the capacity to conduct key analytical work (such as cost benefit analysis) in-house.
- 22. Mandate a 30-day minimum consultation period for Regulatory Impact Assessments, where consultation is undertaken as a part of the Regulatory Impact Assessment process.
- 23. Empower the Regulatory Gatekeeping Unit to develop and conduct postimplementation reviews for all non-legislative proposals that have been subject to a Regulatory Impact Assessment.
- 24. Direct the Regulatory Gatekeeping Unit to perform an audit of legislation overdue for review, and set a schedule for the review of these Acts.
- 25. Establish a review policy to be applied to all new legislation, specifying:
 - a. criteria triggering the mandatory inclusion of a Review of Act clause;
 - b. criteria for identifying the most appropriate Government or external organisation to perform the review;
 - c. criteria to guide legislators in identifying how frequently a review should be performed; and

d. standard wording for the Review of Act clause.

State taxes

- 26. Consider options for reforming payroll tax, residential transfer duty and land tax:
 - a. broadening the base and lowering the rate of all three taxes to increase their efficiency; or
 - b. increasing reliance on efficient taxes (land tax and payroll tax) and reducing or abolishing the inefficient taxes (residential transfer duty).

Retail trading hours

- 27. Amend the *Retail Trading Hours Act 1987* such that retail trading hours in Western Australia are fully deregulated, with the exception of:
 - a. Christmas Day (12:00am 11:59pm);
 - b. Good Friday (12:00am 11:59pm); and
 - c. the morning of ANZAC Day (12:00am 12pm),

during which time only retailers that employ ten (or fewer) staff may open.

Taxi industry

- 28. Consider options for reforming the taxi industry:
 - a. full and immediate removal of quantity restrictions in the taxi industry;
 or
 - b. staged removal of quantity restrictions in the taxi industry; or
 - c. removal of the regulations that prevent small charter vehicles from competing with the taxi industry.

Potato marketing

- 29. Either:
 - a. repeal the *Marketing of Potatoes Act 1946* and *Marketing of Potatoes Regulations 1989* immediately; or
 - b. repeal the *Marketing of Potatoes Act 1946* and *Marketing of Potatoes Regulations 1989* with an adjustment period.

Domestic gas reservation policy

30. Rescind the domestic gas reservation policy as soon as possible.

Keystart

31. Abolish Keystart as soon as possible.

1 Introduction

1.1 Terms of Reference

The Treasurer of Western Australia has given written notice to the Economic Regulation Authority (**ERA**) to undertake an Inquiry into Microeconomic Reform in Western Australia.

The Terms of Reference for the Inquiry requires the ERA to develop the most advantageous package of microeconomic reform measures that the Western Australian Government could implement to improve the efficiency and performance of the Western Australian economy, with a focus on areas of reform that have the potential to achieve the following outcomes:

- improved productivity and flexibility of the Western Australian economy;
- increased choice for consumers and business, leading to net economic benefits to Western Australia;
- increased opportunities for Western Australian businesses to effectively compete for national/international market share; and
- removal or streamlining of unnecessary regulation.

In developing its recommendations, the ERA is required to:

- assess the current level of efficiency of Western Australia's economy, including a comparison with other relevant national and international economies;
- identify those areas in the economy where reform could enhance their contribution to the overall Western Australian economy;
- identify options for improving the economic efficiency of the key areas identified above;
- prioritise key areas of reform based upon their potential impact on overall economic efficiency and future growth; and
- recommend a small number of specific key reforms or sectors that require further investigation by the ERA and/or policy development by the Government.

1.2 Public consultation

The ERA is seeking to consult extensively with the public in undertaking this Inquiry and developing its recommendation.

The ERA released an Issues Paper on 9 August 2013 and sought feedback on issues relevant to microeconomic reform in Western Australia. The ERA was pleased to receive 57 submissions in response.¹

The ERA subsequently released a Discussion Paper on 8 November 2013, which provided further detail on a number of specific issues raised by the public and Government

¹ Where permission has been granted by the author, the submissions are available on the ERA's website.

departments in response to the Issues Paper. The ERA sought more detailed feedback in relation to these issues and received 27 submissions in response.

Each submission was reviewed and discussed by the ERA, and whilst the ERA has limited the topics to be considered by the present Inquiry, it recognises that many of the other topics raised in the submissions are likely to be of significance to Western Australians.

A full list of parties who provided the ERA with a public submission in response to the Discussion Paper is given in Appendix 9. These submissions are also available in full on the ERA's website, where they may serve to inform public debate on the issues raised.

1.2.1 Preparing a submission

The ERA encourages further submissions on the issues and potential recommendations arising from its Inquiry into Microeconomic Reform and has produced this Draft Report to facilitate comment. The ERA is seeking detailed feedback from submissions in relation to those issues and potential recommendations.

You are invited to provide a submission on matters of relevance to the Terms of Reference and the issues raised in this Draft Report. Submissions are due by 4:00 pm (WST) on Friday, 9 May 2014. All feedback received in response to this Draft Report will be considered, and will assist the ERA in forming recommendations for the Final Report.

This Draft Report examines some of the issues currently facing the Western Australian economy, and in some cases provides potential recommendations.

- Chapters 2 provides an overview of the rationale for microeconomic reform and a discussion of compensation for losers as a result of recommended microeconomic reforms.
- Chapter 3 contains information regarding the current performance of the West Australian economy.
- Chapters 4 to 7 contain specific areas of reform on which the ERA is seeking feedback from submitters: including public infrastructure; divestment of Government assets; regulatory burden; State taxes; regulation of retail trading hours; the taxi industry; the potato industry; the domestic gas reservation policy and Keystart home loans.

1.2.2 Next steps

After reviewing the responses received to this Draft Report, the ERA will prepare a final report, which will be presented to the Treasurer by 30 June 2014. The Treasurer will have 28 days to table the Final Report in Parliament.

In accordance with section 45 of the *Economic Regulation Authority Act 2003*, the ERA will act through the Chair and members in conducting this Inquiry.

1.3 Invitation to make submissions

Interested parties are invited to make submissions on the Authority's Draft Report by 4:00 pm (WST) Friday, 9 May 2014 via:

Email address: publicsubmissions@erawa.com.au Postal address: PO Box 8469, PERTH BC WA 6849

Office address: Level 4, Albert Facey House, 469 Wellington Street,

Perth WA 6000

Fax: 61 8 6557 7999

CONFIDENTIALITY

In general, all submissions from interested parties will be treated as being in the public domain and placed on the Authority's website. Where an interested party wishes to make a submission in confidence, it should clearly indicate the parts of the submission for which confidentiality is claimed, and specify in reasonable detail the basis for the claim. Any claim of confidentiality will be considered in accordance with Section 55 of the *Economic Regulation Authority Act (2003)*.

The publication of a submission on the Authority's website shall not be taken as indicating that the Authority has knowledge either actual or constructive of the contents of a particular submission and, in particular, whether the submission in whole or part contains information of a confidential nature and no duty of confidence will arise for the Authority.

General enquiries

Leonie Browner
Economic Regulation Authority
Ph: 08 6557 7900

records@erawa.com.au

Media enquiries

Richard Taylor
Riley Mathewson Public Relations

Ph: 61 8 9381 2144 admin@rmpr.com.au

2 The rationale for microeconomic reform

The Terms of Reference for the Microeconomic Reform Inquiry requires the ERA to identify the most advantageous package of microeconomic reform measures that the Western Australian Government could implement to improve the efficiency and performance and hence productivity of the Western Australian economy.

Microeconomic reform can be defined as government policies or initiatives aimed at improving the productivity of specific industries or sectors in the economy.²

The purpose of this chapter is to provide:

- a high level description of productivity, its importance and how it can be enhanced through microeconomic reform;
- an overview of the nature of the microeconomic reforms recommended in this Draft Report; and
- the implications of microeconomic reform for various stakeholder groups, winners and losers from the recommended reforms and whether there are valid arguments for compensation.

2.1 Productivity and microeconomic reform

Productivity measures how effectively an economy uses resources (labour and capital) in order to deliver the goods and services demanded by consumers. An increase in productivity represents an increase in output created from a fixed set of inputs (that is, productivity is about working smarter rather than working harder).

The benefits of increased productivity at an economy-wide level can be observed in two forms:

- producing more with less occurs when the production of various goods and services increase relative to the amount of inputs used to produce them. This will lead to a combination of greater income for producers and lower prices for consumers, with the exact distribution of gains depending on the structure of each particular industry; and
- better utilisation of resources occurs when productivity growth allows resources (capital and/or labour) to be released from those industries that can now produce the desired level of output with fewer inputs. This frees up resources to be used for additional leisure or production elsewhere, expanding production choices and increasing the standard of living.

Productivity gains have real and tangible benefits to individuals and businesses (that is, in the form of higher incomes or profits and concomitant standards of living). Reflecting this, Governments should have as an objective implementation of policies to enhance productivity. Microeconomic reform is the primary policy lever available to governments to do this.

Forsyth, P. (1992) 'A Perspective on Microeconomic Reform', in Forsyth, P. (ed) Microeconomic Reform in Australia, Allen and Unwin, Sydney.

Microeconomic reform directly impacts productivity by influencing the input/output relationships in the economy. For example, restricting production of a good by licensing producers can result in higher prices and fewer products available to consumers. A reform that removes licence restrictions, which do not have a public interest justification, can lead to lower prices and a greater supply of the product or service.

Microeconomic reform also results in indirect effects on productivity; these include an increase in competition and openness³ of the economy. In order to compete, businesses will generally become more productive. The opening of the economy also allows greater access to technology, expertise, trade and investment, all of which result in higher standards of living for individuals.

Professor Fred Hilmer AO, the architect of the national competition policy reforms of the 1990s, has identified two broad categories of microeconomic reforms: enablers and incentives.⁴

Enablers increase the capabilities in the economy and are the foundations that support businesses and individuals in their work. Enablers include infrastructure, training and education and legal frameworks. For instance, the Government can encourage or facilitate the development of infrastructure at crucial times to enhance the productivity of labour and capital.

Incentives are mechanisms that encourage businesses and individuals to improve their performance. Incentives can improve the productivity of an economy by:

- reducing unnecessary regulation or regulatory barriers to entry to allow existing and new firms and industries to react to changes in demand and technology, allowing them to capitalise on these changes to become more productive;
- ensuring taxes comply with the core principles of good tax design, which stipulate that taxes should be efficient, simple and equitable; and
- increasing competition as competitive markets will generally serve the interests of
 consumers and the wider community by providing strong incentives for suppliers
 to operate efficiently, be price competitive and to innovate, thus maximising the
 production of goods and services from the scarce resources available.

The ERA considers that both enablers and incentives are important to the productivity of the Western Australian economy and that the Government should not focus on one to the exclusion of the other. However, it is incentives that provide the impetus for economically efficient behaviour, productivity gains and innovation. In the absence of these incentives, the provision of additional enablers may not deliver productivity improvements.

Hilmer notes there has been a shift in focus since the reforms of the 1990's away from incentives and towards enablers.⁵ One example of this is the changing role of the National Competition Council since delivering upon the National Competition Policy reforms. The role of the National Competition Council is now largely limited to making recommendations on third party access, whereas it had a much wider remit in the 1990s involving reviewing the implementation of National Competition Policy reforms. In contrast, Infrastructure

Openness in economic terms refers to the ease with which goods, services, innovations, technologies and capital can flow between participants in an economy and the international community.

Hilmer, F., 2014, Competition Policy from 1992 to 2014, Presentation to the Business Council of Australia on 13 February 2014, accessed from http://www.bca.com.au/docs/d9695dfb-9c05-49b5-b5a5-aeb96866c400/Fred_Hilmer_Competition_Policy_from_1992_to_2014_FINAL_21.3.2014.pdf on 25 March 2014.

Hilmer, F., 2014, Competition Policy from 1992 to 2014, Presentation to the Business Council of Australia on 13 February 2014, accessed from http://www.bca.com.au/docs/d9695dfb-9c05-49b5-b5a5-aeb96866c400/Fred Hilmer Competition Policy from 1992 to 2014 FINAL 21.3.2014.pdf on 25 March 2014.

Australia, which advises on Australia's infrastructure needs and financing methods, was established in 2008, when there was a much greater focus on enablers.

One reason for this shift in focus is that changing incentives is often more politically difficult than changing enablers. Microeconomic reform often involves winners and losers and even though society overall might be better off as a result of a particular reform it is often the case that the losers are a very vocal minority — one person's barrier to entry can be another person's protection from competition. This makes reform politically challenging. Additionally, a focus on enablers (for example, more infrastructure, or better education) is often a far easier political debate.

Again, as Hilmer notes, in the early 1990's "we had stagnant productivity, inefficient government monopolies, heavily regulated non-traded services. But we had a bipartisan consensus" [on the need for reform].⁶ There is a need to rebuild that consensus if the potential benefits from microeconomic reform in terms of improved living standards are to be maximised.

A final point from Hilmer is worth noting. If reducing unemployment is a key objective then the research suggests that the real driver of employment is the growth in new businesses. Hilmer considers that "what we should be doing is creating an environment where new businesses are encouraged to form". This reinforces the need to focus on incentives as well as enablers, particularly removing regulatory barriers to entry and letting the forces of competition drive innovation.

2.2 Overview of microeconomic reforms in the Draft Report

In this Inquiry, the ERA has given consideration to how the productivity of the Western Australia economy could be enhanced by addressing enablers, incentives and the interaction between enablers and incentives.

This report makes recommendations for reform across 19 different areas⁸ of the Western Australian economy, each of which is expected to generate considerable benefits to Western Australians.

Quantifying the benefits of reform can be challenging – in many situations the ERA has not been able to source sufficient data or information to undertake a robust quantification. However, to the extent to which benefits have been quantified in this Draft Report, the potential gains are significant.

Hilmer, F., 2014, Competition Policy from 1992 to 2014, Presentation to the Business Council of Australia on 13 February 2014, p. 6, accessed from http://www.bca.com.au/docs/d9695dfb-9c05-49b5-b5a5-aeb96866c400/Fred_Hilmer_Competition_Policy_from_1992_to_2014_FINAL_21.3.2014.pdf on 25 March 2014.

Hilmer, F., 2014, Competition Policy from 1992 to 2014, Presentation to the Business Council of Australia on 13 February 2014, p. 8, accessed from http://www.bca.com.au/docs/d9695dfb-9c05-49b5-b5a5-aeb96866c400/Fred Hilmer Competition Policy from 1992 to 2014 FINAL 21.3.2014.pdf on 25 March 2014.

⁸ The nineteen areas being: congestion charges; State taxes; the taxi industry; the potato market; Royalties for Regions; Government project evaluation; electricity time-of-use/cost-reflective charging; Government engagement in commercial activities; public/private partnerships; unsolicited proposals; divestment of Government assets; fit for purpose investment; non-asset solutions; innovative funding sources; State infrastructure strategy; reducing regulatory burden; retail trading hours; domestic gas policy; and Keystart.

The total quantifiable benefit of the reforms recommended by the ERA could exceed \$549 million per annum, largely as a result of the recommendation to reform State taxes.⁹ This amounts to an annual benefit of \$234 for every Western Australian resident.¹⁰

In addition to this, the ERA has not been able to quantify the benefits from the remaining recommendations but expects considerable benefits to be derived from better provisioning of infrastructure spending, more efficient use of existing infrastructure, reducing the cost of regulatory burden and deregulating retail trading hours.

2.2.1 Issues addressed in this report

In Chapter 4 of this report, the ERA considers the reforms that could be made to enhance the contribution that public infrastructure makes to productivity. As an enabler, the provision of public infrastructure is essential for an economy to function effectively: factors that prevent the Government from delivering sound infrastructure projects are likely to have a detrimental effect on the economy.

The ERA has identified a number of ways in which the delivery of public infrastructure could be improved in Western Australia. These include better application of infrastructure planning processes, selecting infrastructure projects more carefully to get better value for money, and improving utilisation of existing infrastructure before committing to expensive expansions.

The ERA considers that productivity of some public infrastructure could be improved if it were provided by the private sector. In general, the private sector is more efficient at service delivery – in part because it has stronger incentives (that is, profit maximisation) and it is not affected by the conflicts of interest that beset government decision making (for example, trade-offs between commercial and social policy objectives). The ERA has developed criteria for identifying Government businesses and assets that are suitable for divestment and demonstrated how these would be applied.

The ERA supports a more extensive application of user charges for infrastructure, such as road user charges, to provide incentives for more efficient use. Analysis by the Bureau of Infrastructure, Transport and Regional Economics indicates that if an effective congestion charge was in place, Perth could save around \$1.6 billion in productivity losses (in the form of increased travel times, less reliable travel times, pollution costs and additional fuel costs) in 2015.¹¹

In Chapter 5, the ERA considers options for reducing regulatory burden in Western Australia. Hilmer notes that regulatory burden has an incentive effect and a cost effect. At one end of the spectrum, these effects can be minor in nature (for example, adding extra time and effort in complying with processes) or they can be quite significant (for example, creating a barrier to competition or paralysing an industry to the extent that the regulatory approach has to be completely redesigned). ¹²

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⁹ This is based on the estimated benefit of \$580 million from reform of State taxes, \$9 million from reform of the taxi industry and \$5.5 million from the reform of the Potato industry.

¹⁰ The Australian Bureau of Statistics estimates the Western Australian residential population as being 2,535,701 as at September 2013 (ABS data set: 3101.0)

¹¹ Bureau of Infrastructure, Transport and Regional Economics, 2007, Estimating urban traffic and congestion cost trends for Australian cities.

Hilmer, F., 2014, Competition Policy from 1992 to 2014, Presentation to the Business Council of Australia on 13 February 2014, p. 8, accessed from http://www.bca.com.au/docs/d9695dfb-9c05-49b5-b5a5-aeb96866c400/Fred Hilmer Competition Policy from 1992 to 2014 FINAL 21.3.2014.pdf on 25 March 2014.

The ERA makes recommendations on ways to reduce the compliance costs of existing regulatory burden and ways to improve Government processes to prevent the introduction of new poorly designed regulation. The ERA recommends the Government undertake a broad regulatory reform programme, accelerate the use of technology to improve services, and consider key performance indicators for senior public sector staff on reform progress and service delivery. The ERA recommends strengthening existing protections against new regulatory burden by establishing Regulatory Impact Assessments as a legal requirement, providing a minimum consultation period for these assessments, and publishing all statements and compliance notices relating to the assessment process.

In Chapter 6, the ERA examines the efficiency costs of State taxes and assesses options for reforming State taxes. Taxes have an incentive effect. For example, the combination of exemption thresholds and high tax rates in payroll tax regime can act as a disincentive to the growth of small businesses who may try to avoid engaging additional staff so they are not brought into the payroll tax system. Such distortions to behaviour impose an efficiency cost and are most acute when taxes are applied to narrow and mobile bases.

The efficiency costs arising from Western Australia's three most significant taxes (payroll tax, residential transfer duty and land tax) are significant and have been estimated to be in the order of \$1 billion per annum. A preliminary assessment indicates that the reform options considered in this Draft Report have the potential to reduce the efficiency costs of these three taxes by around \$500 million per annum. 14

In Chapter 7, the ERA considers five specific sectors where there are interventions in markets that may not be warranted: retail trading hours; the taxi industry; the potato market; Keystart Loans; and domestic gas. Government intervention in these markets dulls the incentives of participants to be efficient because competition has been restricted.

Western Australia's retail trading hours are among the most restrictive in Australia. Regulation of trading hours protects some small retailers from competition to an extent and therefore lessens their incentives to differentiate themselves in a way that would allow them to compete in an unregulated market. For retailers that do not enjoy this protection, regulation of retail trading hours prevents them from being able to operate when it may be profitable for them to do so. Trading hour restrictions also disadvantage 'bricks and mortar' shops relative to on-line retailers, which are not limited in their hours of operation.

The ERA considers that consumer choice, rather than Government regulation, should determine which shops open and when. Retailers will respond to consumer demand by opening when it is profitable for them to do so and remaining closed when it is not.

The taxi industry in Western Australia is highly regulated, with the Department of Transport determining the number of taxis licensed to operate in Western Australia and the maximum price that may be charged for taxi services. These regulations have resulted in taxi services being expensive, under-supplied and unreliable. The ERA estimates that removing the restriction on the quantity of taxis would result in a reduction in the price of taxi fares, generating a benefit to taxi passengers of around \$47 million per annum.

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This estimate has been calculated by Synergies Economic Consulting. Synergies used the estimates of average efficiency costs of payroll tax, transfer duty and land tax estimated by KPMG Econtech for the Henry Review of Taxation and applied these estimates to actual 2012/13 collections of these taxes by the Western Australian Government. Source: Synergies Economic Consulting, 2014, Review of Western Australia's tax system, A report for the Economic Regulation Authority.

¹⁴ Synergies Economic Consulting, 2014, Review of Western Australia's tax system, A report for the Economic Regulation Authority.

The fresh potato market in Western Australia is regulated by the *Marketing of Potatoes Act* 1946. This is the only remaining statutory agricultural marketing scheme, other than the rice industry in New South Wales, that the ERA could identify in Australia. Under this Act, the price, quantity and variety of fresh potatoes produced in Western Australia is determined by the Potato Marketing Corporation (**PMC**), rather than by the interaction of consumers and producers. These restrictions on competition dull the incentives of potato growers to respond to consumer demand and grow potatoes of a variety and quality sought by consumers. The ERA estimates that regulation of the fresh potato industry causes a net economic loss to Western Australia of approximately \$5.5 million per annum or around \$48 million over the next 15 years.

Keystart Loans is a State Government program that provides financing to potential home buyers who are unable to obtain financing from a private lender. Currently the Keystart loan book consists of over 16,000 loans at a total value of almost \$3.5 billion. Keystart does not require borrowers to take out lenders mortgage insurance (which would protect Keystart in the event of the borrower defaulting). The ERA estimates that Keystart has foregone around \$100 million in lenders mortgage insurance between 2008/09 and 2012/13. The ERA considers that the State Government is exposed to an unacceptable level of risk from Keystart and that there is a lack of understanding and transparency surrounding this risk. The ERA recommends that the Government should require Keystart borrowers to take out lenders mortgage insurance or else close the program.

The domestic gas reservation (**DGR**) policy requires proponents of liquefied natural gas projects to reserve 15 per cent of production from each export project for sale on the Western Australian market. The implementation of the DGR policy appears to have been the Western Australian Government's response to an adjustment by the market that involved a sharp spike in gas prices and tight supply of domestic gas. The ERA considers that there is no evidence of a market failure to justify the application of a DGR policy in Western Australia and that the DGR policy should be rescinded as soon as practicable. The ERA acknowledges that choosing to end the reservation policy may involve some structural adjustments in the domestic market. However, in the longer-term this will result in sustainable prices, more competition and greater security of supply.

2.2.2 Compensation

The ERA notes that, while the implementation of the recommendations contained in the Draft Report would be beneficial to the economy overall, in most instances the reforms would lead to winners and losers. Often, with reforms such as the ones recommended in this report, there are many winners and, while their individual gains are small, their number means a significant economy-wide benefit. In contrast, there are often only relatively few losers, but their losses may be individually significant.

The losers from reform are often those that have benefitted from a degree of protection by existing restrictions on competition and could experience a reduction in income or wealth as a consequence of the removal of those restrictions. As a general rule, the losers from reform can be expected to resist any reforms that will penalise them. This resistance will come in two main forms:

- trying to prevent the reforms from occurring by using any influence that is available
 to them and by attempting to discredit the analysis upon which the assessment of
 the relative benefits and costs of the reform are based upon; or
- should reform proceed, lobbying for compensation for lost income or wealth arising from implementation of the reforms.

Payment of compensation does not change the outcome of whether the removal of regulations is beneficial to the economy or not. It merely transfers money from one group to another on the basis that the receiving group is somehow more deserving of that money than those funding the compensation.

The ERA considers that there should not be any general rule on compensation and that groups or individuals need to explain why they deserve compensation on a case-by-case basis. There should not be an automatic presumption that individuals and businesses will be compensated for changes to government policies that have an adverse effect on them.

This is partly because different groups or individuals within groups can be affected differently by the same reform. For example, some holders of production licences¹⁵ (such as taxi plates or potato licences) may have received those licences for free, while others may have purchased them for considerable cost. Licence holders may have held these licences for long periods of time and gained more than their initial investment in the form of high prices, or they may have recently purchased the asset and so have not had the chance to recoup their investment.

The ERA considers that investors should be aware of the risks associated with any investment they make. Licences have a value because of a potential future revenue stream that can be generated from owning the asset, arising from the government restriction. This revenue stream is the consequence of the above normal profits that can be generated while the restriction remains in place. Investors will be aware of the risk that the Government may remove the restriction at some point in the future and this risk will be incorporated into the value of the licence. Investors would be 'double dipping' if they were to receive compensation from the removal of the restriction because they would already have been receiving above normal profits as a result of the restriction.

The counter argument to this is that the Government has effectively forced people to purchase the asset in order to enter the market or expand their operations, and therefore should compensate investors if reforms result in the value of the asset being eroded. However, investors or producers may have recouped the value of the asset through a higher income generated from being part of an artificially restricted group of sellers, and if this is the case there is no need to compensate for the loss of value of the asset.

The ERA notes that there are precedents for providing compensation for the removal of restrictions on competition. For example, as discussed in more detail in Chapter 7 of this report, assistance was provided for dairy farmers during the deregulation of the industry between 2000 and 2008. While there is no automatic right to compensation as a result of any policy change, the Government may consider that compensation is appropriate in particular circumstances.

The main areas of this Draft Report that are likely to generate claims for compensation are: reform of State taxes; deregulation of the taxi industry; and deregulation of potato marketing. The matter of compensation will be discussed in more detail in the specific chapters relating to each of these three areas. However, the ERA makes the following comments on each area by way of summary.

The ERA has examined options for reforming State taxes. The options contemplated would involve broadening the base of efficient taxes and lowering the rates by removing

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¹⁵ Production licences only have value because of government regulations. The regulations provide value to the asset holder because of the additional income that is associated with the restrictions. In the absence of the regulations, there would be no substantial value associated with holding a licence.

Even if an investor is not aware of this risk, the risk should be reflected in the purchase price of the asset as long as there are enough buyers and sellers in the market for the asset.

exemptions and concessions. This would result in some individuals and businesses becoming liable for some taxes for the first time. The ERA considers that if the Government deems compensation to be necessary it should be handled outside of the tax system and through the social concessions scheme. This will reinforce that taxes are revenue raising instruments, rather than social policy instruments. Any concessions should be specifically targeted to cases of hardship and should be limited.

The removal of quantity restrictions in the taxi market, or the removal of barriers to competition from the small charter vehicle market, is expected to cause a significant fall in taxi plate values and lease fees. For many taxi plate owners this could represent a significant loss in wealth and potentially income. The issue of whether taxi plate holders should be compensated for the loss of plate value is contentious, particularly as many non-driving plate-holders have elected to invest in plates, rather than being required to invest in order to operate a taxi. An overview of potential options for compensation has been provided and the ERA welcomes submissions on these.

Removal of the restriction on production of fresh potatoes would also cause a loss of asset value, although the ERA notes that many growers been allocated their licences for free. Nevertheless, the ERA notes that new growers or those expanding their business have had no choice but to purchase additional rights to produce at substantial cost and the loss in value of the licences may be realised if and when they exit the industry.

Additionally, the regulation of the fresh potato market has supported prices that have enabled higher cost producers to stay in the industry. Removal of this buffer would likely see some growers leave the industry, with a potentially adverse impact in particular regional locations.

Again, an overview of potential compensation options has been provided in Chapter 7 and the ERA welcomes submissions on these.

3 Economic performance

Western Australia's recent economic performance is a reflection of a variety of previous economic choices made in the State, covering a broad range of factors such as capital investment, labour, involvement in international and domestic markets, and investment in innovation.

Evaluating Western Australia's economic performance can highlight which sectors are performing well or performing poorly, and allows the positive and negative impacts of past choices to be evaluated. This understanding can be used to assist the Government in allocating its resources, and in making economic choices that are informed by past experience.

This Chapter provides information about the current and forecast performance of the Western Australian economy, providing context to subsequent sections of this Draft Report, and covering:

- the recent and forecast growth of the Western Australian economy;
- measures of Western Australia's productivity;
- the financial position of the State Government;
- · employment in Western Australia;
- the effect of population growth on the Western Australian economy;
- · the cost of living in Western Australia; and
- the economic relations between Western Australia and international economies.

3.1 Introduction

Western Australia has benefited from strong economic growth over the past decade, outpacing the broader Australian economy, and recording an average annual growth rate of 4.6 per cent per annum between 1995/96 and 2012/13.¹⁷

This economic strength has given the Western Australian Government a degree of freedom in its investment choices, particularly in relation to infrastructure projects. However, the same prosperity has also sheltered Western Australia from the impact of sub-optimal investment choices and inefficiencies in other areas of the economy that are overdue for reform.

The State's strong growth has been driven largely by a booming resources sector, rather than uniform growth across all areas. This has resulted in the development of an increasingly specialised economy. Private investment, production, and the State's export markets all illustrate a focus on the resources sector, and consequently, the emergence of China as the Western Australia's dominant export partner.

However, recent slowing of growth rates in Western Australia and a national contraction of the resources sector highlights the need to increase the rigour around the State's infrastructure prioritisation and expenditure. This also serves as a reminder that the boom in the resources sector has a limited lifespan, and has increased Western Australia's vulnerability to international economic conditions.

Western Australian Treasury, 2013, *Mid-year Economic and Fiscal Outlook 2013-14*, p. 56.

In light of this slowing growth, the ERA considers that it is time for Western Australia to address the current inefficiencies in its non-resources markets, to establish a stronger framework for infrastructure spending, and to implement reforms that will allow the State to transition from a specialised resources economy to a more diversified economy in the future.

3.2 Recent and forecast economic growth in Western Australia

In the 2013/14 Budget, the State Government noted that the outlook for the State's economy is still strong, despite a forecast decline in business investment, particularly in the resources sector. ^{18,19} However, more recent forecasts anticipate slowing economic growth in the coming year, both in Western Australia and across the country. ^{20,21}

Private investment in the State has also declined. The Department of State Development has indicated that business investment fell by an estimated 9 per cent in 2013, although this was offset to some degree by a 6.25 per cent increase in merchandise exports.²²

The prospect of economic contraction is of particular concern for the Western Australian Government, since its budget position has deteriorated in recent years, in spite of the State's sound economic performance. The reasons for this deterioration are discussed in detail in Section 3.3. The slow-down will further increase pressure on the Government to make prudent and well-considered investment choices, and particularly to more effectively prioritise spending. In Chapter 4, the ERA discusses this issue extensively, and provides recommendations to improve Government decision-making around infrastructure spending.

This section provides a broader context to the ERA's recommendations in this Draft Report, It considers productivity and productivity growth in Western Australia, discusses the factors that have contributed to high productivity over the past decade, and prospects for the State's future economic growth.

3.2.1 Productivity

Productivity is a measure of how effectively an economy uses its resources (labour and capital) in order to deliver the mix of goods and services required by its citizens. Consequently, productivity provides an indicator of the efficiency of the economy's operation.

The microeconomic reforms recommended in this Draft Report are aimed at improving productivity by increasing the outputs that are generated using existing labour and capital, leading to further increases in income and wealth. With this higher income, all else remaining constant, the average standard of living²³ of individuals increases. ²⁴

¹⁸ Western Australian Treasury, 2013, op. cit. p. 3.

Growth in export volumes is expected to increase in coming years, with a move away from business investment towards exports due to the completion of a number of large resources projects. This will likely occur because of a general transition from the construction phases of major projects to the production and export phases.

²⁰ Western Australian Treasury, 2013, *op. cit.* p. 3.

²¹ Reserve Bank of Australia, 2014, Statement on Monetary Policy – February 2014, p. 60.

²² Department of State Development, 2014, Western Australian Economic Profile – March 2014, p. 1.

²³ Standard of living refers to the overall level of material comfort, as measured by the goods and services available to an individual, group, or nation.

²⁴ It is important to note that this is not necessarily equivalent to an evenly spread increase in the standard of living across all Western Australians, a factor that is taken into account in a Government's social policy decisions.

How is productivity measured?

Gross Domestic Product (**GDP**) for the Australian economy measures the productivity of the national economy. Gross State Product (**GSP**) is the equivalent measure for Western Australia. This indicator is developed by calculating the total market value of all final goods and services produced within the economy, providing an estimate of the level of monetary value being produced by the economy.

There are two main types of productivity. These are:

- labour productivity, which indicates the volume of output produced per hour of labour used in production;²⁵ and
- Multi Factor Productivity (MFP), which measures the part of output growth that cannot be attributed to the growth of labour or an increase in capital inputs. MFP can result from business process innovations, advances in technology, and similar types of improvement in the efficiency of a firm's operations.²⁶

Western Australia's Gross State Product

Western Australia's contribution to the value of goods and services produced in Australia has increased steadily since 2005. Over the ten years since 2003/04 Western Australia's contribution to Australia's GDP rose from 14 per cent to over 16 per cent.²⁷ The growth rate of Western Australia GSP is expected to fall below the 4.9 per cent West Australian 10 year average rate but will remain above that of Australia's growth rate.²⁸ This trend can be seen in Figure 1.

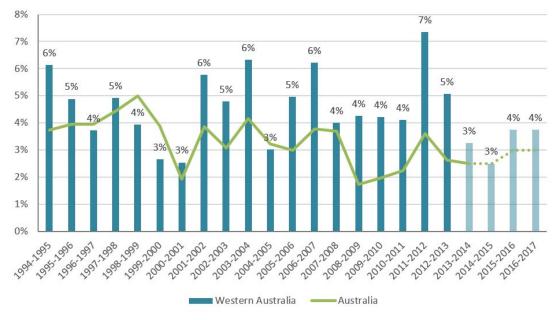


Figure 1 Western Australia GSP and Australia GDP Growth Rate (nominal)

Source: ABS Catalogue 5220 and 5206, Department of State Development, 2014, Western Australia Economic Profile and Australian Treasury, 2013, Mid-year Economic and Fiscal Outlook 2013-14.

Note: Light blue bars represent forecast GSP.

²⁵ Australian Bureau of Statistics, 2010, Productivity Glossary.

²⁶ Australian Bureau of Statistics, 2010, *Ibid.*

²⁷ Calculated from ABS data, Catalogues 5220 and 5206 as at March 2014.

²⁸ Department of State Development, 2014, Western Australia Economic Profile, p. 1.

Over time, the difference between Western Australian and national economic growth rates has resulted in a substantial difference between Western Australia's GSP per capita and that of other States. For example, by 2012/13, the State's GSP per capita was 48 per cent higher than the national average.²⁹

Labour productivity in Western Australia

Figure 2 provides a comparison of the labour productivity growth of Australia's States and Territories for the period 1991 to 2010. Western Australia's labour productivity growth was highest in the 1990's and, while slowing, remained positive throughout the 2000's. Growth was observed across all jurisdictions between 1991 and 2010, with the exception of the Northern Territory and Australian Capital Territory in a number of periods.

The increase in labour productivity represents an improvement in the amount produced per hour of work performed. The trend may be influenced by a range of factors, but is generally consistent with what would be expected when an economy experiences growth in a capital intensive industry, such as mining.

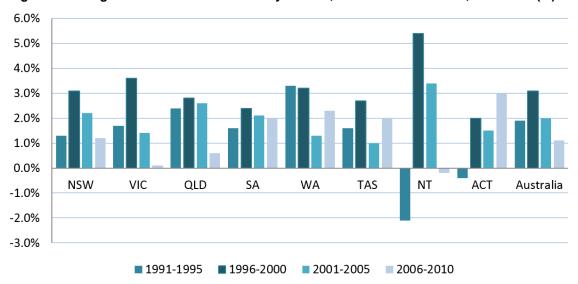


Figure 2 Average Annual Labour Productivity Growth, States and Territories, 1991-2010 (%)

Source: Victorian Competition and Efficiency Commission, Securing Victoria's Future Prosperity: A Reform Agenda, Productivity Information Paper, Victoria.

Multi Factor Productivity in Western Australia

Figure 3 shows a comparison of MFP growth across Australian States and Territories between 1991 and 2010. Steady declines in growth rates were seen in all States from 2000 onwards, after strong increases in the late 1990's. Trends in Western Australia were largely consistent with those seen across the rest of the country, after somewhat higher than average growth between 1991 and 1995.

²⁹ Government of Western Australia, Department of State Development, 2014, Western Australia Economic Profile -February 2014.

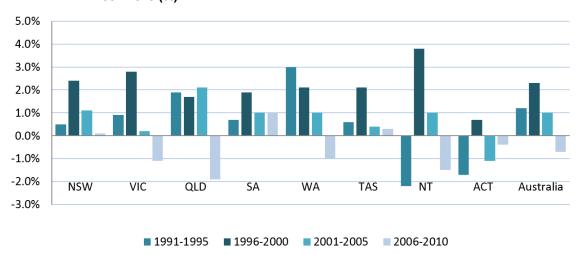


Figure 3 Average annual Multi-Factor Productivity Growth, States and Territories, 1991-2010 (%)

Source: Victorian Competition and Efficiency Commission, Securing Victoria's Future Prosperity: A Reform Agenda, Productivity Information Paper, Victoria.

The decline in MFP growth across Australia has variously been attributed to the fading effects of the microeconomic reforms of the 1990's³⁰ and a general lack of new reforms focused on productivity. The decline in MFP growth has also been attributed to labour shortages, declines in the adoption of new technologies, and increases in productivity-stifling legislation and regulation.³¹

Increases in Western Australia's income have been largely driven by increases in capital investment³² and growth of the labour force, rather than gains in MFP.

The relationship between productivity and industry structure in Western Australia

The value of goods produced and exported from Western Australia rose by 9 per cent in 2012/13 and was the largest contributor to Western Australian GSP growth in 2012/2013. Western Australia produced 48 per cent of the nation's goods exported in 2012/13. This is particularly notable in light of the fact that Western Australia represents just under 11 per cent of Australia's population.³⁴

Western Australia's economic development has become increasingly dependent on mining and resources in recent decades.³⁵ Western Australia's reliance on these sectors leaves it particularly vulnerable to global shocks. Investment in the States resources sector has begun to decline as major construction projects near completion and transition to a production and export phase.³⁶ Recent falls in commodity prices have also resulted in a

³⁰ For more detail, please see the ERA's Microeconomic Reform in Western Australia Issues Paper, 2013.

³¹ Grattan Institute, 2011, Australia's Productivity Challenge, p. 4.

³² Capital refers to any non-financial assets that are used in the production of goods and services.

³³ Department of State Development, 2014, op. cit.

³⁴ Department of State Development, 2014, op. cit.

³⁵ The mining and petroleum exports comprised of 89 per cent of the State's merchandise exports in 2012-13. Source: Department of Mines and Petroleum, 2013, Western Australian Mineral and Petroleum Digest 2012-13.

³⁶ Department of Mines and Petroleum, 2013, Western Australian Mineral and Petroleum Digest 2012-13, p. 7.

number of mining companies re-evaluating their investments in Western Australia.³⁷ These trends can be seen in Figure 4 below.

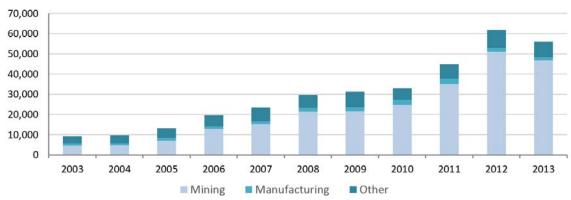


Figure 4 Western Australian Private Capital Expenditure (2011/12 \$'000)

Source: Australian Bureau of Statistics, Private New Capital Expenditure and Expected Expenditure, Catalogue 5625.0.

The relationship between productivity and income in Western Australia

Figure 5 indicates that Western Australia has moved from being on par with most other State economies in terms of GSP per capita in 2003/04, to being considerably more productive per head of population by 2011/12. In 2011/12, the national average GDP per capita was around \$65,000, compared to Western Australia's GSP per capita of around \$100,000. This indicates that Western Australia produces a greater value of goods and services per person than other State, and is consistent with the high value produced per hour of work performed seen in the State's labour productivity.

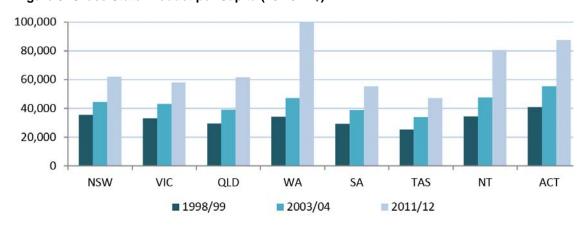


Figure 5 Gross State Product per Capita (2011/12 \$)

Source: Department of Treasury, State Accounts and Australian Bureau of Statistics, Catalogue 5220.0.

However, the Western Australia's economy is regarded as relatively capital intensive, 38 due to the magnitude of the State's resources industry. Consequently, improvements in labour productivity may not account for the entirety of the increase in GSP per capita. The increase may also be driven by other factors, such as an increase in capital investment per worker,

Department of Mines and Petroleum, 2013, Ibid.

a shift in the types of goods produced (that is, a shift to mining production), or an increase in the value of the goods or services produced (such as iron ore). However, it is difficult to draw precise conclusions, as the information needed to understand the relationship between labour and capital is not collected on a State level.³⁹

3.3 The Government's financial position

There has been a significant decline in the Government's financial position in recent years. This is a particular concern, as it suggests that the State may not be in a strong position to adapt to any contraction of key economic sectors, and may not have made best use of the benefits delivered by the mining boom.

This section discusses some of the State's economic vulnerabilities that have emerged as a result of the Government's current financial position. It examines a range of key financial measures, and their implications for Government finances, including:

- the State Government's credit rating;
- the State Government's financial targets;
- capital expenditure by the State Government;
- the State Government's net operating balance;
- · General Government revenue; and
- General Government expenses.

3.3.1 Western Australia's credit rating

What is a credit rating?

A credit rating is an indicator of the likelihood that a company or government will be able to pay back its debt. This is not based on a formula, but on the assessment and analysis of credit ratings agencies such as Standard & Poor's and Moody's. Essentially, the rating reflects the agencies' perception of the riskiness of investing in a company or jurisdictions.

Credit ratings have practical implications for governments, in that they influence the interest rate paid in the debt markets. However, strong credit ratings also have a marked impact on business confidence, providing a signal to investors that the State is a stable, safe and low risk place to invest.⁴⁰ Similarly, weak credit ratings can deter investment in the State.

Western Australia's credit rating downgrade

In spite of the State's sound economic performance in recent years, the State Government is now in a challenging financial position. On 18 September 2013, Standard and Poor's downgraded Western Australia's credit rating from AAA to AA+.

Forewarning of the credit rating downgrade was given as early as January 2009, when ratings agency Moody's highlighted growing pressures for services and infrastructure expenditure. By late 2012, both ratings agencies revised their outlook for the Western

³⁹ The Productivity Update provides some recent research on the state of productivity. Productivity Commission, 2013, Productivity Update: May 2013, Australia.

⁴⁰ Ministerial Media Statement, Hon Troy Buswell MLA, Treasurer, Rating agency warning spurs State Government budget resolve, 28 January 2009.

Australian economy from stable to negative, with Standard's and Poor's giving a one-in-three chance of a downgrade within the following two years.

In August 2013, the State Government responded to the threat of a credit downgrade by launching the *Fiscal Action Plan* as part of the 2013/14 State Budget.⁴¹ The *Fiscal Action Plan* contained a range of expenditure and revenue measures designed to address weaknesses in the State's financial position. Based on Treasury modelling, the Budget showed total public sector net debt hitting \$86.4 billion by 2022/23, in the absence of successful corrective measures. Consequently, the *Fiscal Action Plan* contained measures to reduce the public sector wage bill, defer unnecessary infrastructure expenditure, raise taxes, and rationalise existing Government programs not deemed to provide value for money.⁴²

However, the Government withdrew support for two key measures of the *Fiscal Action Plan* within weeks of the Budget's release. In response, Standard and Poor's lowered the State's credit rating, citing "limited political will" as a cause. In a clarification issued in November 2013⁴⁴, Standard and Poor's highlighted the State's exposure to the mining sector's cyclicality and volatility, and Western Australia's growing debt burden and moderate budget flexibility.

Standard and Poor's also noted the additional risk created by WA's disproportionately high public ownership of utilities and unwillingness to sell assets, and warned that that the State's credit rating "would be put under further downward pressure if or when net debt reaches 120 per cent of consolidated revenues". ERA modelling of the State's financial position indicates that even if the *Fiscal Action Plan* is 80 per cent effective, current Government policies will result in the State's credit rating coming under further downward pressure by 2020. This threatens the effectiveness of Government initiatives to restore the credit rating to its former AAA status, and highlights the importance of structural measures contained in the *Fiscal Action Plan*.

A further downgrade (or threat of a likely downgrade) will weaken the investment market in the State, potentially driving businesses to seek alternative opportunities.

3.3.2 Government financial targets

The Government Financial Responsibility Act 2000 requires Western Australian Governments to set financial targets. The current Government updated its financial targets in the 2013-14 State Budget to better reflect the criteria assessed by rating agencies. The State Government's new financial targets seek to:

- ensure that general government sector expense growth does not exceed revenue growth;
- maintain a cash surplus from operating activities for the general government sector of at least 50 per cent of infrastructure spend per year;
- maintain the total non-financial public sector (TNPS) net debt to revenue ratio at or below 55 per cent;

.

⁴¹ The Government considers the significant challenges to be a moderation in economic growth, weaker tax forecasts, softening in commodity prices and continued deterioration in the State's share of national GST revenue. Source: Treasury of Western Australia, 2013-14 Budget Fact Sheet, p. 6.

⁴² See "\$6.8 billion Fiscal Action Plan", 2013-14 State Budget, Budget Paper No. 3.

⁴³ Including tuition charges for the children of overseas 457 visa holders and solar power feed-in tariffs.

⁴⁴ Standard and Poor's (November 2012) Supplementary Analysis: Western Australia (State of).

- maintain a cash operating surplus for the TNPS of at least 5 per cent of operating cash receipts; and
- provide a fair and efficient taxation system that is competitive with other Australian States

The Western Australian Government is currently in the process of further reducing capital and operating expenditure in response to the downgrade of the State's credit rating. Table 1, taken from the *2013-14 Government Mid-year Financial Projections Statement*, shows Government's most recent forecast of expected performance against these financial targets. The forecast outcomes reflect the current challenges facing the State Government and, as stated in the Budget papers, the poor outlook underlies the recent negative assessments from the credit rating agencies.⁴⁵

Table 1 Western Australian State Government financial target compliance

Table 1
2013-14 MID-YEAR REVIEW - FINANCIAL TARGET COMPLIANCE

	2012-13 ^(a)	2013-14	2014-15	2015-16	2016-17
	Actual	Forecast	Forecast	Forecast	Forecast
Ensure expense growth does not exceed revenue growth					
- Current estimate (revenue growth minus expense growth)	-1.7	0.6	-2.0	1.4	-0.9
- 2013-14 mid-year review compliance	No	Yes	No	Yes	No
- 2013-14 Budget compliance	No	Yes	No	Yes	No
Maintain a cash surplus from operating activities for the general government sector of at least 50% of infrastructure spend					
- Current estimate	33.7	42.6	43.6	56.8	56.7
- 2013-14 mid-year review compliance	No	No	No	Yes	Yes
- 2013-14 Budget compliance	No	No	No	No	No
Maintain TNPS net debt at or below 55% of revenue					
- Current estimate	50.6	53.8	57.9	58.4	59.2
- 2013-14 mid-year review compliance	Yes	Yes	No	No	No
- 2013-14 Budget compliance	Yes	Yes	No	No	No
Maintain a TNPS cash operating surplus of at least 5% of receipts					
- Current estimate	5.9	5.5	5.3	5.1	4.9
- 2013-14 mid-year review compliance	Yes	Yes	Yes	Yes	No
- 2013-14 Budget compliance	Yes	Yes	Yes	No	Yes
Maintain the State's tax competitiveness					
- 2013-14 mid-year review compliance	Yes	Yes	Yes	Yes	Yes
- 2013-14 Budget compliance	Yes	Yes	Yes	Yes	Yes

⁽a) These targets did not apply at the time of the 2012-13 Budget. However, outcomes for the 2012-13 year are shown for comparative purposes with the forward estimates outlook.

Source: 2013-14 WA Government Mid-year Financial Projections Statement

3.3.2.1 The Government's net operating balance

Net operating balance refers to the difference between the Government's expenses and its revenue for a given period. A net operating surplus indicates that Government revenue has been greater than expenses, whereas a net operating deficit shows that expenses have been higher than revenues.

⁴⁵ Department of Treasury Western Australia, 2013-14 Budget Statements, *Budget paper No.3*, p. 56.

The Western Australia Department of Treasury has forecast a decline in the State's net operating balance in coming years. The *Economic and Fiscal Outlook 2013/14* predicted an operating surplus of \$386 million for 2013/14, stating that 'this provides only a limited buffer against further Goods and Services Tax (**GST**) revenue declines, or adverse movements in commodity prices or other key parameters, and provides a limited source of funding for essential infrastructure investment."⁴⁶ This illustrates how vital it is that the State Government plans to provide effective protections against any economic consequences arising from unforeseen circumstances.

Figure 6 shows the estimated net operating balance for 2011/12 and 2012/13, and forecast balances for the period until 2016/17. The figure shows a net deficit in 2014/15, returning to surplus the following year.

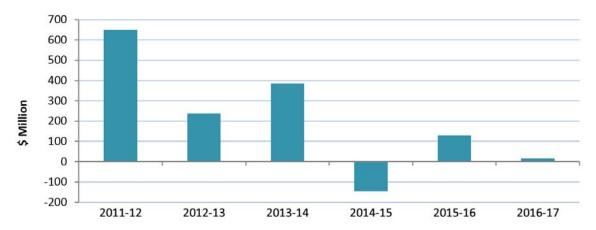


Figure 6 Net Operating Balance

Source: Department of Treasury, Economic and Financial Outlook 2013-14.

The Government has taken action to offset this worsening in the net operating balance. The *Fiscal Action Plan* discussed in Section 3.3.1 is intended to address the "significant challenges facing the State's finances."⁴⁷ The plan spans the next four years, and aims to enhance existing sources of revenue, create new revenue streams, and reduce Government expenses. The plan includes a re-prioritisation of the Government's Asset Investment Program, and is predicted to increase Government revenue and decrease expenses by around \$6 billion over the next four years to 2016/17.

The need to improve the prioritisation of Government infrastructure investment is discussed in detail in Chapter 4.

3.3.2.2 General Government revenue

General Government revenue⁴⁸ refers to the income the Government earns from its investments and business, in addition to any Commonwealth grants it receives. The

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⁴⁶ Department of Treasury Western Australia, op. cit., p. 39.

⁴⁷ The Government considers the significant challenges to be a moderation in economic growth, weaker tax forecasts, softening in commodity prices and continued deterioration in the State's share of national GST revenue. Source: Treasury of Western Australia, 2013-14 Budget Fact Sheet: Fiscal Action Plan, p. 1.

⁴⁸ The ABS Government Finance Statistics 2010/11 explanatory notes defines the function of general government expenditure is to provide non-market goods and services (e.g. roads, hospitals, libraries) primarily financed by taxes, to regulate and influence economic activity, to maintain law and order, and to redistribute income by means of transfer payments. It also includes agencies and government authorities under departmental administration that

majority of the Western Australian Government's revenue comes from taxation, royalty income and other Commonwealth Grants. A breakdown of general Government revenue for 2013/14 is given in Figure 7.

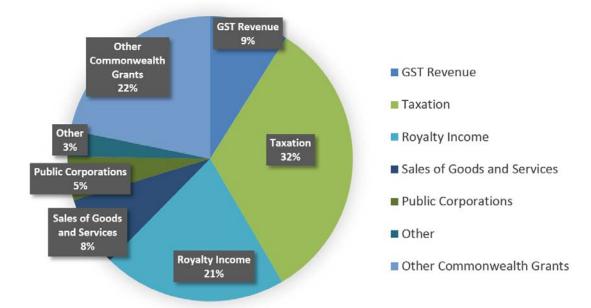


Figure 7 Sources of General Government Revenue 2013-14

Source: Department of Treasury, Economic and Financial Outlook 2013-14.

Growth in tax revenue between 2011/12 and 2012/13 is likely to have been derived from an increase in tax revenue of 16.3 per cent over the period. ⁴⁹ The rise in tax revenue was driven by strong labour market conditions and several large one-off stamp duty assessments of large commercial property transactions. ⁵⁰ These gains were partially offset by a 7.9 per cent fall in Commonwealth Grants, most notably the GST revenue grant. ⁵¹ Further reductions to the State's GST allocation were announced in in March 2014, reducing Western Australia's share to a record low. ⁵²

are engaged in the provision of public administration, defence, law enforcement, welfare, public education and health. Also included are non-departmental bodies that independently perform the government functions of regulation (e.g. Nurses Registration Boards and the Maritime Safety Authority), provision of non-market services (e.g. the Australian Broadcasting Corporation) and redistribution of income.

Total Public sector is the consolidated total of general government, public non-financial corporations and public financial corporation's sectors. The main function of Public Non-Financial Corporation's (PNFCs) is to provide goods and services that are predominantly market, non-regulatory and non-financial in nature, and financed through sales to consumers of these goods and services. Enterprises in the PNFC sector differ from those in the general government sector in that all or most of their production costs are recovered from consumers, rather than being financed from the general taxation revenue of government. Some enterprises, however, do receive subsidies to make up for shortfalls incurred as a result of government policy, for example, in the provision of 'community service obligations' at concessional rates. Public financial corporation's (PFCs) are government owned or controlled enterprises which engage in financial intermediation (trade in financial assets and liabilities), such as the Reserve Bank of Australia, government owned borrowing authorities and insurance offices and home lending schemes

⁴⁹ Western Australian State Treasury, 2012, 2012-13 Budget Fact Sheet, p. 2.

⁵⁰ Western Australian State Treasury, 2013, 2012-13 Annual Report on State Finances, p. 3.

⁵¹ Western Australian State Treasury, 2012, 2012-13 Budget Fact Sheet, p. 17.

⁵² ABC News, 28 Mar 2014, accessed 1 Apr 2014, http://www.abc.net.au/news/2014-03-28/was-share-of-gst-slashed-to-record-low/5352570>.

The Western Australian Treasury expects General Government revenue to grow by 9.9 per cent in 2013/14, well above the 2 per cent growth recorded in 2012/13. The large increase in general government revenue in 2013/14 is driven by an increase in the iron ore royalty rate to 7.5 per cent. However, this contrasts to overall revenue forecasts that are expected to average 2.7 per cent per annum to 2016/17. ⁵³ This raises a concern that the overall growth rate may not be sufficient to cover increasing demand for Government services, in spite of the strong general revenue growth seen in 2013/14.

3.3.2.3 General Government expenses

General Government expenses represent the money the Government spends in providing public goods and services. (It does not include the purchase of non-financial assets.) Figure 8 provides a breakdown of Government expenses for 2013/14, with law and order, health, and education being the largest areas of expenditure.

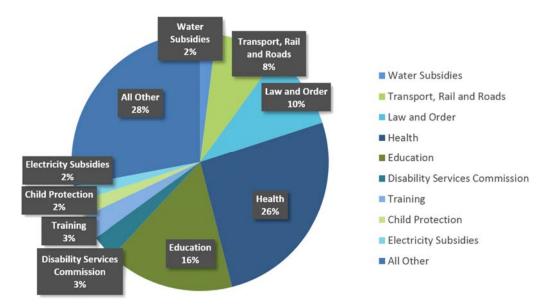


Figure 8 Sources of General Government Expenditure 2013-14

Source: Department of Treasury, Economic and Financial Outlook 2013-14.

Figure 9 shows the Government's estimated expenses for 2011/12 and 2012/13, and forecast Government expenses for 2013/14 to 2016/17. Expenses are expected to increase by 8.4 per cent in 2013/14, in part due to the once-off cost of voluntary redundancies in the public sector. The rate of increase is expected to fall to an average of 3.2 per cent per annum between 2014 and 2017.

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⁵³ Western Australian State Treasury, 2013, Government Mid-year Financial Projections Statement, p. 12.

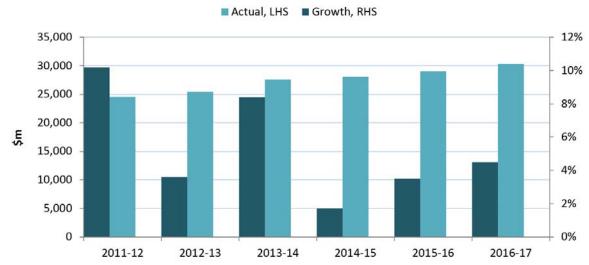


Figure 9 General Government Expenses

Source: Department of Treasury, Economic and Financial Outlook 2013-14.

3.3.2.4 Government assets and capital expenditure

The Western Australian Government is the main provider of a number of the State's utilities, including water and electricity. As shown in Table 2, these represent a substantial proportion of both current Government assets, and of budgeted expenditure for 2014.

In recent years, the State's budget constraints and heavily subsidised electricity pricing has resulted in a low level of expenditure on electricity transmission and distribution. The level of budgeted expenditure for electricity utilities in 2014 reflects the need to upgrade ageing assets.

Roads, educational facilities, and public housing also form large components of the Government's portfolio of assets, and significant expenditure on hospitals has been budgeted.

Table 2 Distribution of Government assets and capital works by sector (2013/14)

Sector	Total Value	2014 Expenditure	Description of assets
	(\$m)	Budget (\$m)	
Water Corporation	15,483	1,000	Desalination plant, pipe networks
Public Transport Authority	6,683	543	Trains and Buses
Main Roads	41,434	1,086	Roads and bridges
Housing Authority	18,593	904	Social Housing / land & housing development
Electricity Utilities	20,585	1,568	Generation, transmission & distribution
Corrective Services	1,493	94	Prisons
Education	13,943	582	Schools
LandCorp	1,380	422	Land
Health	7,063	1,119	Hospitals
Ports	1,694	167	Ports
Other Agencies	46,555	1,218	Stadiums, Metropolitan Redevelopment Authority, regional projects, et cetera.
Total	\$ 174,905	\$ 8,702*	

Source: Department of Treasury, 2013, 2013-14 State Budget

^{*} Adjusted from the State Budget headline total, which includes a provision for underspend that is not allocated to individual agencies. The headline total is \$7,451.

In Chapter 4, the ERA provides a detailed analysis of Government infrastructure spending and Government ownership, followed by recommended reforms.

3.4 Employment and Gross Value Added

While capital investment has played a key role in the growth of the State's resources sector, labour is likely to become an increasingly important factor as the economy diversifies. This section identifies the industries that make the largest contribution to employment in Western Australia, and discusses the implications of the participation rate for the State economy.

The section uses Gross Value Added (**GVA**) as a key indicator of economic performance. GVA is a measure of the difference between the selling price of goods and services, and the cost of producing those goods and services.⁵⁴ When the GVA for an industry is compared with the level of employment in that industry, the ratio indicates the value added per employee. This is an indicator of the productivity of the industry.

3.4.1 Employment in major industries

In 1999, the mining sector was responsible for 3 per cent of Western Australia's employment. By 2013, this had grown to around 8.5 per cent. While the sector employed less than 10 per cent of the State's workforce, it generated almost 40 per cent of the State's GVA in 2011/12. ⁵⁵

However, other sectors of the State economy have also experienced growth as a result of the development of the resources sector. For example, much of the State's manufacturing industry is dedicated to mineral processing and manufacturing mining equipment. Additionally, a large share of the construction industry relates directly to mining projects.

After resources, the biggest contributor to State GVA is the services and sales industry, responsible for around one third of the State's GVA. The sector includes wholesale and retail trade, transportation and storage, and professional and technical services. Consequently, in contrast to the resources sector, the services and sales industry includes many of the State's small businesses.

Employment increased across all sectors between 1999 and 2013, with the exception of the agriculture, forestry and fishing sector, which contracted slightly.

3.5 Population growth

Between 2000 and 2010, Western Australia's population increased at a higher rate than that of any other State. While the State has seen consistent interstate migration during the last decade, the increase in population has been primarily driven by overseas migration.

Figure 10 shows the rate of population growth over the last decade in Western Australia compared to that of Australia as a whole as well as Northern Territory and Queensland. As illustrated, Western Australia has consistently had the highest rate of population growth in Australia since 2007. This growth in population is largely due to increased migration rather than an increase in birth rates. This has resulted in an increase of workers, driving a higher

⁵⁴ For example, if the input costs of a creating a table were added it cost \$100 and the finished table was sold for \$150, the gross added value of that table is \$50.

The Australian Bureau of Statistics also stated that, in 2006/07, around 25 per cent of Western Australian sales and services income was attributable to mineral product manufacturing (*Manufacturing Industry, Catalogue 8221.0*). Note: GVA differs from GSP in that it excludes net indirect taxes.

demand for government goods and services such as infrastructure and utilities, and increasing income tax revenue.

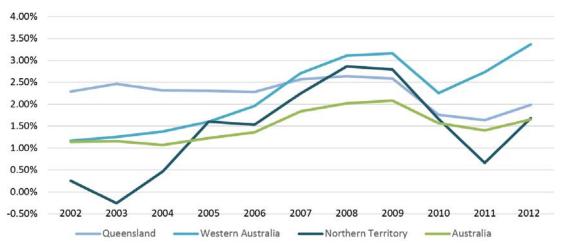


Figure 10 Population Growth in Western Australia and Australia, 2002 - 2012

Source: Australian Bureau of Statistics, Regional Population Growth Catalogue 3218.0.

Western Australia's share of national population was 10.9 per cent in the June quarter 2013, and is projected by the Australian Bureau of Statistics to rise to 12.2 per cent of Australia's total population by 2022/23.⁵⁶

The most recent Australian Bureau of Statistics population projections for the Perth metropolitan area are shown in Table 3. The projection suggest ongoing increases to Perth's population density. The rightmost column provides an indicative measure of density for a scenario where the metropolitan area, as currently defined by the State Government, remains unchanged. Since the Western Australian population is largely focused in the Metropolitan areas; this may materially change patterns of demand for Government services.

Table 3 Population projections for Perth

Period	Regional	Metropolitan	Percentage of Western Australian Population in Metropolitan area	Indicative Metropolitan Density
30 June 2007	0.6 million	1.6 million	73%	240 persons per km ²
30 June 2012	0.6 million	1.9 million	76%	285 persons per km²
Projected 2026	0.7 million	2.3 million	76%	345 persons per km²
Projected 2056	0.9 million	3.4 million	79%	510 persons per km ²

Source: Australian Bureau of Statistics (midpoint projections, Series B), Catalogue 3222.0, Economic Regulation Authority.

⁵⁶ Department of State Development, 2014, op. cit.

3.6 The cost of living

Since 2006, the cost of living in Perth has increased somewhat more rapidly than the average for all Australian capital cities. This is shown in the Consumer Price Index (**CPI**)⁵⁷ shown in Figure 11. The CPI measures the average change over time in the prices paid by households for a fixed basket of goods and services.

Between 2006 and 2012, the average CPI across Australian capital cities increased at an average annual rate of around 3 per cent, while the Perth CPI increased at a rate of around 3.2 per cent. This means that the price of goods in Western Australia rose on average by 0.2 per cent per annum more than the price of goods in other capital cities. While a 0.2 per cent difference in a single year does not appear to be a large difference, Western Australia's higher-than-average CPI growth over multiple years has resulted in the State's cost of living shifting farther above the national average in each subsequent period.

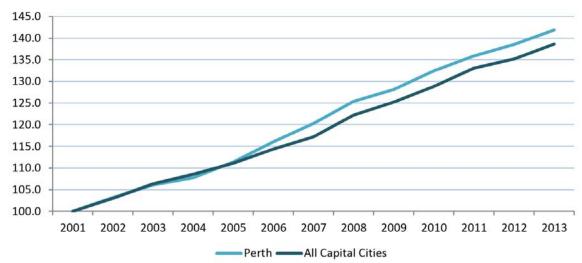


Figure 11 Perth and Australian Consumer Price Indices (CPI), 2001 - 2013

Source: Australian Bureau of Statistics, Consumer Price Index, Catalogue 6401.0.

CPI is an important factor in assessing standards of living. Where CPI (reflecting the cost of goods and services) rises more quickly than income, citizens will be worse off.

The Wage Price Index (**WPI**) is a measure of the average growth of income. ⁵⁸ The Western Australian WPI has averaged 4.3 per cent between 2006 and 2012. Figure 12 provides a comparison of the two indices. ⁵⁹ It shows that, since 2006, WPI has outpaced the growth of CPI in the State. However this should not be taken as conclusive evidence of consumer welfare, as it does not reflect the distribution of that income growth. ⁶⁰

⁵⁷ Growth in CPI is often used as a benchmark estimate of inflation. Source: Treasury of Western Australia, 2013, Budget: Glossary.

⁵⁸ The WPI is an index of the cost of a fixed basket of jobs, it is designed to measure changes in wages over time for a fixed quantity and quality of labour input. Source: Treasury of Western Australia, 2013, *Budget: Glossary*.

⁵⁹ Note that the WPI refers to the whole of Western Australia and the CPI refers only to Perth.

For instance, a decrease in the income of low-earning citizens in combination with a large increase in the income of high-earning citizens may still show the WPI outpacing CPI, even though standards of living have reduced for the low-earning sectors of the community.

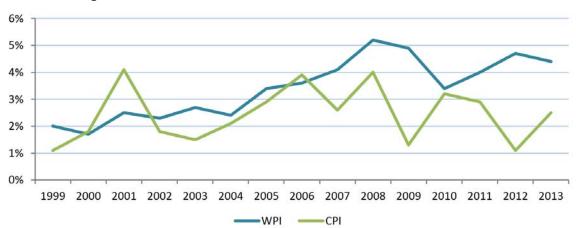


Figure 12 Western Australia Wage Price Index growth and Perth Consumer Price Index growth

Source: Australian Bureau of Statistics, Consumer Price Index, Catalogue 6401.0 and Wage Price Index, Catalogue 6345.0, ERA analysis.

Furthermore, the cost of living varies markedly across Western Australia, with areas in the north-west generally reporting a significantly higher cost of living than those closer to the metropolitan area. The most recent Regional Price Index report, published by the Department of Regional Development and Lands (released in 2012, relating to the 2011 calendar year compares the costs of a common basket of goods and services across a number of regional locations, to the costs of the same basket of goods and services in Perth.

The northernmost regions of the State show the greatest disparity, with the overall cost of living being 37 index points higher in the Pilbara, and 20 index points higher in the Kimberley, than in Perth.⁶¹ This means that, for instance, the same basket of goods and services in the Pilbara costs 37 per cent more than it would in Perth.

Substantial increases in the cost of living in regional areas, where these are not offset by increases in income, may result in hardship conditions that require additional Government expenditure in the region. Further, Government organisations operating in the region will also have increased expenses, due to the high cost of procuring goods and services.

3.7 International considerations

The Western Australian economy has strong ties to economies outside of Australia, due to the significance of its export markets. However, while opportunities for international trade have allowed Western Australia to develop a strong resources-based export market, they also mean that the State is particularly vulnerable to international markets, and to economic and political changes in those markets, over which it has little control.

This section discusses Western Australia's current position in the international economy, and considers:

- Western Australia's international trade activities;
- the impact of Terms of Trade on Western Australia; and

⁶¹ Western Australian Department of Regional Development, 2012, Regional Price Index 2011, Australia.

 Australia's rankings in the Global Competitiveness Report, and what these mean for Western Australia.

3.7.1 International trade

In 2012, over half of Western Australia's GSP was attributable to the international export of goods and services. This was a portion of Australia's total exports, with the State Contribution 46 per cent (\$114 billion) of total national exports in 2011/12. Around \$100 billion of this amount came from the mining industry, while the remainder was largely attributable to the agricultural and manufacturing sectors.⁶²

As shown in Figure 13, the composition of the State's international export destinations has shifted significantly over the past decade, seeing a decrease in diversification largely due to increasing trade with China. The Chinese market accounted for less than 10 per cent of the State's exports by value in 1998/99, rising to 49 per cent by 2012/13. Japan and the Republic of Korea have maintained significant shares of WA's export, while the proportion accounted for by the United States and United Kingdom have decreased significantly, as has the share exported to countries represented under "other" in Figure 13.

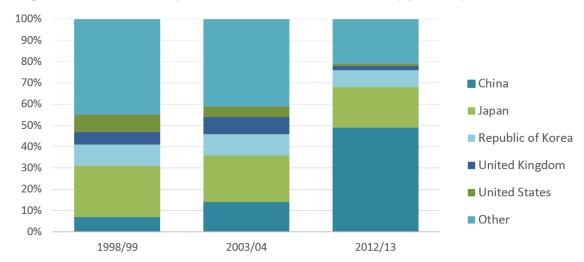


Figure 13 International Export Destinations, Western Australia (by \$ value)

Source: Australian Bureau of Statistics, International Trade in Goods and Services, Catalogue 5368.0.

Chinese and South-East Asian imports into Western Australia have also become increasingly important to the State's economy, as shown in Figure 14. This has come at the expense of the United States, Japan, and the Republic of Korea to some extent. However, the range of countries from which Western Australia imports goods is relatively diverse, compared to the State's export profile shown in Figure 13.

⁶² Australian Bureau of Statistics, State Accounts, Catalogue 5220.0.

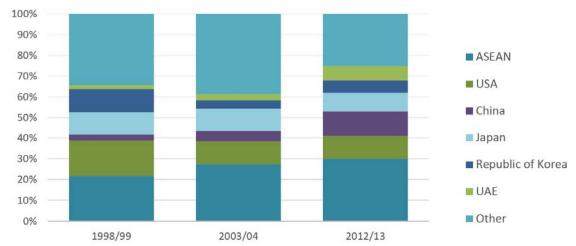


Figure 14 Import Country of Origin, Western Australia (by \$ value)

Source: Australian Bureau of Statistics, International Trade in Goods and Services, Catalogue 5368.0.

3.7.2 Terms of Trade and exchange rates

The Terms of Trade index (TOT) is the ratio of prices for Australia's exports⁶³ to the prices for its imports.

If Australia's terms of trade is increasing, that is if export prices are rising relative to import prices, "then the income accruing to Australian producers is increasing with the result that, for a given volume of exports, a larger volume of imports can be purchased. Thus changes in the terms of trade reflect changes in the real purchasing power of the Australian economy overall". ⁶⁴ This directly raises living standards.

As Australia's exports are predominantly resource based, the improvement seen in the ToT throughout the 2000's has largely been attributable to the urbanisation and industrialisation of Asian economies (particularly that of China) that required resources to build and expand, resulting in higher demand that drove up prices.⁶⁵

⁶³ A comparable figure for Western Australia is not produced by the Australian Bureau of Statistics, as Western Australia trades with eastern Australia, for which there are no reliable data.

⁶⁴ 1350.0 - Australian Economic Indicators, Apr 2005, Feature Article - The Terms of Trade and the National Accounts

⁶⁵ An increase in demand for Australian goods and services from overseas results in an increase demand for Australian dollars and therefore an appreciation in the AUD.

The demand for Australia's resources from China has slowed since 2009, as the global supply has expanded. This has resulted in a decrease in commodity prices that is reflected in the recent deterioration of Australia's ToT. Mining costs have also followed prices upwards globally, indicating that mining-intensive economies, such as Western Australia's will be vulnerable to further falls in commodity prices. 66

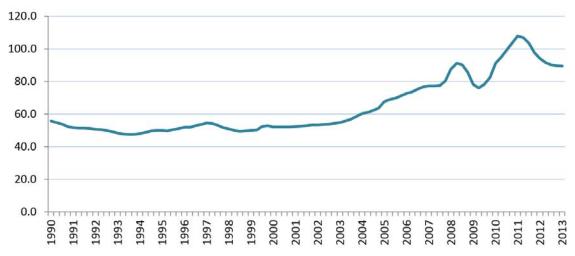


Figure 15 Australian Terms of Trade Index, 1990-2013

Source: Australian Bureau of Statistics, Australian National Accounts: National Income, Expenditure and Product, Catalogue 5206.0.

Western Australia's substantial export market also exposes the State to fluctuations in currency exchange rates.

A movement in the exchange rate will have differing implications for various industries. For instance, a strong increase in the value of the Australian Dollar (**AUD**) is likely to cut the export earnings of trade-exposed sectors such as agriculture. However, the increase will likely benefit businesses who rely on imports to generate income, due to the increased international purchasing power of the AUD.

Figure 16 shows the exchange rate of the AUD relative to the United States Dollar (**USD**) over time. The value of the AUD increased steadily throughout the 2000's and, as with the ToT, this was largely a result of increased demand from Asia and rising commodity prices.⁶⁷

Interest rates have also played a role in the increasing value of the AUS. Australia has maintained high interest rates relative to those of other countries and has retained its AAA credit rating in spite of the general international economic downturn. ⁶⁸ This has attracted a higher level of foreign capital to Australian banks, which has also increased the value of the AUD.

⁶⁶ Deloitte Touche Tohmatsu, 2013, *Tracking the trends 2014: The top 10 issues mining companies will face in the coming year*, Canada.

⁶⁷ An increase in demand for Australian goods and services from overseas results in an increase demand for Australian dollars and therefore an appreciation in the AUD.

⁶⁸ Australia is now one of only seven countries that hold a AAA rating with all three major credit rating agencies, reflecting the confidence in Australia's debt levels and economic conditions. Source: Australian Treasury, 2012, Understanding the appreciation of the Australian dollar and its policy implications, Australia, p. 47.



Figure 16 US AUD Exchange Rate 2000-13

Source: Reserve Bank of Australia.

Movements in the national ToT and exchange rate have had varying impacts across Australian and Western Australian industries. While the parts of the manufacturing industry relating to the mining sector have been relatively shielded from any negative effects, other trade-exposed industries such as textiles, clothing and wood and paper manufacturing have faced difficulty in competing in international markets.⁶⁹

3.7.3 Global Competitiveness Report

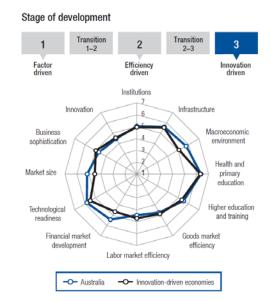
The Global Competitiveness Report by the World Economic Forum assesses the competitiveness of 148 countries, providing information regarding the drivers of the productivity and prosperity of each. The report allows countries to compare performance in terms of overall competitiveness as well as in specific areas. The report sources data from a variety of agencies, as well using results from an Executive Opinion Survey conducted by the World Economic Forum, and therefore results may be subjective. While its assessment is conducted on a national basis, its findings are broadly applicable to Western Australia.

Australia is classed in the highest stage of development by the World Economic Forum and is ranked 21 out of the 148 countries assessed. Figure 17 shows Australia's most recent results, indicating that while it has performed well in terms of the basic requirements for competitiveness, it has underperformed compared to other innovation-driven economies in terms of the efficiency of its labour and goods markets.

⁶⁹ Plumb, Kent and Bishop, 2012, *Implications for the Australian Economy of Strong Growth in Asia*, p. 16.

Figure 17 Stage of Development 2013-14





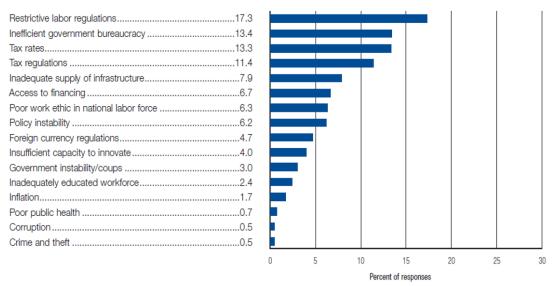
Source: World Economic Forum, World Competitiveness Report 2013-14, pg. 110.

Note: Higher scores represent a high level of development. That is, a score of seven is better than a score of one.

In the most recent release of the World Competitiveness Report, Australia scored poorly in terms of the burden caused by inefficient bureaucracy, with respondents naming it as the second most problematic factor for doing business in the country (the first being restrictive labour regulations). The ERA discusses this issue extensively in Chapter 5, and provides recommendations to reduce the burden caused by regulation in Western Australia, and to prevent the introduction of future regulatory burden.

The 16 factors that were reported to be the most problematic when doing business in Australia are shown in Figure 18. Most respondents appear to consider the Australian political and financial environment to be relatively stable, but express concern over the operation of regulation, and lack of infrastructure supply.

Figure 18 Most Problematic Factors for Doing Business in Australia



Source: World Economic Forum, World Competitiveness Report 2013-14, p. 110.

Note: Higher scores represent more significant issues. That is, a score of seven is worse than a score of one.

3.8 Conclusion

The Western Australian economy has enjoyed high levels of growth in recent years, and remains in a relatively strong position, compared to many other State economies.

As discussed in this chapter, this growth has largely been driven by the development of the State's resources sector, resulting in a highly specialised economy. However, this opportunity has also exposed Western Australia to a significant level of risk in the event of a downturn in the sector.

To manage this risk, the Government needs to plan for the future. The economic reforms recommended in this Draft Report aim to ensuring that Western Australia's economy remains resilient in the face of national and global economic change.

4 Infrastructure

4.1 Introduction

The provision of public infrastructure is essential for an economy to function effectively. Anything that constrains a Government from advancing sound infrastructure projects, such as limited funding or poor assessment processes, is likely to have a detrimental effect on the economy.

Traditionally, infrastructure is defined as the basic physical and organisational structures and facilities (for example, buildings, roads, power supplies) needed for the operation of a society or enterprise.⁷⁰ The Productivity Commission divides infrastructure into two categories:

- Economic infrastructure, which incorporates the physical structures from which
 goods and associated services are used by individuals, households and industries.
 For example, transport and communications networks, as well as energy, water
 supply and sewerage facilities, commonly fall into this category.
- Social infrastructure, which includes the facilities and equipment used to satisfy the community's education, health and community service needs.⁷¹

The effective delivery of both economic and social infrastructure is essential for maintaining productivity in Western Australia.

Both economic and social infrastructure are considered in the public infrastructure section of this report (Section 4.2). The section relates to capital expenditure on both categories.

This chapter is broadly structured as follows.

- A summary of infrastructure spending in Western Australia;
- A review of how Government invests in the infrastructure; and
- A review of which assets Government should own and operate, including an assessment of which existing assets the ERA thinks the Government should divest.

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⁷⁰ Oxford Dictionaries Online: Infrastructure.

⁷¹ Productivity Commission, 2013, *Public Infrastructure Issues Paper*.

4.1.1 Importance of infrastructure

Infrastructure is generally accepted to be necessary for economic activity and to have a positive effect on economic growth.⁷²

In 2008, the Productivity Commission published an internal research memorandum on the link between infrastructure and productivity growth.⁷³ The research concluded that despite decades of research, the result of empirical studies into the link between infrastructure investment and productivity consistently results in implausibly high returns to infrastructure investments. It concluded that:

"This is not to say that infrastructure is not important to productivity or that increased spending will not increase productivity, just that the magnitude of the relationship remains unclear." 74

What is known is that infrastructure is an enabler of productivity, it increases the capabilities of the economy and provides the support that businesses and individuals need in their work. Infrastructure is of particular importance in Western Australia to provide for the growing population and resource focused economy. However, without adequate incentives the benefits of these enablers may not be maximised.

The key to optimum infrastructure expenditure is, where possible, to evaluate each project on a case-by-case basis.⁷⁵ That is, the potential of infrastructure expenditure to raise economic growth depends largely upon the ability of government to implement good infrastructure investment evaluation processes.

4.1.2 Infrastructure spending in Western Australia

4.1.2.1 Current State Government infrastructure expenditure

Comparison of the various inter-state Budget Papers for 2013-14 shows that capital expenditure in Western Australia is in line with the other jurisdictions as a proportion of economic activity, but is significantly higher on a per capita basis (by 60 per cent). Whilst the comparison indicates a higher rate of economic activity per capita than other States, it also reflects that the Western Australian Government is more active in more sectors of the local economy.

Table 4 shows that the allocation of infrastructure expenditure across the health, education and water sectors in Western Australia is broadly consistent with the allocation in other jurisdictions. Expenditure on housing and land is materially higher in Western Australia, while expenditure on transport is relatively low. Electricity expenditure is low relative to the other jurisdictions that maintain network and generation assets; however, two jurisdictions have exited the electricity sector entirely (South Australia and Victoria).

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⁷² See Matton R., 2004, Infrastructure and State Economic Development: A survey of the issues.

⁷³ Productivity Commission, 2008, Econometric Modelling of Infrastructure and Australia's Productivity.

⁷⁴ Productivity Commission, 2008, Econometric Modelling of Infrastructure and Australia's Productivity, p.11.

⁷⁵ Gramlich E., 1994, *Infrastructure Investment: a Review Essay*, Journal of Economic Literature, Vol. 32 (3), pp. 1176-96.

Table 4 Interstate comparison of 2013-14 State Government infrastructure expenditure

	WA	NSW	QLD	Vic	SA
Electricity	18%	21%	23%	0%	0%
Transport	21%	47%	45%	47%	40%
Health	13%	6%	15%	11%	13%
Education	7%	3%	5%	5%	6%
Water	11%	7%	2%	25%	17%
Housing & Land	15%	2%	3%	3%	7%
Other Agencies*	15%	14%	6%	9%	17%
Total	100%	100%	100%	100%	100%
Adjusted capital expenditure** (\$m)	7,452	15,528	11,014	7,421	2,587
Capex/GSP	3.0%	3.3%	3.7%	2.2%	2.7%
Capex per capita (\$)	3,013	2,113	2,389	1,306	1,557

Source: Department of Treasury, Western Australia, 2013, 2013-14 Budget: Economic and Fiscal Outlook, Budget Paper No.3, and equivalent budget papers from the Governments of New South Wales, Victoria, Queensland, and South Australia.

Gross capital expenditure by the Western Australian Government more than doubled from \$3.4 billion per annum to \$7.3 billion in nominal terms over the ten year period to 2013.

Half of this increase (\$1.9 billion) was in the sectors of electricity (25 per cent) and health (24 per cent), while transport contributed 19 per cent (or \$760 million) to the increase. The remainder of the increase was split between water, education, and housing and land.

The real increase in capital expenditure for the period was 61 per cent, with real health expenditure rising 689 per cent, electricity 139 per cent. Table 5 presents a breakdown of the Asset Investment Program by sector for 2003 and 2013, showing the real increase in expenditure for each sector and its contribution to the total increase.

Of the increase in transport expenditure, spending on roads accounted for 65 per cent or \$500 million of additional expenditure. Road expenditure is forecast to expand further, with Main Roads being allocated \$1.1 billion in the 2013-14 Budget. This will bring funding for the transport sector back up to its long term average of 20 per cent of the budget, from a low of 12 per cent in 2011.

^{* &#}x27;Other agencies' includes investments in Finance, State Development, and Sport and Recreation.

^{**} Capital expenditure less Provision for Underspend, as noted in Chapter 3.

Table 5 Western Australia Asset investment program – ten year comparison (real)

Sector	2002/03* (\$m)	2012/13 (\$m)	Real Increase (%)	Contribution to increase (%)
Electricity	585.7	1,397.9	139%	25%
Health	131.9	1,040.7	689%	24%
Transport	893.1	1,423.4	59%	19%
Water	502.7	959.0	91%	15%
Education	220.1	506.9	130%	9%
Housing and Land	1,189.7	1,245.9	5%	9%
Other Agencies**	1,019.4	726.2	-	-1%
Total	4,542.6	7,300.0	61%	100%

Source: Department of Treasury - Western Australian State Budget Papers 2003-2013.

4.1.2.2 Project implementation

The State's record at implementing major projects is mixed. The Office of the Auditor General examined the 20 highest value non-residential construction projects in Western Australia in 2012 and found that:

- the expected final cost of the 20 projects was \$6.2 billion, which was \$3.3 billion (114 per cent) more than the original budget-approved cost;⁷⁶ and
- approximately 90 per cent (\$3 billion) of the cost variance occurred during the evaluation phase, when the business case is developed and the scope and cost of the project more accurately defined.⁷⁷

The reasons for cost overruns vary from project to project reflecting individual circumstances. However, a survey of the academic literature indicates several recurring reasons for cost overruns, which are also likely to have been present in Western Australia.⁷⁸ These include:

- lack of understanding of large complex projects;
- under-costing and understatement of risk for large costs by project proponents; and

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^{*} In real 2013 dollar terms, adjusted at the CPI as per the ABS Consumer Price Index Series 6401.0

^{**} Includes a \$600 million provision for underspend which was realised in 2012-13

⁷⁶ Office of the Auditor General Western Australia, 2012, Western Australian Auditor General's Report Major Capital Projects, p. 8.

Office of the Auditor General Western Australia, 2012, Western Australian Auditor General's Report Major Capital Works, p. 7.

⁷⁸ See for example Flyvbjerg (2009) Survival of the unfittest: why the worst infrastructure gets built and what we can do about it, which documents large differences between ex ante and ex poste estimates of costs and benefits for large infrastructure projects in various sectors.

• premature announcements of large projects before full costing and analysis has been undertaken, such as announcements during an election campaign.⁷⁹

4.1.3 Current Government financial situation

The State's current financial situation needs to be viewed within the context of Western Australia having a rapidly growing and ageing population, a rapidly growing economy and being geographically dispersed. Additionally, the State's tax base is relatively limited and does not necessarily grow with the economy (see Chapter 6 on State Taxes).

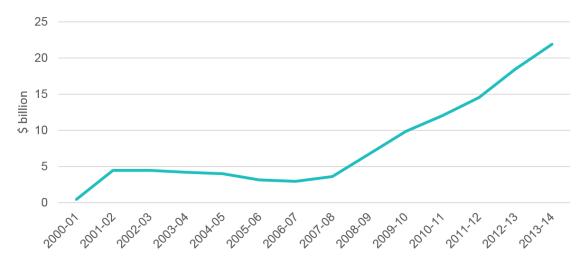


Figure 19 Net Debt – State of Western Australia (\$ Billion)

Source: Government of Western Australia, Various, State Budget, Budget Paper No.3 Economic and Fiscal Outlook. (Years 2003 to 2013)

In this context, Government must place some form of arbitrary constraint on infrastructure expenditure. The State's credit rating is often referred to as a guide to such budget constraints because when there is insufficient cash to fund infrastructure, Government must borrow. When Government borrows, credit rating agencies provide independent scrutiny of the sustainability of expenditure policy settings.

Figure 19 above demonstrates that, in recent times, these financial policy settings have come under pressure. Increases in net debt, partly as a result of increasing infrastructure expenditure, ⁸⁰ are not consistent with maintaining a high credit rating. The State's net debt situation and Government's focus on the credit rating will place more constraints on future infrastructure funding than was the case previously.

Credit ratings have practical implications for governments in that they influence the interest rate paid in the debt markets. More importantly however, is the impact of the credit rating on business confidence, providing a signal to investors that the State is a stable, safe and low risk place to invest.⁸¹

⁷⁹ The Government is then 'locked in' to going ahead with the project even though it might not be affordable and/or may not deliver a net benefit in its proposed form and cost.

⁸⁰ Infrastructure expenditure has not been the only factor contributing to net debt. General increases in operating expenditure have also made a significant contribution.

⁸¹ Ministerial Media Statement, Hon Troy Buswell MLA, Treasurer, Rating agency warning spurs State Government budget resolve, 28 January 2009

As noted in Chapter 3, successive Western Australian Governments have set financial targets as part of the State Budget process. Of the current financial targets, the following constraints are relevant to Government infrastructure investment:

- maintain a cash surplus from operating activities for the general government sector of at least 50 per cent of infrastructure spend per year; and
- maintain the total non-financial public sector net debt to revenue ratio at or below 55 per cent.

The Western Australian Treasury states that the financial targets are closely aligned with the criteria assessed by ratings agencies, and the outlook for these targets reflects the underlying reason behind the negative assessment by both ratings agencies of the State's finances.⁸² Chapter 3 outlines that the Western Australian Government is currently in the process of further reducing capital and operating spending in response to the downgrading of its credit rating by Standard and Poor's from triple-A to AA+ in September 2013.

The 2013-14 Government Mid-year Financial Projections Statement identifies Government's most recent forecast of its expected performance in achieving financial targets. The Government expects to achieve 1 of the 2 infrastructure-related targets (shown below) over the forward estimates. Financial target compliance is given in Table 6.

Table 6 2013-14 Mid-year Review – infrastructure financial target compliance

	2012-13 Actual	2013-14 Forecast	2016-17 Forecast
Maintain a cash surplus from operating activities for the government sector of at least 50 per cent of infrastructure spend	No	No	Yes
Maintain TNPS net debt at or below 55 per cent of revenue	Yes	Yes	No

Source: Government of Western Australia, 2013, 2013-14 Government Mid-year Financial Projections Statement

The growing net debt and concern regarding the State's ability to meet financial targets in the longer term highlights the need for sound infrastructure planning and process in Western Australia. Furthermore, a review of State-owned assets is beneficial to identify where the private sector can be utilised, either through divestment or participation in service provision to increase the efficiency and productivity of the assets.

4.2 Public infrastructure

The ERA has undertaken a review of public infrastructure provision in Western Australia, and has identified eleven priority areas of reform that Government could implement to improve the efficiency and performance of the Western Australian economy. Analysis of patterns of capital expenditure in Western Australia relative to other Australian jurisdictions and review of Government's performance in infrastructure projects has guided selection of the reforms.

⁸² Government of Western Australia, 2013, 2013-14 Budget Statements, Budget paper No.3, p. 56.

These priority reforms have been selected against a background of increased demand for infrastructure created by population and demographic pressures and diminishing capacity to fund projects created by a tightening budget situation, as outlined in Section 4.1.3 above.

The eleven measures, which will be discussed in detail below, are:

- Implement and Follow good process. This principle highlights the importance of good project planning, prioritisation, implementation and subsequent asset management.
- **Fit for purpose**. Under a constrained budget, the consideration of more affordable infrastructure alternatives may provide more solutions more quickly.
- Alternative Policies. Non-asset solutions may provide alternative resolution to market failures, such as reforms of planning restrictions instead of direct investment.
- Review Royalties for Regions. The hypothecation of substantial revenues for regional projects is reducing budget flexibility, precluding proper capital prioritisation.
- Implement congestion charging. Western Australians spend considerable time stuck in congested traffic during peak periods. Congestion charging can dramatically decrease the productivity losses that are incurred as a result.
- Implement cost-reflective retail electricity tariffs and investigate time-of-use
 electricity charging. Cost-reflective retail tariffs allow for greater retail
 contestability, while time-of-use tariffs assist in effective demand management and
 ensure efficient infrastructure utilisation.
- Account for risk in Government commercial activity. Commercial activities expose Government to risk and restrict funding available for traditional social programs. Any risk undertaken should be accounted for explicitly.
- **Develop innovative funding sources**. Sources could include user charges on existing infrastructure or through the increased use of developer charges.
- **Public Private Partnerships**. Benefits from contestability of government services are evident from widening the use and scope of PPP procurement methods.
- Unsolicited Proposals. Western Australia currently lacks a mechanism to evaluate
 unsolicited infrastructure proposals from the private sector. Unsolicited proposals
 encourage input from the private sector that may provide innovative solutions to
 infrastructure needs.
- **Infrastructure WA**. The ERA has investigated the establishment of an independent infrastructure advisory board and does not support it at this time.

4.2.1 Implement and follow good process

4.2.1.1 Issue

Given the size of the State Government's infrastructure program, reforms to planning of capital expenditure have the potential to materially impact economic efficiency, a key objective of microeconomic reform. In a recent study, McKinsey Global Institute extrapolated the savings from 400 case studies and estimated that on a global scale

selecting projects more carefully could save an average of \$1 trillion a year.⁸³ The solutions proposed by the study are not complex; for example, the study highlights the importance of fully utilising existing infrastructure before building new capacity.

In its 2014 Draft Report on Public Infrastructure, the Productivity Commission highlighted inadequate project selection and a lack of thorough analysis of costs and benefit:

"The need for a comprehensive overhaul of poor processes in the development and assessment of infrastructure investments is the key message of this draft report. All other desirable or aspirational objectives — project pipelines, increased government funding, greater opportunity for patient equity, cost savings and even user charging and pricing reform — depend for their efficacy ultimately on having much-strengthened and widely-applied set of credible and welfare-enhancing reforms."

There are a series of strong institutional and governance arrangements and processes in place in Western Australia to guide the provision and delivery of the State's public infrastructure. However their application in practice remains at the discretion of the government of the day and evidence reviewed in the course of the inquiry shows that these arrangements and processes are not always followed. The risks from failure to follow good practice can be expensive and enduring, with the reverse also true.

4.2.1.2 Submissions

There were seven public submissions on the topic of infrastructure planning, six from industry representative bodies and two from State Government departments, with one confidential.

- Master Builders Western Australia noted the lack of infrastructure data available for forward planning purposes. An audit of the state of infrastructure and demand is recommended to fine tune infrastructure expenditure and assess industry capacity. Key principles include safe delivery, environmental sustainability and budget sustainability with suitable industrial relations.
- The Western Australian Local Government Association (WALGA) recommended the requirement for publicly available ten-year infrastructure plans be extended to government and regional entities to align with local government requirements.
- The Civil Contractors Federation recommended the use of evidence-based costbenefit analysis to prioritise infrastructure investment.
- The Department of Transport supported the State's Strategic Asset Management Framework as a rigorous methodology for prioritisation and development of quality investment proposals for government's consideration.
- The Department of Planning outlined forthcoming reforms to the State's Infrastructure Coordination Committee and expenditure prioritisation methods to enhance the Strategic Asset Management Framework.
- The Chamber of Minerals and Energy recommended establishment of a dedicated economic infrastructure unit to develop a long term coordinated pipeline of projects in collaboration with the private sector.

⁸³ McKinsey Global Institute, 2013, Infrastructure productivity: How to save \$1 trillion a year

 The Chamber of Commerce and Industry (CCI) pointed to a pressing need to improve infrastructure planning to ensure funding is allocated transparently to the highest net value projects.

4.2.1.3 ERA analysis

The ERA has examined existing State Government infrastructure planning processes in Western Australia and their application. Infrastructure planning takes place in the context of the annual State Budget process whereby Government makes decisions to allocate funding between various competing priorities for the subsequent rolling four-year period. Oversight of State agencies' annual strategic asset planning cycle is the responsibility of the Western Australian Department of Treasury, which has developed the *Strategic Asset Management Framework* to provide the basis for sound investment decision making.

The Strategic Asset Management Framework

Infrastructure planning by State Government entities in Western Australia is guided by the Strategic Asset Management Framework (**SAMF**). The SAMF is a quality assurance mechanism guiding the quality, form and detail required for submissions and advice to Government. The objective of the SAMF is to maximise value for money outcomes in infrastructure provision by providing a sound basis for decisions on the investment in, management and disposal of, assets required for Government service delivery. In short, the objective of SAMF is to ensure Government receives quality information to make decisions.

There are currently fourteen documents in the SAMF series as detailed in the box below. The SAMF documents are in turn supported by a detailed range of related materials such as the National PPP suite of guideline documents and Infrastructure Procurement Options Guide.⁸⁴

Box 1 The Strategic Asset Management Framework: WA Treasury

- High Level Policy
- Strategic Asset Plan
- Capital Investment Policy
- Project Definition Plan
- Land Planning and Assembly
- Fast-Tracked Proposals
- Options Analysis (Project Evaluation Guidelines)
- Office Accommodation Planning
- Maintenance Policy
- Asset Retention and Disposal
- Real Property Disposal System
- Alliance Contracting Policy
- Value Management Guidelines
- Concept Approval and Business Cases

Source: WA Department of Treasury

The SAMF has been subjected to various independent appraisals and consistently endorsed as good practice in infrastructure planning. For example, in December 2011, the Council of Australian Governments (**COAG**) reform council released a detailed review of capital city strategic planning systems, including in-depth assessment of the infrastructure planning processes applicable in each jurisdiction. The study strongly endorsed the SAMF as detailed in Table 7 below.

⁸⁴ Western Australian Department of Treasury, 2010, Strategic Asset Management Framework Guidance; Infrastructure Australia, 2008, National Public Private Partnership Policy Guidelines; Government of Western Australia, 2010, Infrastructure Procurement Options Guide.

Table 7 The COAG Reform Council - external scrutiny and endorsement of SAMF

Page	Criterion	Description	Key Point	Comment
154	3	Nationally significant infrastructure	Effective decision-making tools are in place for guiding infrastructure investments	"A clear process is in place to determine the need for new and upgraded infrastructure. Effective tools include the SAMFto support decision-makers"
161	9	Accountabilities , timeliness and performance measures	A clear structure exists for internal accountability to Cabinet.	"Strong internal accountability bodies are in place includingthe whole-of-government Strategic Asset Management Framework supporting the Economic Expenditure and Review Committee to Cabinet"

Source: COAG Reform Council, 23 December 2011, Review of capital city strategic planning systems: Report to the Council of Australian Governments

The Department of Treasury reports compliance with SAMF as its key indicator of effectiveness for value for money outcomes in service delivery and infrastructure provision. However, as shown in Table 8 below, compliance with SAMF in 2013 was at a low point, with only six out of the fifteen (40 per cent) highest value agencies⁸⁵ compliant with SAMF or equivalent at 30 June 2013.

Table 8 Department of Treasure value-for-money outcomes in infrastructure

Key indicators of effectiveness	2009-10	2010-11	2011-12	2012-13	2012-13
	Actual	Actual	Actual	Target	Actual
Percentage of highest value agencies complying with the SAMF or equivalent accredited mechanism	75%	69%	75%	75%	40%

Source: West Australian Department of Treasury, 2013, Annual Report 2012-13, p.147.

Compliance with the SAMF is required under two instruments. Firstly, guidelines produced by the Department of Premier and Cabinet for submissions to both Cabinet⁸⁶ and the Economic Expenditure Review Committee (**EERC**)⁸⁷ require that project proposals *should* not be considered for funding unless they are SAMF compliant. Secondly, the Public Sector Commission publishes periodic circulars which, create legal compliance requirements for Chief Executive Officers. Circular 2009-22 mandates the SAMF be adopted by all public sector agencies.

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^{85 &}quot;Highest value agencies" as defined by WA Treasury includes six Government Trading Enterprises, for whom compliance is currently not mandatory

Department of Premier and Cabinet, 2013, Cabinet Handbook 2013, p.26, "The financial implications of Cabinet proposals must be evaluated by the Treasury prior to the submission being lodged for Cabinet consideration. If the submission includes an asset investment proposal, Treasury must be consulted as to whether the proposal complies with the SAMF. Cabinet Secretariat may not accept Cabinet submissions without this verification."

⁸⁷ Department of Premier and Cabinet, 2013, Economic and Expenditure Reform Committee Handbook, p.5, "Submissions to initiate projects for asset investment should comply with the Capital Investment Policy of the SAMF".

The ERA notes, notwithstanding these requirements, successive governments and their agencies do not always have strong incentives to comply with the SAMF. Political imperatives often cause projects to be rushed through proper planning processes, with the result that project outcomes are usually materially compromised. Examples provided throughout this report include the Muja AB Refurbishment in the context of the Varanus Gas Explosion the Banksia Hill Detention Centre Project in response to an election commitment and the "parallel planning" approach adopted to hasten delivery of the Fiona Stanley Hospital.

The Office of the Auditor General (**OAG**) conducts regular reviews of key projects seeking to provide Parliament with assessments of the effectiveness and efficiency of public sector programs and activities and identify opportunities for improved performance. As can be seen in Table 9, compliance and non-compliance with SAMF and related infrastructure planning processes is a frequent theme of performance audits.

Two key themes emerge from a review of OAG audits over the last five-years; at the heart of most poor project outcomes is either a failure to implement good planning process, or a (related) failure to properly understand the underlying condition of the asset base.

Table 9 Recent Auditor General Examinations Involving Infrastructure Planning

Date	OAG Report	Relevant Finding
February 2014	Water Corporation: Management of Water Pipes	Risk-based replacement strategy requires accurate and complete asset condition & performance information which is currently insufficient to ensure fully informed decision making
November 2013	Western Power's Management of its Wood Pole Assets	Concerns remain with asset management systems. Asset condition information has been inaccurate and incomplete. Prioritisation of expenditure appears unstructured and subjective.
November 2013	Audit Results Report Annual 2012-13 Assurance Audits	Statements of Corporate Intent - governance and accountability mechanisms for entities that operate at arm's length from Government. Of 23 due SCl's, 12 were not tabled by 31/10/2013. Education/Treasury unable to produce documentary evidence on condition of schools to justify changes in their useful life for accounting purposes.
August 2013	The Banksia Hill Detention Centre Redevelopment Project	The project was driven by an election commitment and not derived from Strategic Asset Planning. The resulting business case did not adequately consider the impact of the project. Identified risks were realised but no steps were taken to mitigate them. Misleading and contradictory information was provided about project progress.
April 2013	'Room to move: Improving the Cost Efficiency of Government Office Space"	The planned whole-of-government approach to the strategic management of office accommodation has not been implemented. Only 35 per cent of government agencies had provided 10-year Office Accommodation Plans as required under SAMF.
October 2012	Major Capital projects	A sound asset management framework and robust planning need to be consistently applied across all major projects to ensure investment decisions are well informed. The impact of departing from good process stays with a project. Major capital projects suffer limited transparency and 90 per cent of project cost variance occurs during business case development.
September 2012	Second Public Sector Performance Report 2012	Housing Authority's Head Contractor Maintenance Model was poorly planned and unsuccessfully rolled-out. The control framework could be strengthened by taking a more strategic risk based approach
September 2011	Second Public Sector Performance Report 2011	Common weaknesses at assessed agencies included a lack of robust strategic planning for ICT projects including a failure to develop business cases. Agencies face significantly increased risk of poor ICT outcomes
June 2011	Public Sector Performance Report 2011	Five out of nine assessed agencies did not follow good practice principles to strategically manage procurement resulting in failure to identify opportunities to get best value for money
October 2010	ICT Procurement in Health and Training	Good governance and planning are critical to successful ICT procurement and both have been poor in the case of Health, which has been consistently unable to provide a suitable business case
August 2010	Fitting and Maintaining Safety Devices in Public Housing	The Housing Authority property information is often unreliable posing deep systemic problems and a structured project management and reporting framework was lacking for the safety device program.
June 2010	Fiona Stanley Hospital Project	The planning phase was neither efficient nor effective. The project business case and other key planning documents had significant gaps which required time and resources to fix. The project lacked robust financial and project management systems. Health should ensure that future projects conform to the SAMF. The use of parallel planning process rather than SAMF's sequential one delivered an unacceptable business case with substantially underestimated scope and budget
March 2010	The Planning and Management of Perth Arena	Critical components of the SAMF were not applied leading to inadequate governance, oversight, project management and administration. The Department of Treasury and Finance (DTF) should ensure consistent application of the SAMF.
June 2009	Maintaining the State Road Network	Main Roads lacks key information about the condition of the road network making cost effective prioritisation of maintenance difficult to achieve.

Source: Office of the Auditor General: Reports and Publications.

In particular, in its October 2012 review of Major Capital Projects, the Office of the Auditor General found that the expected cost of the 20 projects it reviewed is \$6.157 billion or \$3.275 billion (114 per cent) more than the total original approved budget estimates, of which 90 per cent was found to occur during the evaluation phase. The OAG made the following observation:

...it is critical to project performance to get the early stages right. A sound asset management framework and robust planning need to be consistently applied across all major projects to ensure investment decisions are well informed and project expectations are realistic. Fixing projects gets harder as they progress and, as a number of projects in the report show, the impact of departing from good process at the start stays with them.⁸⁸

On this basis, the ERA concludes that it is the implementation of planning processes that is the primary source of problems with infrastructure planning in Western Australia, not the process itself. Poor infrastructure outcomes, cost and time blow-outs and infrastructure that is not fit for purpose, are common when good planning processes are not followed.

In the following sections, specific components of the SAMF will be examined in more detail. From an infrastructure planning perspective, the ERA considers four primary policies in the SAMF with respect to agencies' Strategic Asset Plans, business cases, the evidence base for asset planning and the role of cost benefit analysis.

Agency Strategy Asset Plans

A Strategic Asset Plan (**SAP**) is a corporate planning process required by the SAMF to ensure agencies communicate with Government the relationship between demand, existing assets and new infrastructure priorities. A SAP requires agencies identify and articulate a deep understanding of the condition and fit-for-purpose of the existing asset base and through emphasis on non-asset initiatives, identify the top strategic infrastructure priorities for the agency over a ten-year period.

Under the SAMF, a SAP plays a central role in generating the business cases for individual project evaluation. However, as shown in Box 2, in practice, an agency's SAP does not always drive investment decisions.

Box 2 Case Study: Banksia Hill Detention Centre

The redevelopment project of the Banksia Hill Detention Hill centre was not processed through the Department of Corrective Services' normal SAP and fell outside the normal budget and project planning process. The decision for redevelopment was based on an election commitment rather than on an established business need. The Auditor General found that:

"The resulting business case was rushed, in turn delaying and adding cost to the opening of the facility and serious risks were realised" (p.26)

Source: Office of the Auditor General Western Australia, 2013, The Banksia Hill Detention Centre Redevelopment Project.

The ERA considers the SAP to be of considerable importance for two reasons. Firstly the SAP should communicate clearly to government that the agency understands underlying demand drivers, the condition of the substantial investment already undertaken in existing assets and the range of options available to Government to meet demand. Secondly, the

⁸⁸ Office of the Auditor General, 2013, Major Capital Projects- October 2012, p.6.

SAP represents an ideal vehicle to drive Government's reform agenda, should it choose to implement broader changes to infrastructure planning policy.

For example, a directive from Government that all agencies consider the strategic implications of private sector provision of core services as part of the SAP, and/or divestment strategies could generate quality information for Government to inform future policy direction in each sector.

The Business Case

At the heart of the investment decision for any infrastructure is the articulation of the proposal and its costs and benefits relative to other options. This is encapsulated by the business case.

There are a number of documented examples of the consequences of failure to adequately follow established planning process. In Box 3 below, the imperative to ensure reliable electricity supplies following the Varanus Island gas crisis resulted in business transactions that lacked proper business case justification.

Box 3 KPMG Report into Verve's Muja AB Refurbishment Project

The (previously retired) coal-fired Muja Power Station was brought back into service following the Varanus island gas crisis to broaden sources of electricity supply. After expenditure of \$290 million and the subsequent operational mishaps brought about the failure of the private sector joint venture, considerable project debt was resumed by Verve Energy. A review was ordered into the project prior to further expenditure being approved. The KPMG Review concluded the following:

"There appears to have been no methodical approach to applying a typical investment decision framework to this project" (p.ii)

"No consolidated comprehensive business case appears to have been prepared at the time the original investment decision was made to proceed with the project. The briefing materials, financial model and due diligence documentation are disparate in nature." (p.8)

"If the cost of the unanticipated boiler tube repair works had been known up front, the overall economics of the project would have been challenging..." (p.8)

"There has been a lot of conjecture as to whether this [boiler repairs] was foreseeable at the scoping stage. The short answer, with some hindsight, is probably yes." (p.15)

Source: KPMG, 2013, Muja AB Project Assessment.

Similar examples elsewhere in this report include Banksia Hill Detention centre and the Perth Arena. In the case of the Fiona Stanley Hospital, the Auditor General identified that the business case was prepared in parallel with other planning to hasten project delivery.

The infrastructure evidence base: asset condition and demand

Another finding of the Auditor General's performance examinations is the wide-spread lack of information about the condition of government-owned assets.

Evidence has been provided by the OAG that:

• Main Roads lacked key information about the condition of roads;

- the Housing Authority lacked information about the condition of public houses;
- Western Power lacked information about the condition of its power poles;
- The Department of Education lacked information about the condition of its schools;
 and
- Water Corporation lacked information about the age and condition of its water pipes.

Strategic asset planning requires, as a pre-condition to further asset investment, a thorough understanding of the condition of the existing assets and the most cost-effective mix of maintenance and asset renewal. As various OAG audits discovered, in many cases there are also strong safety implications of not having a good understanding of the condition of the asset. The ERA considers it a high priority for government entities to build the evidence base underlying a proper understanding of the condition of the State's public assets.

The role of cost benefit analysis

Cost benefit analysis (**CBA**) is a method that can be used to evaluate whether an infrastructure project (or a policy) makes the community better off overall, compared to the status quo (or some other alternative). That is, whether it is expected to produce a 'net benefit', and if so, the extent to which benefits exceed costs. This evaluation should be broad, taking into account economic, social and environmental outcomes.⁸⁹

Consistent with a number of public submissions outlined above, the Productivity Commission's recent draft report on public infrastructure frequently emphasised the importance of transparent cost-benefit analysis: 90

- "Properly conducted cost-benefit analysis is an important starting point for guiding project selection and improving the transparency of decision making." (p.9)
- "Accordingly, cost-benefit analysis can play an important role in project selection, provided it is properly applied. Making cost-benefit analyses public (with clearly documented assumptions) for both projects that have been selected, and those that have been rejected, greatly improves the transparency of decision making. Such transparency strengthens the incentives for decision makers to focus on the overall net benefits of projects. It also allows particular estimates (for example, of construction costs or patronage) to be debated and the consequence of different estimates to the project's net benefits to be calculated." (p.74)
- "For cost—benefit analysis to play a useful role in guiding project selection, it needs to be
 of high quality and be consistently applied." (p.74)
- "Reforms to improved project selection that can and should be initiated immediately even election commitments to build and/or fund substantial infrastructure should be subject post-election to rigorous project assessment and selection" (p.30)

Guidance for performing cost benefit analysis is contained within the SAMF publication *Options Analysis* detailed above however relevant agencies, such as the Department of Transport, have developed advanced in-house expertise in sector-specific economic analysis. The SAMF policy anticipates agencies that do not often conduct economic analysis will out-source cost-benefit evaluation skills as required.

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⁸⁹ Productivity Commission, 2014, Public Infrastructure Draft Report, p.75

⁹⁰ Ibid.

Box 4 2014 Election commitments for public transport projects

In the 2013 State election campaign, the Liberal Government promised two major multi-billion dollar public transport projects, the \$2 billion Airport Rail Link and the \$1.9 billion Metro Area Express (MAX) Light Rail Project. Both projects were then included in the 2013-14 State Budget. The MAX Light Rail was subsequently deferred for three years in the 2013-14 Midyear Financial Projections Statement, in order to reduce the pressure on net debt.

A business case for the MAX Light Rail project has been completed by the Department of Transport including detailed CBA which was subjected to rigorous independent scrutiny from Infrastructure Australia. The CBA outlines a range of patronage and demographic assumptions, showing an aggregate (and independently verified) net benefit. The business case has not been made public.

A business case is yet to be finalised for the Airport Rail Link project.

It is therefore not clear on what basis Government has given the Airport Link priority over the MAX Light Rail Project.

The Productivity Commission argues that a transparent cost-benefit framework improves infrastructure outcomes to the community by integrating the requirements of all infrastructure stakeholders⁹¹ under the unifying concept of economic efficiency.

In particular, the aim of cost-benefit analysis is to determine the highest possible net benefit to the community from the provision of public infrastructure in aggregate. For example, if there are two infrastructure project proposals that are equally costly to build, prioritising the one that produces the greatest benefits will improve allocative efficiency. Cost benefit analysis provides the quantitative tool by which this comparison can take place.

In Box 4 above, an example is given where cost benefit analysis was apparently not used to guide decisions between large multi-billion dollar investments in public transport, with the result that it is not possible to demonstrate an economically efficient outcome for the community.

4.2.1.4 Recommendations

- 1. Apply project evaluation processes, including cost-benefit analysis, consistently and rigorously to all major infrastructure projects.
- 2. Subject all election commitments to rigorous project evaluation processes before being included in the State Budget.
- 3. Publish the outcomes of all major project evaluations.

⁹¹ Government, the community, financial institutions and industry members are examples of stakeholders.

4.2.2 Fit for Purpose

4.2.2.1 Issue

The strong performance of the Western Australian economy in recent years has led to an expectation of the provision of world class infrastructure – including stadiums, hospitals and public transport systems. However, the current budgetary situation, as outlined in section 4.1.3, means that Government may no longer be able to afford everything that its constituents desire. Continuing to provide high-end infrastructure will place further pressure on the State's burgeoning debt, a key factor in the recent credit rating downgrade.

Like Governments before it, the current Government's reaction to tightening budgetary conditions has been to delay or cancel entire projects. For example, on 18 December 2013, the Treasurer announced that the Metro Area Express (**MAX**) Light Rail project⁹² would be delayed, while the Ellenbrook Bus Rapid Transit project⁹³ was cancelled.

An alternative to these cancellations might have been to consider projects that are more affordable and fit for purpose. These projects may be able to deliver many of the benefits promised by the more lavish projects for just a portion of the cost.

4.2.2.2 Submissions

The ERA received no public submissions on this issue.

4.2.2.3 ERA Analysis

Maximum delivery for minimum cost

In recent times there has been a tendency for Government to provide infrastructure at a level that is beyond what is necessary. While this may not always be an incorrect decision, decisions to do so should not be taken lightly. One such example is highlighted in the case study below.

⁹² The MAX Light Rail project is a mass capacity transport system (similar to a tramway) designed to link major metropolitan centres, health and entertainment precincts with the CBD. The system is to run from Mirrabooka in the North to Victoria Park in the East and Nedlands in the South.

⁹³ The Ellenbrook BRT project was to create dedicated priority bus lanes that would improve journey times linking to the Midland train line at Bassendean.

Box 5 Fiona Stanley Hospital: Single or double bed rooms?

In 2007 the cost of the Fiona Stanley Hospital increased based on a decision to expand the number of single bed rooms at the hospital. The Auditor General notes⁹⁴:

The number of single bed rooms was increased from 257 to 534 in 2007. This added just over 3,300 square metres to the area of the hospital and \$44.5 million in capital construction costs. The potential impact on other capital costs, such as ICT, was not addressed in the revised budget.

The decision to increase the number of single bed rooms followed a 2007 ministerial study trip to the United States (**US**), and a subsequent business case. The business case assessed the benefits in terms of meeting patient expectations and controlling hospital acquired infections. It concluded that single bed rooms would be more comfortable for patients and, based on research in the US and the United Kingdom, could help reduce infection rates. WA Health estimated that the increase in single rooms with adjoining bathrooms would mean a \$1 million a year increase in hospital running costs for additional cleaning, utilities and maintenance. It considered the impact on staff efficiency to be minimal.

Increasing the number of single bed rooms might have been the correct decision, and is only a minor part of the project's cost. However, the point of this analysis is that the increase in cost was a deliberate choice to improve the level of service beyond that necessary. In tighter fiscal times, decisions such as this must be considered carefully.

Providing infrastructure that is beyond necessary service levels may result in fewer people being able to access the benefits that are derived from its use. In some areas, Western Australia spends significantly more than other States to provide the same service. Providing the service at a lower cost can either free up funds to be used on other areas or provide the service to a greater portion of the population.

The ERA appreciates that it may cost more to provide certain infrastructure in certain situations. While this is necessary at times, decisions to provide a service that is higher than necessary requires careful consideration to ensure that the funds committed to such projects could not be better used elsewhere.

Consideration of alternative projects

There may be situations where, when a project is unaffordable, a smaller or range of smaller products are able to provide many of the benefits of the original project. It is important that Government considers all alternatives to minimise the impact that budgetary conditions and other external factors have on delivering benefits to society.

This may occur when assessing the validity of different transport modes, as explained in Box 6.

⁹⁴ Western Australian Auditor General, 2010, Fiona Stanley Hospital Project.

Box 6 Light Rail Transit or Bus Rapid Transit?

Perth's strategic public transport plan, Public Transport for Perth in 2031, envisages a range of solutions for Perth's network.⁹⁵ These include Heavy Rail, Light Rail Transit (**LRT**) and Bus Rapid Transit (**BRT**).⁹⁶

The mode choice tends to reflect the situation that the mode is to serve. For example, heavy rail has a very high capital cost and tends to be favoured to move large volumes of people over large distances, while BRT is cheaper, but is considered to be suitable for smaller numbers of people.

Typically, heavy rail is the most expensive form of transport infrastructure, followed by LRT, with BRT the cheapest.⁹⁷ With regard to a current example, the Ellenbrook BRT had a cost of \$13.33 million/km⁹⁸, the MAX Light Rail project has a total cost of \$86 million/km⁹⁹, while the Airport Link (a heavy rail project) has a cost of \$235 million/km.

There is also evidence that BRT is cheaper to run on a per kilometre basis, but can be more expensive on a per person per kilometre basis due to low ridership. Both Heavy and Light Rail are also considered to be superior to BRT in inducing land use changes such as Transit Orientated Developments (TODs) 101 and are better for the environment. 102

However, in certain situations there may be scope for moving to a BRT rather than (in particular) LRT and in some cases heavy rail. These reasons are highlighted below:

- BRT systems can shift considerable numbers of people. Bogota, Columbia's BRT system, shifts a peak of 45,000 people per hour per direction (pphpd). In contrast, Perth's rail system shifts 34,000.¹⁰³ Bogota covered 100 per cent of the city for the same cost as a railway covering 16 per cent of the city.
- BRT's inferior performance on attracting people to TODs is based on peoples' expectations of normal bus services, which might have frequent stopping, slow transit times and be less permanent in nature. A well designed BRT that displays the desirable characteristics of permanence and visibility can encourage TOD's.
- Buses can match light rail's environmental performance and in any case is much superior to car travel.

⁹⁵ Government of Western Australia, 2011, Public Transport for Perth in 2031 p7.

⁹⁶ Heavy Rail systems are those that run independent to traffic as seen in Perth's current train system. LRT systems, such as the tramways of Melbourne, have less capacity than Heavy Rail and typically operate on the same roadways as private traffic. BRT systems run buses on new roadways or dedicated lanes, removing causes of delay that impact on speed and reliability.

⁹⁷ Currie, 2005, Bus Transit Oriented Development – Strengths and Challenges Relative to Rail; Gardner, 1996, Decision making and large transport infrastructure projects.

⁹⁸ Department of Transport, 2012, Perth in Focus – Perth Public Transport, Presented to Committee for Perth on 8 November 2012; Thirty-ninth Parliament of Western Australia, First Session, 2013, Parliamentary Debates: Legislative Council 17 October 2013 p. 5134.

⁹⁹ Western Australian Government, 2013, Metro Area Express (MAX) Light Rail Project: An Overview.

¹⁰⁰ Currie and Delbosc, 2013, Exploring Comparative Ridership Drivers of Bus Rapid Transit and Light Rail Transit Routes.

¹⁰¹ TOD's are compact, typically walkable communities centred around high quality public transport systems.

¹⁰² Currie, 2005, Bus Transit Oriented Development – Strengths and Challenges Relative to Rail; Commissioner for Environmental Sustainability, 2008, Public transport's role in reducing greenhouse emissions.

¹⁰³ Public Transport Authority, data provided to the ERA upon request.

¹⁰⁴ Henscher, 1998, The imbalance between car and public transport use in urban Australia: why does it exist?

 LRT often shares space with traffic (for example, Melbourne Trams) and offer no substantial time savings over bus services.¹⁰⁵

The ERA acknowledges that a mix of alternatives will be required for Perth's future public transport system.

However, a review of what each mode can potentially achieve could potentially increase the public transport available for Perth residents.

Ideally Government projects would be ranked and prioritised according to Benefit Cost Ratios (**BCR**s)¹⁰⁶. Projects that deliver the highest benefit per dollar invested would then be undertaken first, maximising societal benefit. However, governments do not, and are at times unable to, rank all projects according to BCR.

In its report on public infrastructure, the Productivity Commission discussed Governments' bias towards large projects, commenting that current arrangements for project selection and prioritisation tend to favour larger more iconic projects over smaller scale projects that would yield higher net benefits to the community through directly improved efficiency of the use of existing infrastructure. This was also attributed in part to the trend of Commonwealth funding becoming increasingly project specific, accentuating a bias in infrastructure decision making towards large, politically salient projects:

"The incentives in political decision-making lead to an undue emphasis on 'ribbon cutting' opportunities, generally associated with very major ('mega') projects, at the expense of periodic maintenance and of small-scale 'de-bottlenecking' options that could postpone or even avoid the need for costly asset expansions" 107

Opposition to the Fit for Purpose approach

The fit for purpose approach is subject to some objection. Firstly, the implementation of the 'second best' project may prevent the first option being built at a later date. For example, the construction of BRT infrastructure may occupy valuable space on a transport corridor that would prevent the building of a light rail system in the future. However, the ERA notes that such impacts have been managed in the past. These include train line disruptions during the Perth City Link project or the BRT disruption during the construction of the Southern Suburbs Railway from 2004 to 2007.

Secondly, it could be argued that investing in more affordable projects can be detrimental to the meeting of multiple objectives. For example, public housing could potentially be constructed much more cheaply than is currently the case, but the social outcomes associated with doing so may be highly undesirable.

Considering these points, the ERA agrees that care must be taken when considering project alternatives and each should be analysed on a case-by-case basis. Different actions may be required depending on the context in which infrastructure is being delivered.

4.2.2.4 ERA conclusions

The ERA considers that there are a number of opportunities for Government to deliver greater public benefit in the presence of budgetary constraints. This can be achieved

¹⁰⁵ Infrastructure NSW, 2011, First things first: The State Infrastructure Strategy 2012-2032 p.96.

¹⁰⁶ BCR is equal to present value benefits divided by present value costs. It provides an indication of the volume of benefits returned for each dollar invested.

¹⁰⁷ Productivity Commission, 2014, *Public Infrastructure Draft Report: Volume 1* p.229.

through considering a range of lower cost options instead of delaying or cancelling a project that is no longer financially feasible. These lower cost projects may deliver many of the benefits of the higher cost options.

The first stage in realising such gains is for Government agencies to analyse a range of alternative projects when undertaking a business case. ERA discussions indicate that this process is already undertaken by the best agencies.

Gaining benefits in this area would be as simple as:

- implementing and following good process, such as outlined in Section 4.2.1; and
- should funding be limited, Government asking agencies for lower-cost alternatives to partially solve the original problem.

4.2.3 Alternative policies

4.2.3.1 Issue

Infrastructure, as with all government expenditure, is used as a means of achieving government policy objectives. However, in certain situations, it may be possible to implement government policies in ways that do not place the same stress on government finances that is associated with infrastructure expenditure. This section raises the question of whether infrastructure expenditure is the best way to implement government policy.

For example, the Department of Housing undertakes a range of development activities in response to a perceived market failure in the supply of affordable housing. This may not be an inherent market failure, but could have been caused, at least in part, by other Government policies. The correction of these policies could have the same impact on the supply of affordable housing without the cost of risk to Government that is associated with development activities.

4.2.3.2 Submissions

The ERA received no public submissions on this issue.

4.2.3.3 ERA analysis

Identifying the market failure to which the Department of Housing is responding, other than the fact that dwellings could be built for lower prices but are not, is difficult. It is important to understand the reasons that this is the case before resorting to infrastructure expenditure as a solution. In this situation, State and Council building regulations may provide a part of the reason for reduced supply of affordable housing.

The Department of Housing has submitted that complying with a series of regulations imposed by the State Government in combination with various State and local building conditions has substantially increased the cost of its unit developments. In particular, the Department of Housing states that the cost of one of its unit developments was increased by approximately \$20,000 due to requirements for:

- arbitrary aesthetic changes;
- fire standards that are higher than those common in the eastern states; and

• standard developer contributions that took no account of existing developer contributions to community infrastructure.

This development was in an area where high rise units are common. Developers could be exposed to higher compliance costs when seeking approval in areas where high rise developments are rarer.

Developers will need to recover a margin to cover the known costs of complying with regulation and costs that could be imposed by State and local governments after the project has commenced. These increased compliance costs increase the cost of constructing a development and therefore the sale price of the properties.

Given the high fixed cost of producing a property, including the additional cost that is imposed by regulation, it makes sense for a developer to finish (that is, divide floors and fit out) a development so that it is tailored to the higher end of the market. As these high fixed costs encourage higher value developments, the construction of affordable properties is likely to be limited.

In response to the lack of private developments catering to the lower end of the housing market, the Department of Housing conducts its own development activities to increase the supply of affordable housing. Instead of exposing the Government to unnecessary risk, it may be that decreasing unnecessary building regulations could increase the private development of affordable housing and limit the need for Department of Housing input.

4.2.3.4 ERA conclusions

The ERA considers that instead of spending scarce public funds and taking on financial risk offsetting the impact of unnecessary regulation, a more sensible approach would be to reduce the unnecessary regulation itself.

Reforms in other areas of Government could allow the private sector to provide the affordable housing that is currently provided through Department of Housing development activities. This could free up funds to deal with other issues, such as reducing the State's public housing waiting list, while also decreasing the risk exposure of Government.

In the event that there are other methods for delivering the same outcome as can be achieved by infrastructure expenditure (such as reducing existing regulation), these methods should be given priority so as to allow the reallocation of scarce funds to address other issues.

4.2.4 Royalties for Regions

4.2.4.1 Issue

Royalties for Regions (**RFR**) is a 'hypothecated' (that is, dedicated) fund which quarantines 25 per cent of Western Australia's royalty income for expenditure on regional programs. The size of the fund has grown rapidly since its inception, with a recent boom in iron ore royalties resulting in total funding of approximately \$6.4 billion¹⁰⁸ for the four-year period to the end of the current budget cycle in 2017.

As is a common problem with hypothecated funds, there is no de-facto relationship between the optimal level of expenditure on regional projects and the revenue raised from the program. The proximity of the fund's balance to its legislative limit, its overall size and the

¹⁰⁸ Western Australia Treasury, 2013, 2013-14 Economic and Fiscal Outlook, p. 84.

resulting ready availability of funding, have all combined to remove the traditional incentives that ensure only projects that provide the highest net benefit to the community are funded.

As a result, the program is likely funding sub-optimal projects that do not achieve value-formoney. The scale of the program and the volatility of its revenue base are having a material impact on Government's budget flexibility with negative consequences for overall State economic efficiency and productivity.

4.2.4.2 Submissions

The ERA received 7 submissions on the topic of regional infrastructure, two from Government departments and five from industry representative bodies. 6 submissions were in favour of reforms to the RFR, with the remaining submission being broadly informational in content:

- The Civil Contractors Federation proposed that any preference for regional expenditure is best implemented through long-term, coordinated, evidence based planning such as via a state infrastructure plan.
- The WA Local Government Authority recommended more strategic use of RFR funds.
- The Chamber of Minerals and Energy recommended consideration of the distribution of RFR funding, in particular whether the percentage funding methodology represents the most efficient and effective mechanism and allocation for realising key government initiatives.
- The Department of Planning argues that planning is better undertaken at a wholeof-state than a regional level because many infrastructure networks span multiple regions. Regional infrastructure planning would benefit from more rigorous and transparent prioritisation process based on net public benefit rather than stakeholder consensus.
- The Department of Regional Development outlined the requirement for sound business cases for RFR projects reviewed by a 20-member Directors General reference group. Recent reforms include a shift of strategic emphasis to Regional Blueprints and productivity enhancing projects.
- The Chamber of Commerce and Industry of Western Australia (CCIWA) calls for greater transparency around how the RFR is delivering social and economic infrastructure in the regions. CCIWA considers it important that regional infrastructure undergoes the same stringent assessment process as all other infrastructure projects to ensure that projects which deliver the greatest value for money for taxpayers are prioritised.

4.2.4.3 ERA analysis

Background

The Royalties for Regions (RFR) program was a National Party policy in the 2008 State Election. After a close result in the polls, the National Party was in the position of choosing which of the two parties it would effectively allow to govern the State. Support for the RFR program was part of the Liberal Party's winning bid for a power-sharing arrangement with the National Party.

The Royalties for Regions Act 2009 (the **Act**) was proclaimed on 27 March 2010 to provide for the operation of the RFR fund. The stated objective of the Act is to promote and facilitate

economic, business and social development in regional Western Australia. Under the Act, the Minister, with the Treasurer's concurrence, may authorise expenditure to provide infrastructure and services, develop and broaden the economic base and to maximise job creation and improve career opportunities in regional Western Australia (S.9). In a number of sections, the Act places a clear limit on the fund of \$1 billion (S.6.3, 7.2, 8).

The RFR is a "hypothecated" fund. Hypothecation (also known as ring fencing or earmarking) is the dedication of a specific source of revenue for a particular expenditure purpose. In contrast to the traditional approach of funding all government expenditure from a consolidated fund, the objective of hypothecation is to increase transparency and create a stronger connection between a source of revenue and what it is spent on.

Hypothecation is a strong feature of fiscal policy in the United States. In 2005, hypothecation accounted for an average of 24 per cent of all US state government expenditure, varying from 4 per cent in Rhode Island to 84 per cent in Alabama. By contrast, the United Kingdom Government has consistently opposed hypothecation on the grounds that spending priorities should not be determined by the way in which money is raised. In response to a recent proposal to link fuel duties to public transport funding, the UK Treasury stated the following:

"Government's spending priorities are not, in general, determined by the way in which the money is raised. Hypothecating taxes to particular spending programmes can reduce flexibility in spending decisions and lead to a misallocation of resources, with reduced value for money for taxpayers. The (UK's) Spending Review process ensures that resources are allocated to deliver Government priorities." 111

Hypothecation is not inherently good or bad and there are examples of successful application of this policy. 112 On a case-by-case basis, the advantages of hypothecation (in terms of transparency, accountability and increased incentives to pay certain taxes) must be weighed up against the disadvantages, in terms of reduced flexibility and the potential for inefficient expenditure allocation. The World Health Organisation considered the success of hypothecation to be dependent on the context and on how other government spending is adjusted as a consequence, summarising hypothecation as a "sacrifice of fiscal flexibility on behalf of government in order to achieve greater accountability and citizen support" noting that both effects will most likely be of temporary nature only. 113

Budget flexibility

The Western Australian Government's royalties income has increased strongly since the Royalties for Regions policy was formulated, and the Government expects it to continue to rise in coming years, citing higher production volumes, a depreciating exchange rate, and the removal of the discounted royalty rate on iron on 'fines'. 114

The increase in royalties has materially augmented the funding available for regional programs. However an offsetting decrease in GST Grants from the Commonwealth in

¹⁰⁹ Crowley, George and Hoffer, Adam, 2014, *The effects of dedicating tax revenues*.

¹¹⁰ House of Commons Library, 2011, *Hypothecated taxation*

¹¹¹ House of Commons, 2009, Fourth special report of session, p10

¹¹² For example, until 1997 the Victorian Government levied a 5 per cent tobacco tax which was hypothecated to a Health Promotion Fund and used to buy-out tobacco sponsorship at sports events, resulting in reductions in smoking-related health costs. The model was subsequently replicated in many jurisdictions around the world.

¹¹³ World Health Report, 2010, *Hypothecation of tax revenue for health - Background paper 51*

¹¹⁴ Department of Treasury, Western Australia, 2013, 2013-14 Budget: Economic and Fiscal Outlook Budget Paper No.3

response to increases in royalties has magnified RFR's impact on the State's budget flexibility.

Under Australia's Federation model of government, the wealth contained in regional Western Australia's natural resource base is assumed to be owned by all Australians. Practical application of this principle is reflected by Federal government adjustments to the allocation of GST grants that takes into consideration each State's ability to generate ownsource revenue. This process has resulted in a reallocation of Western Australia's royalty income to other States, as a result of decreases in its GST grants.

As noted in the 2013/14 State Budget: 116

"The composition of State revenue has changed significantly in recent years. For example, the share of total revenue attributable to royalty income has increased from 5% in 2003-04 to 21% in 2013-14. Conversely, Commonwealth grants are shrinking rapidly as a proportion of total State revenue. After reaching a peak of almost 50% in 2001-02, Commonwealth grants are expected to account for just 31% of total revenue in 2013-14. A key factor driving changes to Commonwealth grants is the significant penalty for Western Australia associated with the Commonwealth Grants Commission process for distributing national GST collections."

The full extent of the wealth reallocation is still unfolding, with GST revenue forecast to fall to \$626 million in 2016-17, from \$2.5 billion in 2013-14 (and a peak of over \$4 billion in 2007-08¹¹⁷), in response to increases in royalty income. As a result, State Government is experiencing material expenditure pressures from the associated population boom but is receiving little benefit from the additional income.

Payments into the RFR fund are calculated on a gross basis and do not account for GST deductions from increases in royalties, with Treasury estimates suggesting that around 70 per cent of royalty revenue is lost through the GST grants process. This magnifies the impact of RFR on the budget. RFR appropriations have more than doubled from around 3 per cent of general government revenue in 2009-10 to well over 5 per cent in 2013-14. This means that an increasing (and unforeseen) proportion of the State's financial capacity is being quarantined for regional expenditure under the program. Further, the Royalties for Regions fund has grown from less than 10 per cent to more than 20 per cent of the size of the Asset Investment Program over the six years of its operation.

This analysis highlights the key difficulty with hypothecated funds in that they inhibit budget flexibility. In the case of Royalties for Regions, this flexibility has been exaggerated by the offsetting action of Commonwealth GST grants allocations, with the result that the funding available for regional expenditure is multiples higher than anticipated. This is at the expense of funding necessary to meet substantial expenditure pressures associated with the

Department of Treasury, Western Australia, 2013, 2013-14 Budget: Fact Sheet – Where the money comes from and where it goes

Horizontal Fiscal Equalisation is the term given by the Commonwealth Grants Commission to the process of equalising State Governments' fiscal capacity to provide public services. Under this principle, GST revenues are distributed with the objective of full equalisation of the States' capacities to provide services and infrastructure at the same standard if the same effort was made to raise revenue from its own sources and operated at the same level of efficiency – see FAQ at www.cgc.gov.au

¹¹⁷ WA Department of Treasury, 2009, 2008-09 Budget Fact Sheet.

¹¹⁸ WA Department of Treasury, December 2013, 2013-14 Government Mid-year Financial Projections Statement.

¹¹⁹ WA Department of Treasury, 2012, 2012-13 Budget Fact Sheet.

WA Department of Treasury, 2009, 2009-10 State Budget: Budget Paper No.3, and 120 WA Department of Treasury, 2013, 2013-14 State Budget: Budget Paper No.3.

associated population increase. The resulting lack of budget flexibility was a strong theme behind Standard & Poor's recent downgrade of the State's credit rating.

At the commencement of the RFR policy in 2009, a Legislative Council Standing Committee conducted an inquiry into the RFR policy (the **Inquiry**). 121 Its terms of reference included reviewing any cost-benefit modelling of the policy, implications of the policy for the credit rating, budget flexibility and the ability of the Government to adjust the policy in response to changing financial circumstances. Key recommendations from the Inquiry are included in the box below.

Box 7 Recommendations of the Standing Committee on Estimates and Financial Operations: "Royalties for Regions" Policy

The Committee:

- supported the overall intent of RFR to maintain vibrant regional communities and the fair allocation of the State's resources to those regions (p.5);
- was unable to establish any evidence of an actual infrastructure backlog in regional local government (p.16);
- noted that no cost-benefit analysis was undertaken and is of the view that the initiatives, programs and funding allocations to be implemented as part of the RFR program require cost benefit analysis (p.27)
- supported some form of ex-post cost benefit evaluation of the RFR program as advised by Treasury (p.27);
- noted the added challenge to the State Budget created by the increase in expenditure associated with RFR (p.33);
- supported advice from Government that the amount allocated to RFR will be adjusted if the State's AAA credit rating is at risk (p.30 and p.34);
- advised that the Minister for Regional Development stated "...remodelling of the RFR will reflect the financial circumstances of the State" (p.34);
- noted the lack of key financial data and information on actual regional revenue and expenditure to guide the policy (pp. 32-33); and
- urged Government to take into account economic sustainability of the RFR program, wherein future generations are deprived of the benefits of royalty wealth due to the recurrent nature of much of the program's expenditure (p.39).

Source: 2009 Standing Committee on Estimates and Financial Operations: "Royalties for Regions"

The ERA notes that, contrary to the indication provided to the Inquiry by Government and relevant agencies at that time, ex-post cost benefit evaluation of the policy does not appear to have been undertaken, key regional financial data has not been collected, and importantly, the policy has not been adjusted in response to either the threat of, or actual, downgrading of the State's credit rating.

As shown in Table 10 below, in its first five-years of operation the RFR fund received \$4.2 billion in appropriations of which \$2.9 billion has been spent. After accounting for \$500 million unexpended at other agencies, the balance of the Special Purpose Account housing the RFR fund at 30 June 2013 was \$880 million, which is approaching the \$1 billion

¹²¹ Legislative Council Standing Committee on Estimates and Financial Operations, May 2009, Report 20 "Royalties for Regions" Policy.

cap set by the legislation. The purpose of the \$1 billion cap, as explained to Parliament during the second reading speech of the Act, was to hasten expenditure of the funds, "negating delaying tactics for projects and stockpiling for elections". 122

Table 10 Royalties for Regions Appropriation Overview

Funding and Expenditure	Year	Total \$m
Appropriation	2008-09	334
Appropriation	2009-10	644
Appropriation	2010-11	817
Appropriation	2011-12	1,199
Appropriation	2012-13	1,128
Total		4,212
Actual Expenditure	2008-09	197
Actual Expenditure	2009-10	257
Actual Expenditure	2010-11	514
Actual Expenditure	2011-12	812
Unaudited expenditure	2012-13	1,078
Total		2,858
Unexpended - Health		211
Unexpended - other agencies		287
Total unexpended with agencies		498
Balance in the SPA at 30 June 2013		880

Source: Government of Western Australia, 2013, Royalties for Regions Progress Report July 2012- June 2013.

The ERA notes that measures to hasten the expenditure of large amounts of funding are not consistent with good practice infrastructure project planning or delivery. As noted elsewhere in this report, poor outcomes are frequently a result from rushed projects. In contrast, successful outcomes result from business cases developed and tested over long periods and originating from long term strategic plans and government commitments.

Western Australia's Treasury has advised that appropriations to the RFR fund are made quarterly. Given the large and growing revenue base, the fund is nearing its capacity to receive new payments. It could be expected that this would further reduce the incentive to spend funds carefully.

The Western Australian Regional Development Trust established to oversee the RFR has advised the Minister to remove the cap, describing its potential to restrain development of the fund as "chilling". 124 The ERA however considers that rather than being used to subvert good planning process, this legislative size limit may in fact provide the solution to enable Government to limit overall level of expenditure to optimum levels, and enable the Government to better direct additional towards activities such as the reduction of the State's net debt.

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¹²² Hon Wendy Duncan MLC, Hansard, 25 November 2009, Royalties for Regions Bill 2009 Second Reading (pp.9717b-9754a)

¹²³ Infrastructure Australia, December 2010, Infrastructure Planning and delivery: Best Practice Case Studies – A recurring theme of this report is that successful project outcomes result from long term plans and robust business cases developed and tested over long periods. In contrast, a number of Auditor General reports (ibid.) point to poor outcomes resulting from rushed projects (ibid.)

¹²⁴ WARDT Annual Report 2010-11 (p.13)

Removal of funding discipline

In the annual State budget process, Government makes a series of decisions to allocate available funding between various activities based on its view of current priorities and in the context of changing environmental conditions.

The hypothecation of 25 per cent of royalty income for the RFR has resulted in the quarantining of a volatile and increasingly material source of State income and removed Government's capacity to adjust funding to match the aggregate value of regional projects that supply the highest net benefit to the community against underlying economic conditions.

By virtue of its hypothecated nature, it would be coincidental if the amount of funding reserved for regional projects under the RFR policy bears any relationship with the optimal level of regional expenditure.

From this perspective, the Royalties for Regions program has removed an important incentive embedded in government expenditure decision making in order to direct infrastructure expenditure to its highest and best use – competition for scarce funding.

Elsewhere in government funding for new projects is scarce. In the annual budget round, agencies and Government Trading Entities (GTEs) compete for the limited funding pool available for government projects. In the absence of competitive markets for its goods and services, this process serves a vital role in allocating funding to those projects that provide the greatest benefit.

The RFR fund removes this discipline. Discussions between the Authority and stakeholders suggested that few if any projects that present a business case for RFR funding are rejected. This is reflected by the quantity and nature of the investments that proceed.

By contrast, in Western Australia, key performance indicators used at the State's Department of Regional Development measure the efficiency of the Agency as cost per project approved. Efficiency targets are met by approving as many projects as possible. Combined with this is the risk that unspent funds may be taken away as the balance approaches its legislative limit (as outlined above). Taken together, these factors provide very limited (and in some cases perverse) incentives to direct funding towards those projects that provide the highest net benefit.

Practical limitations on project analysis

Aside from the ready availability of funds, the other main impediment to rigorous evaluation of expenditure under the RFR program results from the size of individual projects. From its inception in 2008 to 30 June 2013, Royalties for Regions has allocated more than \$4.2 billion to over 3,500 regional development projects, at an average value of \$1.2 million per project funded. As such, a significant proportion of projects are too small to justify detailed cost benefit analysis.

Furthermore, it could be anticipated that with the passage of time, the quality of project proposals may fall as the "easy" projects have obtained funding and regional agencies need to be more creative in finding ways to spend the ever-increasing pool of funding. This may be balanced somewhat by the increasing capacity of regions to generate and evaluate proposals.

There are a range of alternate mechanisms by which the Government could achieve its regional aspirations. For example, to the extent that a similar project conducted in a regional context is deemed to have greater value to the Government than a similar project in a metropolitan setting, this preference could be recognised via lower assessed-benefit thresholds for viable projects.

This implies a return to a "bottom-up" approach to project prioritisation, selecting that portfolio of projects providing the highest net benefits to the community and funding accordingly. Such mechanisms are preferred in theory, because they allow adjustment of expenditure to be adjusted to suit the economic context and do not continually force expenditure in the absence of compelling economic justification.

The ready availability of regional funding and corresponding lack of scarcity are not providing Government appropriate incentives to select projects in line with good practice principles.

Summary

The ERA considers that on the basis of the evidence, regional expenditure is not suited to a hypothecated funding model. The ERA accordingly recommends a post-implementation review of the Royalties for Regions Program with a view to repealing the legislation.

This ERA is not expressing a view on the priority government places on regional projects, but on the manner in which total regional funding is determined under the RFR.

The ERA recommends that regional projects and programs be presented to Government to compete for funding in the annual Budget round alongside all other competing proposals for funding and accompanied by appropriate cost benefit analysis as determined by good process detailed above. This could include explicit adjustments reflecting any preference for regional projects where appropriate.

The objective of this approach is to break the arbitrary link between royalty income and aggregate regional expenditure and allow projects and programs to be funded according to individual merit and in competition with other Government priorities. In this way the optimum and affordable level of expenditure on regional projects will be established annually with reference to that aggregate annual portfolio of projects which provides the greatest net benefit to the community when compared with Government's competing priorities.

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¹²⁵ WA Department of Regional Development, 2013 Royalties for Regions Progress Report July 2012 – June 2013

4.2.4.4 Recommendations

4. Repeal the Royalties for Regions legislation, or restrict regional funding to an amount determined annually as part of the Budget process and guided by appropriate cost benefit analysis on a project-by-project basis.

4.2.5 Congestion charging

4.2.5.1 Issue

A city's transport system has a significant impact on both its liveability and productivity. Economic and population growth are placing increasing pressures on Perth's transport system, rapidly increasing traffic congestion. Congestion has reduced traffic flow, resulting in commuters spending hours in congested traffic every week.

The most publicly accepted method for combating congestion is the expansion of existing road capacity. Increasing the capacity of a road provides only temporary relief of traffic congestion. When capacity increases commuters who do not ordinarily travel by car are encouraged to do so. For this reason increases in capacity have no long term impact on alleviating traffic congestion. ¹²⁶

Most urban economists agree that the best method for combating congestion is some form of congestion charge. 127 While such charges are sometimes perceived as a 'revenue grab' by Government, the objective is to change consumer behaviour. The aim of congestion charging is to reduce traffic, encouraging drivers to travel outside peak times or to use other modes of travel. The revenue that is gained through such a charge is secondary to the demand management objectives, but can also be utilised to encourage further demand shifts through, for example, appropriate public transport investment or a reduction in other motoring charges.

Calls for congestion charging have gained momentum in recent times with transport experts¹²⁸ and economists¹²⁹ believing a charge is necessary to ensure that Perth avoids the gridlock that plagues Sydney and Melbourne.

The ERA considers that the productivity losses resulting from traffic congestion warrant an investigation into the implementation of a congestion charge.

4.2.5.2 Submissions

The ERA received three submissions from the public that addressed congestion charging:

- The Western Australian Local Government Association (**WALGA**) expressed that any charging model should be cognisant of driver behaviour, highlighting that:
 - charging for arterial routes will redirect some traffic onto the local road network, leading to negative safety and amenity outcomes; and

¹²⁶ Downs, 2004, Why Traffic Congestion is Here to Stay...and Will Get Worse.

¹²⁷ Small and Gomez-Ibanez, 1998, Road pricing for congestion management: the transition from theory to policy.

¹²⁸ Moving People 2030 Taskforce, 2013, Moving Australia 2030: A Transport Plan for a Productive and Active Australia.

¹²⁹ CEDA, 2012. Stifling Success: Congestion charges and infrastructure delivery.

- the availability of parking around the fringe of charging cordons and the provision of effective alternative transport options must be included in any consideration.
- Master Builders commented on the increased congestion on major arterial roads, especially during peak hour. Master Builders acknowledges that measures to alleviate congestion may be unpopular in the short term, but will be accepted as the norm in the long term.
- The Chamber of Commerce and Industry (CCI) highlights that the introduction of congestion charging has proved successful in other jurisdictions. It would be necessary for the government to demonstrate to the public how any revenue derived from congestion charging could be used to invest in critical infrastructure and/or reduce the tax burden through the abolition of inefficient taxes. The CCIWA considers that further investigation into the issue is required.

4.2.5.3 ERA analysis

Congestion in Perth

In Perth, congestion is still largely confined to morning and evening peak periods as people commute to and from work. Traffic volumes for the Kwinana Freeway are shown in Figure 20¹³⁰, clearly illustrating the existence of morning and afternoon peak periods of travel, with traffic around 30 per cent higher than during the shoulder periods.¹³¹

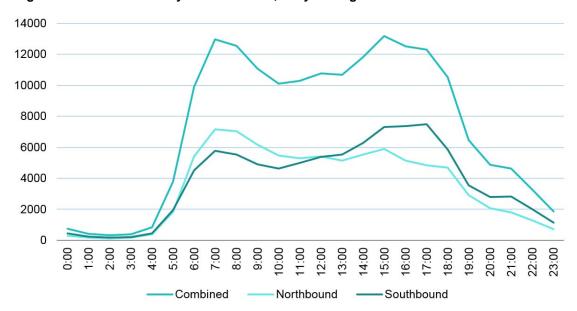


Figure 20 Kwinana Freeway Traffic Volume, Daily Average 2013

Source: Main Roads WA, data provided to ERA upon request.

¹³⁰ The Graham Farmer Freeway follows a similar pattern to that of the Kwinana, though with lower volume. Full data on the Mitchell Freeway is unavailable at this time.

¹³¹ Shoulder periods refer to the periods immediately adjacent to peaks.

Throughout the middle of the day, in between peaks, traffic is largely free flowing, although specific bottlenecks can still occur off-peak. Considering that traffic during this period is a relatively small decrease from the peak, it follows that a relatively small decrease in peak traffic could greatly ease congestion. A reduction in peak period traffic of as little as 5 per cent has the potential to reduce traffic dramatically, increasing speeds by up to 30 per cent.¹³²

As infrastructure capacity is typically determined by peak demand, this profile increases the requirement for road investment. Smoothing the demand for road use across the day can decrease the need for expensive capacity expansion.

The cost of congestion

The economic impact of congestion can be large, costing a country billions of dollars in lost productivity. When a driver enters a congested road they not only face direct costs such as fuel and their own time, but impose costs on all of the drivers already on the road as their presence increases congestion. Congestion is considered an issue when the benefits derived by the additional driver from being on the road are less than the costs that that driver directly faces and the costs that they impose on all other drivers.

According to the Bureau of Infrastructure, Transport and Regional Economics (**BITRE**), the costs of congestion can be split into four categories:

- 1. increased travel times:
- 2. increased uncertainty surrounding travel times (congestion can cause uncertainty surrounding the length of trip times, as congestion levels are uncertain drivers will need to allocate more time to travel to avoid being late);
- 3. increased fuel consumption; and
- 4. the environmental costs posed by pollution (vehicles under congestion emit more pollutants than those in free travelling conditions).

The total costs of congestion could be measured as the difference in each cost category at current congestion levels and totally uncongested conditions. However, some level of congestion is practically unavoidable and it is typically not practicable (nor desirable on efficiency grounds) to reduce congestion to zero. Thus, the BITRE estimates the avoidable costs of congestion (that is, costs that would be saved through appropriate intervention).

BITRE estimates of the avoidable costs of congestion in Perth are shown in Figure 21 . Estimated at \$900 million in the year 2005, costs are forecast to reach 1.6 billion in 2015 and over 200.134

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¹³² Victoria Transport Policy Institute, 2013, Congestion Reduction Strategies.

¹³³ Bureau of Infrastructure, Transport and Regional Economics, 2007, Estimating urban traffic and congestion cost trends for Australian cities.

¹³⁴ Bureau of Infrastructure, Transport and Regional Economics, 2007, Estimating urban traffic and congestion cost trends for Australian cities.



Figure 21 Avoidable costs of congestion, Perth 1990-2020

Source: Bureau of Infrastructure, Transport and Regional Economics, 2007, Estimating urban traffic and congestion cost trends for Australian cities.

Congestion also has a significant impact on the life and wellbeing of families. The average Perth commuter spent 73 hours (equivalent to almost two weeks of annual leave) delayed in traffic in 2013.¹³⁵

Surveys conducted by the Royal Automobile Club (**RAC**) indicate that this extra travel time impacted on the lifestyles of individuals and families. Almost three quarters of the sample experienced increased stress as a result of congestion. Significant portions also stated that extra time spent driving was eating into leisure activities and time that could be spent with their families. Other areas of concern included reduced productivity at work and the risks to safety caused by more dangerous driving.

Congestion charging examples

Congestion charging comes in three major forms: area congestion charges; cordon congestion charges; and facility charges or toll roads. Each of these forms have been implemented domestically or internationally with success. Examples of each are summarised in Table 11.

¹³⁵ Synergies Economic Consulting, 2014, Public Transport Investment: The Value of Action versus the Cost of Inaction

¹³⁶ RAC, 2013, Congestion cutting into family time, accessed from http://rac.com.au/news-community/news-and-reports/publications/rac-enews/rac-enews-2013/perth-congestion-cutting-into-family-time

Table 11 Congestion charging schemes in other jurisdictions

Charging Scheme	Structure	Outcome			
Area C	harging: Driver	s are charged for operating a vehicle within a defined area.			
London (2003)	Flat rate from 7am to 6pm	Car travel decreased by 33 per cent. 50 per cent of the decrease transferred to public transport, 25 per cent diverted around the charging zone, 10 per cent shifted to other private transit and 10 per cent no longer travel or travel outside charging hours. Travel times have decreased by 30 per cent for cars and 50 per cent for buses. ¹³⁷			
Cordon	Charging: Driv	ers are charged for crossing a boundary into a defined area.			
Singapore (1975)	Variable time-of-day. On entry only.	Originally introduced charging only for the morning peak. Initially resulted in shoulder periods seeing more traffic than peak periods. The system changed to the Electronic Road Pricing scheme in 1998, which further decreased congestion, increased travel speeds and shifted commuters to public transit. ¹³⁸			
Stockholm (2006 Trial, Permanent in 2007)	Variable time-of-day. On entry and exit.	The trial resulted in a 20 per cent reduction in vehicles entering and exiting the city. Made permanent via referendum, and has seen continued success. Traffic in 2011 was 30 per cent lower than that in 2005. 139			
Facil	ity Charging: D	rivers are charged for using a selected route (a toll road).			
State Route 91 Orange County, California (1995)	Variable time-of-day.	Managed lanes were added to existing highway capacity and allocated a price, existing lanes remained un-priced. Priced lanes are able to carry twice the traffic of un-priced lanes at four times the speed. This saves the average commuter 30 minutes a day, equivalent to three weeks of annual leave a year.			
Sydney Harbour Bridge and Harbour Tunnel (2009)	Existing flat rate tolls changed to variable time-of-day.	Traffic decreased by 9 per cent on the first day, but recently its effectiveness has been questioned, with success impeded by; 1. Insufficient variance in price across times ¹⁴⁰ ; 2. The lack of development of alternative means of travel; and 3. The lack of flexibility in private sector work hours, which made shifting to off-peak periods largely infeasible. ¹⁴¹			

Source: Leape, 2006; Phang and Rex, 2004; CTS Stockholm; NRMA.

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¹³⁷ Leape, 2006, The London Congestion Charge.

¹³⁸ Phang and Rex, 2004, Road Congestion Pricing in Singapore 1975-2003.

¹³⁹ Centre for Transport Studies Stockholm, 2012. The Stockholm congestion charges- five years on. Effects, acceptability and lessons learnt.

¹⁴⁰ David Henscher, Director of the Institute of Transport and Logistic Studies, University of Sydney.

¹⁴¹ NRMA, 2011, DECONGESTION: 10 ways to relieve Sydney's traffic headache.

Interaction with public transport

In order to ensure the effectiveness of a congestion charge, commuters must be given a viable alternative to private transit. International charges have been most effective when combined with increased public transport to facilitate a shift to public transit. Stockholm, Singapore and London utilise a portion of funds raised to invest in improved public transport. London in particular focused on this area, introducing the charge in combination with 300 new buses that provided a viable alternative to private transit. 142

In the event that a congestion charge is introduced, it is important that Perth's public transport system is capable of absorbing extra patronage during peak periods. The daily patronage of the public transport system in Perth is shown in Figure 22.

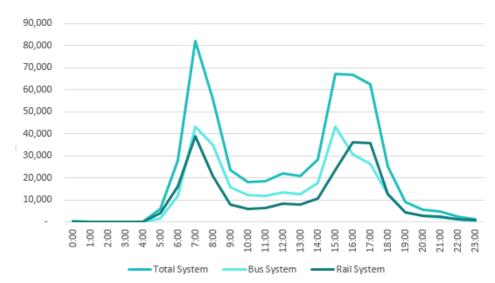


Figure 22 Average daily public transport patronage, Perth, March 2013

Source: Public Transport Authority, data provided to ERA upon request.

Public transport patronage follows similar peak periods of use when people commute to and from work and school. If the existing peak demand periods are unable to accommodate a transfer of commuters from private transit, then the impact of a congestion charge is likely to be decreased.

ERA assessment

The sustained period of economic prosperity experienced in Western Australia has placed increasing pressure on the transport system in Perth, leading to rapid increases in traffic congestion. The costs that are borne as a result of this congestion are now very large. Combating congestion has the potential to not only decrease these costs, but also reduce the need for capital expenditure on road capacity expansions.

Increasing road capacity has little long term effect on alleviating congestion as the expansion releases pent-up demand for road use. Considering this, congestion charging appears to be the most effective method for controlling traffic congestion. It is evident that

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¹⁴² Albalate and Bel, 2009, What Local Policy Makers Should Know about Urban Road Charging: Lessons from Worldwide Experience.

the most successful congestion charging schemes are accompanied by increases in the capacity of alternative travel modes, particularly public transport.

Peak period traffic in Perth largely consists of people commuting to and from the CBD for work. Decreasing traffic entering the CBD will also have flow on effects for commuters travelling to other areas utilising the same route. In 2012, the Committee for Economic Development of Australia (**CEDA**) proposed the introduction of a peak period congestion charge for entering the CBD, suggesting that the Narrows Bridge, Swan River and Mitchell Freeway could serve as natural boundaries for such a charge.¹⁴³

The Productivity Commission has encouraged State and Territory Governments to take advantage of developments in technology to trial direct user charging across road networks. These experiments could provide a way to price congestion in an efficient manner, but it may take some time to achieve acceptance from the community.¹⁴⁴

4.2.5.4 Recommendations

5. Trial a congestion charge for entering the CBD during morning and afternoon peak periods. In order to implement this, further investigation will be required in order to determine the borders of the charging area, the fee structure, the charging and management system and the capacity of the public transport system to handle the likely increase in patronage.

4.2.6 Cost-reflective time-of-use electricity charges

4.2.6.1 Issue

The total cost of providing many types of infrastructure is strongly correlated to the maximum carrying capacity of that infrastructure. Networks and other plant must be sized to serve the maximum expected demand over a reasonable horizon. Consequently, the greater the expected peak demand, the greater the cost of building the assets. If peak demand continues to rise, the assets may need to be expanded and because of this, over the long run, the marginal cost of peak demand can be very high.

The services from Government assets are often provided at a constant charge at all times of the day. This charging structure does not reflect the fact that demand and the cost of supply can change substantially throughout the course of the day. Household electricity tariffs are one such constant charge, where households are charged a constant rate tariff despite the fact that demand, and hence cost of production, vary significantly at different times.

Implementing a usage charge that varies according to the time that a service is used can reduce consumption at times of peak demand and allow service providers to delay or avoid costly network and generation enhancements.

In addition, electricity tariffs for households and many other small-use customers remain at below cost-reflective levels. The Government makes up the shortfall by subsidising electricity supply to these groups. These subsidies impose a burden on taxpayers, distort the price signal to electricity consumers and complicate the task of introducing competition

¹⁴³ CEDA, 2012. Stifling Success: Congestion charges and infrastructure delivery.

¹⁴⁴ Productivity Commission, 2014, *Public Infrastructure Draft Report: Volume 1.*

into this segment of the electricity market. Achieving cost-reflective tariffs will allow the market to operate in an efficient manner.

This section highlights the need for progression towards fully cost-reflective household electricity tariffs and examines the potential benefits of introducing flexible tariff structures such as time-of-use (**TOU**) charging or Critical Peak Pricing (**CPP**).

4.2.6.2 Submissions

The ERA received two submissions from the public regarding electricity charging.

Cost-reflective tariffs:

- The Chamber of Commerce and Industry (CCI) is of the opinion that the introduction of cost-reflective electricity tariffs is a key step towards genuine retail competition.
- The Energy Supply Association of Australia (ESAA) stated that tariffs need to reach cost-reflective levels and, due to slow network price increases and the repeal of the carbon tax, tariffs could reach cost-reflectivity without drastic price increases.
- ESAA and CCIWA also noted that the Government has consistently avoided the pain of increasing tariffs and as such an independent regulator should set electricity tariffs to de-politicise the process.

Time-of-use electricity pricing:

- The CCIWA highlighted that TOU tariffs are widely supported as a mechanism for encouraging small users to reduce peak-period use. The CCIWA suggested that pricing structures need to account for peak demand to ensure the efficiency of Western Australia's electricity system.
- It is the view of the ESAA that the way that we charge for electricity should reflect the way that it is generated and used. TOU pricing may play a role in reflecting changes in generation and use.

4.2.6.3 ERA analysis

Cost-reflective retail tariffs

In the 2010 Wholesale Electricity Market (**WEM**) Report for the Minister, the ERA noted that cost-reflective tariffs are essential for ensuring the market continues to operate in an efficient manner. Setting electricity tariffs that are below cost-reflectivity limits the ability of customers to make efficient consumption and expenditure decisions.

Retail electricity tariffs for households and small businesses remain below cost-reflective levels despite large increases in recent years. The shortfall between the cost of providing electricity and the tariff recovered is paid by the Government to Synergy and Horizon Power through an operating subsidy. The cost of this subsidy, in combination with the Tariff

Equalisation Contribution (**TEC**)¹⁴⁵, was budgeted to be \$420 million in 2013/14 and total nearly \$1.5 billion over the period 2013/14 to 2016/17.¹⁴⁶

Cost-reflective tariffs were further examined in the ERA's inquiry into the efficiency of Synergy's costs and electricity tariffs. At the time, in July 2012, the ERA determined that regulated tariffs, averaged across all customer groups, would need to increase by approximately 21 per cent in order to reach cost-reflective levels.

The ERA considers that Western Australia should progress towards fully cost-reflective electricity tariffs.

Peak Demand

Electricity demand, and therefore generation, distribution and transmission, experiences peak periods of use during the afternoon. Peak demand is also heavily influenced by external factors, such as weather, that affect consumption decisions. For example, during hot temperatures air conditioner use increases, increasing the demand for electricity.

In addition to daily peaks, external factors can cause extreme peaks, which may only occur a few times each summer, during periods of extreme weather. Despite these peak periods typically only occurring on a few days each summer, network and generation capacity in electricity markets are built to service demand at these times. Additionally, excess capacity is required to provide a buffer for unforeseen operational constraints, like generator or network faults.

Figure 23 shows forecast capacity requirement and expected average consumption from 2013-14 to 2023-24.

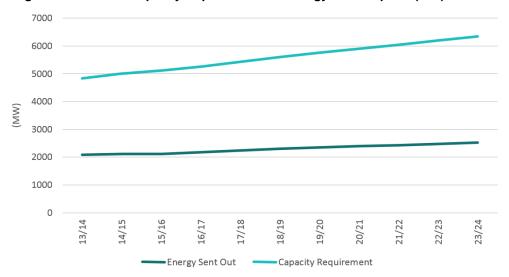


Figure 23 Forecast capacity requirement and energy consumption (MW)

Source: Independent Market Operator, 2013, Electricity Statement of Opportunities - June 2013.

¹⁴⁵ The TEC is paid by Western Power's customers though their network charges, to Horizon Power to fund the shortfall between the uniform tariff revenue and the cost of supplying electricity to customers in regional and remote parts of Western Australia.

¹⁴⁶ Government of Western Australia, 2013, 2013-14 Budget Economic and Fiscal Outlook: Budget Paper No. 3, p. 318.

¹⁴⁷ Economic Regulation Authority, 2012, Synergy's Costs and Electricity Tariffs: Final Report.

The forecast capacity requirement is determined by the expected peak demand of the corresponding year. The capacity requirement dictates the level of network and generation infrastructure needed to service the peak in demand.

Peak demand is expected to grow at a faster rate than average demand (3.13 per cent and 2.06 per cent respectively), increasing infrastructure expenditure and putting pressure on prices. Electricity prices are based on a formula dividing total costs by total energy sent out. If, as it is expected to, peak demand increases faster than average demand then total costs will increase faster than total volume sent out, placing upward pressure on prices.

Reducing the expected demand peak reduces the requirement for capacity expansion, thus providing opportunities to reduce future investment expenditure. Achieving meaningful reductions in peak demand will require more effectively signalling the long run cost of electricity to consumers.

Flexible tariff structures

Flexible tariff structures that better signal the long run cost of producing electricity have the potential to decrease peak period consumption and therefore capital expenditure. The current flat rate tariff system gives no incentive to consumers for diverting their use away from peaks. Allowing for prices that vary with market conditions should result in customers only consuming electricity when the value to them is greater than the true cost of supplying that electricity, at that time of the day or year.

One such method, TOU charging, charges consumers different tariffs for consuming at different times of the day. Support for TOU electricity pricing has been given in numerous reports and inquiries. The Productivity Commission¹⁴⁸ and Australian Energy Market Commission¹⁴⁹ among others advocated the introduction of TOU charging through the roll-out of smart meters. TOU charging is seen as one of the most effective policy options for incentivising behaviour change in consumers.

Other structures include Critical Peak Pricing (**CPP**). CPP schemes charge users a much higher rate for extreme peak demand periods that may only occur a few times each summer. Typically customers are given notice when a peak is approaching to assist them in adjusting their behaviour accordingly. CPP structures are very clearly focused on reducing expenditure requirements that are based on rarely occurring demand peaks.

The tariff structures that can be offered to small-use customers in Western Australia are partly constrained by the metering equipment presently in place. Most customers currently have relatively simple accumulation meters that measure cumulative energy flows over a billing period (usually two months). The installation of smart meters, digital meters that are capable of recording a customers use in 30 minute intervals and relaying that information to the supplier, would greatly expand the range of ways that tariffs could be structured.

While in the short term flexible pricing may affect consumers in different ways, a move to cost-reflective pricing would provide the potential for lower overall prices in the long term. This comes about due to lower total system costs that would in turn place downward pressure on prices.

¹⁴⁸ The Productivity Commission, 2013. Electricity Network Regulatory Frameworks: The Costs and Benefits of Demand management for households.

¹⁴⁹ AEMC, 2012, Power of choice review – giving consumers options in the way they use electricity.

Flexible charging trials

In Australia, flexible tariff trials have been conducted as a part of the Government's Solar Cities Program. The program is designed to trial sustainable electricity supply and use models and was implemented in seven electricity grid connected areas: Adelaide; Alice Springs; Blacktown; Central Victoria; Moreland; Perth; and Townsville.

Successful trials have been undertaken in Adelaide and Perth, facilitated by the use of smart meters capable of recording a consumer's time-of-use. Charging structures included TOU pricing that varied according to peak and non-peak periods and CPP. The structure and outcome of these trials are shown in Table 12.

Table 12 Solar cities time-of-use tariff trials

Trial	Tariff Structure (prices in	c/kWh)	Outcome
Perth Solar City	Super-Peak (2pm-8pm)	40.15	8.9 per cent reduction in consumption during Super-Peak and 5.1 per cent
PowerShift ¹⁵⁰	Peak (7am-2pm, 8pm- 10pm)	23.08	reduction in overall consumption.
(Normally 25.91c/kWh)	Off-Peak (10am-7pm)	13.04	
Adelaide Solar City ^{151*}	TOU Pricing		Shifted 7 per cent from peak to off- peak. Spikes in consumption seen in
(Normally 32.37 c/kWh in summer and 30.73 c/kWh in winter)**	Peak (7am-9pm weekdays) Off-Peak (9pm-7am weekdays, all weekend).	53.8 16.9	shoulder periods (11pm- 11:30pm and 6am-7am). Households saved \$139 per quarter on average.
	Critical Peak Pricing	g.	Participants decreased consumption by 14 per cent on average during
	1 Dec- 31 March, 2pm- 8pm weekdays. Up to 10 times per year.	390.4	critical peak periods.
	All other times	28.6	

Source: Perth Solar City; Adelaide Solar City; Alice Springs Solar City.

Both trials resulted in significant reductions in total electricity consumption, but particularly during peak periods.

As these are opt-in trials, the results are to be interpreted with some caution. Naturally, individuals are more likely to participate in the trial if they know in advance that they will be able to change their consumption behaviour in a way that saves them money. While this

^{*} Both Adelaide trials offered alternate pricing structures. As uptake on the alternates was small, their results were not considered.

^{**} Tariffs increase for larger consumers.

¹⁵⁰ Perth Solar City, 2012, *Annual Report 2012*.

¹⁵¹ Adelaide Solar City, 2013, Adelaide Solar City Final Report.

suggests that demand changes as a result of TOU or CPP may not be as large as those witnessed, the trials still illustrate the existence of a portion of the population that is willing and able to respond to these pricing options.

Lessons learnt from previous schemes

As TOU and CPP initiatives have already been implemented elsewhere, new schemes are able to take advantage of the lessons that have been learnt in their implementation. These lessons may apply to issues in metering roll-out and management and pricing structures.

Victoria began the roll-out of smart metering¹⁵² in 2009, with all meters fitted by the end of 2013. The process has largely been considered unsuccessful, with a 2011 cost benefit analysis quantifying a net cost of \$319 million.¹⁵³ While the metering infrastructure is yet to be used for compulsory flexible pricing, the negative outcomes seen in Victoria provide lessons for the implementation of metering elsewhere:

- Accurate forecasting: accurately defining the costs of the program upfront ensures
 that the program will only go ahead if it is of a net benefit to the state. Inaccurate
 forecasting of meter costs led to the calculation of a net benefit at the inception of
 the project.
- 2. *Meter Ownership:* In Victoria the meters are owned by electricity networks. This creates issues as networks have little ability to offer incentives to customers to reduce their consumption.
- 3. *Public Opposition*: The project has met considerable opposition from the public amid claims that meters are unjust and detrimental to health. However, research has suggested that smart meters offer any greater risk to safety than older style meters.¹⁵⁴
- 4. Flexibility of retailers: Retailers of electricity need to have the capacity to offer innovative tariff structures that offer an incentive for consumers to switch to flexible pricing.

As a greater number of trials or permanent systems have now been put in place, the accuracy of forecasting should have improved. The ERA considers that the remainder of these issues can be limited by proper project design and early action.

The ERA considers that meters should be owned by retailers, who are best placed to offer incentives to consumers. Additionally, meters in Victoria are limited to one design. Expanding this to allow for a greater range of metering allows consumers and retailers a greater choice, limiting opposition from customers.

Early education of the benefits of smart metering should also limit public opposition. This education should extend to health and safety where there exists common misconceptions about the detrimental effects of smart meters.

Finally, if retailers are unable to use smart meters to offer innovative products, the benefits that could be realised will be diminished. In order for this to have any meaningful effect

¹⁵² Smart meters are digital meters capable of recording a consumer's use in 30 minute intervals. They allow for more accurate bills, remove the requirement for manual meter reading, and facilitate TOU pricing.

¹⁵³ Deloitte Access Economics, 2011, Advanced metering infrastructure cost benefit analysis.

¹⁵⁴ Energy Safe Victoria, 2012, Safety of Advanced Metering Infrastructure in Victoria Draft Report.

retailers must be able to offer a product that is both attractive to customers and encourages the shifting of consumption away from peak periods.

In the event that TOU pricing is introduced, consideration should be given to the lessons that are outlined above.

4.2.6.4 Recommendations

- 6. Progress be made towards implementing fully cost-reflective electricity tariffs for households and small businesses.
- 7. Investigate the feasibility of introducing flexible electricity charging schemes such as time-of-use and critical peak pricing.

4.2.7 Commercial activities of Government

4.2.7.1 Issue

The State Government undertakes a range of commercial activities. For the most part, these activities are undertaken by Government Trading Enterprises (**GTE**s) with expertise in particular fields. These GTEs are required to make a return on capital and explicitly account for any subsidies given (for example, pensioner concessions) for which they are compensated with an operating subsidy (or a cash payment for gifted non-commercial assets).

However, some activities are undertaken by Government departments that are semi-commercial in nature and for which the risk taken, return on investment and subsidies given are unclear. These activities have not been subjected to rigorous investigation because to this point they have delivered Government policy objectives for little or no cash outlay.

Despite the fact that these initiatives have not yet caused losses, should markets move against departments during such activities, substantial losses could be realised as the hidden risks become apparent. The risks that Government exposes itself to through these developments may impact on the State's ability to regain its triple-A credit rating. 155

4.2.7.2 Submissions

The ERA received no public submissions on this issue.

¹⁵⁵ In March 2008, the international ratings agency Standard and Poor's submitted to a Senate Standing Committee that, from a credit perspective, the revenue generated by government owned businesses operating in competitive markets is subject to more risk than traditional sources of government revenue such as taxes. As such, states without ownership of higher risk trading enterprises can hold higher levels of debt to fund social spending programs and maintain similar credit quality.

4.2.7.3 ERA analysis

Background

The Department of Housing undertakes substantial residential (mainly unit) development activities, often in conjunction with private developers. The scale of the Department of Housing's activities make it the largest developer of residential land in Western Australia. These developments are of particular interest as it is unclear as to the risk that they pose to Government and whether that risk is compensated for adequately.

In the 2013-14 budget the Government set aside more than \$2 billion to undertake housing developments over the next four years, spread between six programs. This figure forms a sizeable proportion of the State's overall asset investment program and as such is likely to impact on the availability of capital for other purposes. It is also noteworthy due to the lack of comparable activities in other jurisdictions and the relative lack of information that is made available by the Department of Housing regarding such development activities.

Development activities are justified under the Affordable Housing Strategy¹⁵⁸, which states:

"3. Leverage Government Development Activities

The State Government will use its role as a direct provider and developer of land to improve the supply of affordable land and diversity of housing options throughout the State."

This includes to:

"Undertake joint ventures with the private sector that trial new approaches to affordable housing and/or de-risk pioneering developments."

However, the Director General of the Department of Housing has stated previously that the Department of Housing has "...to do good commercial deals and good land developments to actually survive." This raises the question as to whether developments are undertaken to deliver social policy objectives or are of a commercial nature sufficient enough to fund other departmental activities.

Department of Housing Development Activities

Developments undertaken by the Department of Housing include the construction of low cost housing that can form part of the social housing stock or expand the supply of affordable housing in the State. Joint venture projects are the subject of commercial confidentiality and it is therefore difficult to ascertain whether good process is followed. One such example, One on Aberdeen, is examined in Box 8.

¹⁵⁶ Colin Barnett, 2014, Submission to the Senate Economics References Committee Inquiry into Affordable housing. Accessed: http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Affordable_housing 2013/Submissions.

¹⁵⁷ Government of Western Australia, Treasury, 2013, Budget Statement: Budget Paper No.2, Volume 2, p. 680.

¹⁵⁸ Government of Western Australia, 2010, Affordable Housing Strategy 2010-2020: Opening Doors to Affordable Housing p 33.

¹⁵⁹ Thirty-ninth Parliament of Western Australia, First Session, 2013, Legislative Council Standing Committee of Estimates and Financial Operations 2012-13 Agency Annual Report Hearings: Department of Housing 18 November 2013.

Box 8 Case Study: One on Aberdeen

The Department of Housing partnered with property developer Diploma Properties Pty Ltd (**Diploma**) to construct a mixed use commercial and residential development in the City of Perth. One on Aberdeen commenced construction in 2012 and was estimated to be worth \$73 million on completion.¹⁶⁰

As part of the deal the Department of Housing supplied Diploma with a block of land in which the Department of Housing had an equity share of \$6.45 million. ¹⁶¹ The land was used by Diploma to secure a senior debt facility and was in turn valued by the bank at \$5.73 million. In return the Department of Housing is to receive \$10.29 million worth of assets consisting of:

- Ownership of 17 social housing units;
- Co-ownership of 18 units of shared equity (generally the Department of Housing retains proportion of equity of 30 per cent in these properties); and
- A cash balance that is subject to final costs.¹⁶²

According to these figures, the Department of Housing has made almost a 60 per cent return on investment in a little over a year. A return of this magnitude raises a number of questions.

- 1. Was the land that was committed of a higher value?
 - If Diploma were able to give a 60 per cent return on the value of the land, it seems likely that the land was worth more than \$6.45 million.
- 2. If the land was valued correctly, were there extra components or concessions provided to Diploma that are not transparent given the lack of a publicly available business case?
- 3. Was the Department of Housing adequately compensated for the risk that it was exposed to considering that they would have either been required to complete the development in the event that Diploma was unable to do so, or risked forfeiting the land used as security for the project?

Impact on Government finances

Even if, as stated by the Department of Housing, no cash was invested into the One on Aberdeen development, it still bears the risk associated with providing the land and may have been responsible for completing the development should the developer have been unable to do so.¹⁶³ It is difficult to tell whether the Department of Housing is being fully compensated for its involvement in the development in a commercial sense, or whether its

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¹⁶⁰ Housing Authority, 2013, Housing Authority- Annual Report 2012-13, p.77.

¹⁶¹ Minister for Mines and Petroleum; Housing, 2013, Estimates and Financial Operations Committee: Questions on Notice Supplementary Information.

¹⁶² Minister for Mines and Petroleum; Housing, 2013, Estimates and Financial Operations Committee: Questions on Notice Supplementary Information.

¹⁶³ Thirty-ninth Parliament of Western Australia, First Session, 2013, Legislative Council Standing Committee of Estimates and Financial Operations 2012-13 Agency Annual Report Hearings: Department of Housing 18 November 2013.

intention is to provide more 'affordable' housing by forgoing appropriate commercial returns in the project.¹⁶⁴

It is also unclear whether Department of Housing could have funded more social and/or affordable housing units had it developed the land itself (with consideration given to the fact that only one-in-nine dwellings in a new development can be allocated to social housing). Or, in the instance that this was not possible, could the funds have been used to provide housing to people whose need was greater.

In essence, while the monetary return associated with One on Aberdeen appears substantial, the project may not have been the best use of the land when the true opportunity cost is accounted for. Additionally, One on Aberdeen exposed the Government to real financial risk given that the Department of Housing's block of land was used as security and the Department of Housing was committed to completing the project should Diploma have been unable to do so.

Policy outcomes

The Department of Housing undertakes development activities in order to promote affordable housing on the grounds that it releases pressure at other points of the low-end housing market.

Housing is considered to be affordable by the Department of Housing if households earning low-to-moderate incomes can afford the mortgage or rental repayments while still meeting other essential living costs.

Under the following definition from the Productivity Commission, housing is no longer affordable:

"...when households spend more than 30 per cent of their income on rent or mortgage payments." $^{\rm 165}$

Accordingly, the ERA considers housing to be 'affordable' if it costs less than 30 per cent of the gross income of households earning low-to-moderate incomes.

Low income households are defined as those earning between 50 per cent and 80 per cent of median income. Moderate income households earn between 80 per cent and 120 per cent of median income. As at December 2013, median income is estimated at \$82,271¹⁶⁶, resulting in a low income band of \$41,135 to \$65,817 and a moderate income band of \$65,817 to \$98,725.

The affordability of One on Aberdeen is examined in Box 9.

¹⁶⁴ The Business Case for One on Aberdeen is not available due to commercial confidentiality.

¹⁶⁵ Productivity Commission, 2014, Report on Government Services 2014, Volume G: Housing and Homelessness. p 36.

Median income is calculated by increasing the median income recorded in the 2011 census (\$75,868) for the Greater Perth area by the Wage Price Index (WPI) (8.4 per cent for the period September 30 2011 to December 30 2013). Source: Australian Bureau of Statistics, Census 2011 and Australian Bureau of Statistics; Wage Price Index, Australia, 6345.0.

Box 9 Case Study: The affordability of One on Aberdeen

The dwellings that were obtained by the Department of Housing ranged in sale price from \$315,000 to \$534,000¹⁶⁷ with a midpoint price of \$420,000. In this analysis it is assumed that the entire development falls into this range. The percentage of gross income that would be required to meet mortgage repayments at various levels of low-to-moderate income are shown below:

Sale Price	\$315,000	\$420,000	\$534,000		
Monthly Repayments ¹⁶⁸	\$1,767	\$2,356	\$2,996		
Low Income Households: Percentage of Gross Income Required					
Low-end (\$41,135)	52%	69%	87%		
Mid-range (\$53,476)	40%	53%	67%		
High-end (\$65,817)	32%	43%	55%		
Moderate Income Households: Percentage of Gross Income Required					
Low-end (\$65,817)	32%	43%	55%		
Mid-range (\$82,271)	26%	34%	44%		
High-end (\$98,725)	21%	29%	36%		

The cheapest units in the development would be affordable only to those who are earning moderate incomes. Dwellings with the average value would only be affordable to households in the high end of the moderate income range and the highest priced units would not be considered affordable for any low-to-moderate income earners.

The ERA acknowledges that without full unit price information this analysis only provides an indication of affordability. This analysis still indicates that the development at One on Aberdeen was not designed to address the lack of affordable housing and was more likely to be commercial in nature.

Operating subsidy model

To increase the supply of affordable housing, the Department of Housing provides housing that is priced below what would normally be provided by the private sector. Currently this social policy is offset by the Department of Housing's commercial development activities. The Department of Housing makes a profit on its commercial activities that is then used to provide affordable housing, effectively providing a subsidy to buyers of these properties.

Ordinarily when Government entities provide subsidies to groups of people, the subsidy is accounted for explicitly. The entity is then compensated by an operating subsidy, funded through the State budget, covering the shortfall between the cost of providing the good or service and the purchase price. An example of this process is the concessions that pensioners receive from the Water Corporation and Synergy when purchasing water or

¹⁶⁷ Thirty-ninth Parliament of Western Australia, First Session, 2013, Legislative Council Standing Committee of Estimates and Financial Operations 2012-13 Agency Annual Report Hearings: Department of Housing Supplementary Information A7 18 November 2013, p.3.

¹⁶⁸ Monthly mortgage repayments assume an interest rate of 5.86 per cent and 30 year loan term.

electricity. In each case the entity is required to fully cost the service and pay the full dividend to the Government. In return, the entity receives a payment that covers the difference between the cost of provision and the tariff that the pensioner pays.

4.2.7.4 ERA conclusions

The ERA considers that any Government department undertaking commercial developments that pose substantial risk should account for such risk explicitly.

Such entities should cost developments fully, ensuring that the true opportunity cost of either sub-optimal construction or subsidised sale is accounted for. Any operating subsidies required should then be noted explicitly. For example, the provision of some low-end housing is currently offset by the sale of a higher cost property in a form of cross subsidy. Instead of such a cross subsidy, an operating subsidy should be used.

4.2.8 Innovative sources of funding

4.2.8.1 Issue

This section examines two funding mechanisms for recovering the costs of infrastructure, both mechanisms seek to recover the costs from the individuals who benefit from that infrastructure. The two funding mechanisms examined are user charges and developer charges.

4.2.8.2 Submissions

The following general comments were made regarding the use of innovative funding mechanisms.

• The Department of Planning noted its support of further work into finding more efficient and innovative ways to fund infrastructure projects.

The following general statements were made regarding the issues of user charges for infrastructure in Western Australia:

- The Civil Contractors Federation highlighted that when considering potential infrastructure developments both general taxation revenue and user charge funding should be given equal consideration. Government policies that discriminate against user charges reduce the potential for infrastructure development.
- The Chamber of Commerce and Industry noted that user charges should be adopted to pay for infrastructure, to encourage private sector investment into infrastructure and to ensure that infrastructure in the State is better utilised.
- The Chamber of Minerals and Energy commented that not undertaking user charges can impact on investment decisions.

The following comments were made regarding road user charges:

 The Chamber of Commerce and Industry also noted that the use of road toll charges ensures demand is better managed, resulting in improvements in the productivity networks and reducing the need for costly new investment. • The Western Australian Local Government Association (WALGA) stated that road user charges have been considered by most Local Governments, however given the wide range of charging models that could be used it is difficult to consider effectively. The costs and benefits of road user charges need to be considered such as road safety and community amenity outcomes. Likewise parking around the fringe of charging zones and alternative transport options must be included in the consideration of road user charges.

WALGA also stated that heavy vehicle road user charging models could impact the State's competitiveness and productivity. A detailed analysis of heavy vehicle road user charges would be required prior to implementation.

4.2.8.3 ERA analysis and assessment

User charges

A user charge is a price for the use of a good or services. User charges are common for several types of economic infrastructure, such as for the use of water, electricity and public transport. 169

Levying user charges can reduce the level of Government funding required for infrastructure as the Government can recover some of the costs from the users. The Government can use the savings derived from charging users to invest in alternative infrastructure projects. Box 10 outlines the economic benefits of the use of toll roads in New South Wales.

User charging can also address equity concerns as they ensure that the primary beneficiaries of that infrastructure are the ones paying for the infrastructure. Other major benefits of adopting user charges include:

- That user charges increase the degree of accountability on the provider of
 infrastructure. This occurs as individual users of that infrastructure are given a clear
 signal about the cost of that infrastructure. Users will only pay for what they consider
 that individual use is worth.
- Users are able to assess whether they are getting adequate value for the amount of money they are spending.
- Infrastructure owners will respond to the level of user demand and preferences in a
 way that will maximise their profits. ¹⁷⁰ This should result in an appropriate supply
 of infrastructure that will suit the users of that infrastructure.
- User charges enable infrastructure owners to manage the demand for the
 infrastructure by allocating it to the users who value it the most. For example,
 implementing a toll on a major road that saves twenty minutes of time will result in
 the drivers who value saving time using the road while others will take an alternative
 route to save paying the toll.

Consideration needs to be given to the level of cost recovery of a user charge. Some user charges may recover the full cost of that infrastructure and some may recover less than the full cost of that infrastructure.

¹⁶⁹ Productivity Commission, 2014, *Public Infrastructure Draft Report*, p. 122.

¹⁷⁰ Infrastructure Australia, 2013, Report to Council of Australian Government and Assessments, p.3.

If user charges are not charged at a cost reflective level¹⁷¹ the Government must fund the under-recovered proportion of the costs. This may occur when the Government wants to account for positive externalities from the use of that asset, or to address equity concerns.

For example, the Government does not choose to recover 100 per cent of the cost of providing public transport through user charges. This is because there are positive externalities associated with public transport, such as a reduction in pollution and congestion. Furthermore, the Government does not currently apply user charges to roads which impacts the individual's decision regarding whether to catch public transport or drive.

Box 10 Case Study: Toll roads in New South Wales

New South Wales has implemented user charging for major roads through toll charges. Ernst and Young was asked to quantify the economic impact of eight toll roads in New South Wales. 172 173

The report stated that the economic benefits of the toll roads in 2007 was an increase in real Gross State Product (**GSP**) for NSW of \$1,831 million. The increase in GSP is a result of the construction and operation of the toll roads.

The report identified a reduction in traffic congestion that resulted in direct benefits including reductions in travel time and vehicle operating costs for road users (such as petrol and maintenance). Furthermore, there are indirect benefits from the toll road that include reductions in road accidents and vehicle emissions.

However, Infrastructure Australia has noted that the inconsistent charging methods for toll roads in NSW is confusing for users. ¹⁷⁴ For example, the M7 uses a distance based toll, the Eastern Distributor uses a flat toll and the Harbour Bridge and Tunnel use time of day tolling. Infrastructure Australia suggests consistency in using a network-wide charge that would:

- remove anomalies in the existing system:
- send a price signal to manage demand on the network; and
- provide funds for maintenance of the network and investment in new transport infrastructure.¹⁷⁵

The ability to implement user charges on the use of an infrastructure asset opens up the possibility that a private-sector firm could fund, finance and maintain the asset while taking demand risk for the project. A case study on the QII Medical Centre Car Parking Project is provided below in Box 11.

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¹⁷¹ Cost reflective user charges are charges that are just sufficient to cover efficient input costs, and at the same time provide for a reasonable return to the retailer.

¹⁷² Ernst and Young, 2007, The Economic Contribution of Sydney's Toll Roads to NSW and Australia.

¹⁷³ The toll roads analysed were the Sydney Harbour Tunnel, the M5, M4, M2, Eastern Distributor, Cross City Tunnel, Westlink (M7) and the Lane Cove Tunnel.

¹⁷⁴ Infrastructure Australia, 2012, Australian Infrastructure Progress and Action: A Report to the Council of Australian Governments, p.53.

¹⁷⁵ Infrastructure Australia, 2012, Australian Infrastructure Progress and Action: A Report to the Council of Australian Governments, p.53.

Box 11 Case Study: The Queen Elizabeth II Medical Centre Car Parking Project

User charges for car parking has been well established over time for both Government and privately owned car parking facilities. The ability to charge users means that the owner can recover the costs of providing the infrastructure over the assets life. This has attracted private sector interest and participation in providing parking facilities, this reduces the demand on Government budget to provide car parking facilities.

In 2009, the Health Department identified the need to enhance car parking facilities on the site of the Queen Elizabeth II Medical Centre (**QEII**). QEII is one of the State's largest tertiary hospitals with more than 5,000 staff and 19,000 vehicle trips per day (patients, visitors and service vehicles). 176

The Government made land available for a private entity to build, operate and own a car parking facility with the asset transferred back to the Government at the termination of the approximately 26 year agreement. Capella Parking Pty (**Capella**) was granted the rights to undertake the project and to retain parking charges in accordance with a parking fee schedule which was approved by the Government.

Also written in to the project agreement are a range of standards that must be met and upheld by Capella. If these standards are not met the Government can escrow car parking revenues until the failure is rectified.

The Government has not financially contributed to the project, ¹⁷⁷ nor underwritten a minimum level of car parking demand.

Hence, the project has had no budgetary impact on the Government. As the private sector has undertaken the demand risk for car parking, the Government has not exposed its balance sheet to risk.

Developer charges

In Western Australia and many other jurisdictions, land developers provide a contribution to assist in funding the basic infrastructure required for their developments. Basic infrastructure includes; water, sewerage and draining, roads and power. The contribution to the cost of infrastructure is known as a developer charge or a developer contribution and can be in the form of a donation of land work-in-kind or a monetary payment. Contributions are made upfront, prior to infrastructure investment.

Developer charges are of particular importance in Western Australia due to Perth's expanding geographical base and growing population. The limited financial capacity of the Local and State Governments to finance connecting infrastructure to infill areas, greenfield sites or in non-metropolitan areas has led to an increased need for developer charges.

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¹⁷⁶ Government of Western Australia: Department of Treasury, 2012, Public Private Partnerships Queen Elizabeth II Medical Centre Car Parking Project- Project Summary, pg.3.

¹⁷⁷ The State Government made land available for the process however this will be returned to the Government after the lease expires.

¹⁷⁸ Western Australian Government Gazette, Friday 20 November 2009, *Planning and Development Act 2005 – State Planning Policy 3.6 Development Contributions for Infrastructure*, No.211.

¹⁷⁹ This is the transfer of land to the State Government or Local Authority by the developer for the site of the infrastructure.

¹⁸⁰ This is when the developer constructs the infrastructure and gifts it to the relevant authority to maintain.

Similarly to user charges, it is more equitable to have those individuals that directly benefit from the provision of infrastructure to incur the cost of that infrastructure provision. A developer charge is initially paid for by the developer and the cost is then generally passed onto property owners through higher property prices. Hence, the property owner is ultimately paying the contribution for that infrastructure.

As developers are partially funding the infrastructure it is in their best interest to efficiently estimate the level of infrastructure required. Consumers will consider the cost of land (which includes the transferred cost for developer charges), infrastructure provision and alternative developments when purchasing land.

The cost of developer charges for potential development sites should be known prior to the selection of the development site, this should encourage efficient decision making regarding the viability of a particular land development. For example, if a developer is considering two developments, one is located near an existing established area and the other is not. The cost of connecting the development to infrastructure that is in close proximity to an established area will be lower than the development that is not. This will encourage developers to maximise the use of existing infrastructure as the internalised costs of the infrastructure provision will be lower.

In Western Australia, the *State Planning Policy 3.6: Development Contributions for Infrastructure*, outlines the objectives and methodology to appropriately determine the contributions. The policy legislates that the developer contributions must reflect the efficient cost of providing the infrastructure.

The legislation prevents councils and utilities over charging for infrastructure. Councils in Western Australia are required to provide justification for the required infrastructure within a development contribution plan. There have been calls to expand developer charges in Western Australia to fund car parking and community service facilities within new development areas. The service of the s

4.2.8.4 ERA conclusions

User charges

The ERA supports the implementation of user charges rather than general government funding as it enables a more equitable outcome for the funding of infrastructure.

However, the ERA notes that it may not always be appropriate to seek full cost recovery through user charges. An assessment of the appropriate level of cost recovery should be made on a case by case basis.

Developer charges

The ERA considers that widening the basis of developer charges could have potential benefits to the provision of infrastructure in Western Australia. The rate charged to

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¹⁸¹ Western Australian Government Gazette, Friday 20 November 2009, Planning and Development Act 2005 – State Planning Policy 3.6 Development Contributions for Infrastructure, No.211.

¹⁸² Productivity Commission, 2014, *Public Infrastructure Draft Report*, pg. 148.

¹⁸³ For example, connecting the development to a road network that is already existing is cheaper than establishing a new road network.

¹⁸⁴ Department of Planning, 2009, State Planning Policy 3.6: Development Contributions for Infrastructure, pg.4692.

¹⁸⁵ Department of Planning, State Planning Policy 3.6: Development Contributions for Infrastructure.

developers should only be the incremental cost attributable to the development (or each property within the development) for the connection or provision to infrastructure. 186

However, the ERA notes that there are practical complexities regarding the implementation of developer charges and the potential in double charging for infrastructure. As such, the ERA considers that a full review of developer charges should be conducted.

4.2.9 Public Private Partnerships

4.2.9.1 Issue

Public Private Partnerships (**PPPs**) are significant long term arrangements involving private sector delivery of infrastructure and/or related services on behalf of, or in support of, Government's broader service responsibilities. PPPs can range from the private sector financing an investment, with the impact on the Government's financial situation unclear, to a more involved process where the private sector takes on some risk and generates funding for the project (possibly through user charges).

A review of the efficiency of various government services in Western Australia produced by the Productivity Commission highlights considerable scope for improvement and consequently potential for material cost savings¹⁸⁷. Further, evidence on PPPs both in WA and other jurisdictions suggests that they represent an attractive reform measure by which to introduce incentives for a greater level of private sector innovation and contestability into government services and associated infrastructure delivery.

In its draft report on public infrastructure, the Productivity Commission stated: 188

"The overarching motivation for involving the private sector in the delivery of public infrastructure services is to improve the economic efficiency by which services are delivered to the community."

4.2.9.2 Submissions

There were six public submissions concerned with the role of the private sector in infrastructure, all supporting Public Private Partnerships:

- The Western Australian Local Government Association supported the use of PPPs in providing street lighting services enabling the adoption of newer energy efficient technology without the need to draw on public capital.
- The Water Corporation is supportive of the PPP model in procurement where it has
 actively pursued and benefitted from greater private sector participation. Value for
 money benefits and improved customer service have resulted in 95 per cent of the
 capital program and 50 per cent of operations being delivered by competitive
 processes.
- The Department of Transport recognised that some services within WA ports could be delivered efficiently by the private sector and is investigating strategies to support a greater role for the private sector in the provision of transport infrastructure.
- Martin Sheridan detailed a range of financing and funding arrangements available as alternatives to traditional government tax revenue or debt-based funding models.

¹⁸⁶ Productivity Commission, 2014, *Public Infrastructure Draft Report*, p. 149.

¹⁸⁷ Productivity Commission, 2014, Report on Government Services.

¹⁸⁸ Productivity Commission, 2014, Public Infrastructure Draft Report Volume 1, p.9.

 Alinta Energy described a number of benefits from private provision of electricity services such as removal of risks to tax-payers, reductions in State debt, improved budget expenditure, better use of state capital and boosts to local capital markets.

4.2.9.3 ERA analysis

PPPs generally involve an infrastructure asset component and an on-going service delivery component. While PPPs can take many forms, they generally fall into two main categories:

• Economic infrastructure PPPs

Projects where the private party bears market (demand) risk and revenues are largely derived from the third party users of the infrastructure such as toll roads, airports and hospital car parks (QEII Car Park Project). It is possible to move such projects off Government's balance sheet; and

Social infrastructure PPPs

Accommodation type projects such as schools, prisons and hospitals where the government pays a regular availability charge to the private party to provide and maintain a government facility and provide associated services. The extent of services varies on a project-by-project basis. For example, some may incorporate designing, building, financing and maintaining the facility (such as the Eastern Goldfields Prison) and others may also incorporate operating the facility (for example Acacia Prison);

Where it is possible to recover infrastructure costs directly from user-charges, economic PPPs will, in most cases, be more efficiently provided by the private sector as is currently the case in sectors such as car parking, banking and airports. The role of the private sector in social infrastructure PPPs can be more complex, as outlined in greater detail in Table 13 below.

Table 13 Types of PPPs

	Economic Infrastructure	Social Infrastructure				Traditional Procurement
PPP Characteristics	Build, Own, Operate, Transfer (BOOT)	Design, Build, Finance, Maintain (DBFM)	Design, Build, Finance, Operate (DBFO)	Design, Build, Operate, Maintain (DBOM)	Design, Build, Maintain (DBM)	Design and Construct (D&C)
Private Partner Re	sponsibilities:					
Design, build	✓	✓	✓	4	✓	✓
Privately finance	✓	✓	1	×	×	×
Maintain	✓	✓	✓	✓	✓	×
Operational Services e.g. custodial or clinical services	1	×	1	1	×	×
Take demand risk	✓	×	×	×	×	×
On State's balance sheet	×	✓	✓	✓	√	√
Key advantage	No government funding. High degree of risk transfer.	Whole of life outcomes. D&C risk transferred.	High degree of risk transfer and opportunity to innovate.	Increase market competition through govt finance.	Some design/ maintenance construction risk transferred.	Some design & construction risk transferred.
Examples	Toll Roads QEII Medical Centre car park	Eastern Goldfields Regional Prison	Joondalup Health Campus	Joondalup Health Campus Extension	Graham Farmer Freeway	Subiaco Train Station

Source: WA Department of Treasury, 2011, Public Private Partnerships – A Guide

The advantages and disadvantages of PPP procurement are outlined in Box 12 below.

Box 12 Advantages and disadvantages of PPPs

Advantages:

- On time and on budget delivery of infrastructure the capital and ongoing costs
 of a PPP project are locked in before construction begins and the private partner
 only begins to receive payment once a project is commissioned. Private financiers
 undertake a high amount of due diligence to ensure that there are no time or budget
 blow outs.
- Accountability and performance measures put in place to ensure that service
 outcomes for the community meet the high standards specified by Government. If
 the private provider fails to meet these high standards, payments to the private
 partner are reduced, and the agreement can ultimately be terminated.
- Innovation A focus on output specifications and a competitive bidding process
 provide incentives for private parties to develop innovative solutions in PPP projects
 that can then be adopted across the public sector to broadly deliver better and
 cheaper services.
- Risk optimisation PPPs deliver value for money to the tax payer through effective
 risk transfer. Government can use PPPs to reduce its overall exposure to certain
 risks and to allocate specific project risks to the party that is best able to manage
 them.
- Whole of Life Maintenance PPPs ensure whole of life maintenance which is often neglected under traditional procurement during periods of budgetary constraint.
- Maximisation of commercial opportunities The private sector has greater incentives to maximise commercial opportunities associated with infrastructure projects, such as retail space in hospitals and public transport interchanges
- Maximisation of utilisation The private sector also has greater incentives to
 optimise the utilisation of infrastructure to maximise profits. Examples include
 sharing hospital theatre facilities to private surgeons or sub-leasing classroom space
 to private education providers
- Balance sheet treatment In cases of genuine demand risk transfer, such as the QEII Medical Car Park, PPP's can be moved completely off-balance sheet resulting in the provision of infrastructure at no cost to Government.

Disadvantages:

- Complex and expensive the level of rigour and detail underpinning a PPP result in higher upfront planning costs and longer lead times.
- Sophistication PPPs require a higher level of sophistication from staff involved in negotiation and contract formulation so that outcomes do not result in "windfall profits".
- **Higher cost of capital** Government can generally borrow more cheaply than the private sector resulting in higher interest rates built into availability charges.
- "De-politicising" of user-charges When revenue is raised directly from the private sector government may lose the ability to impose policy objectives on fee recovery.
- Government bail-outs In situations where demand risk is transferred, in some recent high profile cases optimistic demand projections have failed to materialise and private project proponents have failed. Government may resume ownership of the assets.
- "PPPs are privatisation" Under PPP arrangements the Government remains
 ultimately responsible for delivering essential government services to the
 community. PPPs can provide an alternative, value-for-money way for services to
 be delivered.
- Balance Sheet Treatment: There is no balance sheet advantage to most PPP projects because financial leases have the same accounting treatment as other form of debt.

Despite the recent growth in PPPs, they still account for a relatively small share of capital spending on infrastructure, estimated at around 10 per cent. Table 14 below shows Victoria and New South Wales have been more active in the use of PPPs, entering three and four times more contracts than WA. In particular, there are some sectors such as education and toll roads where other States are inviting a much greater role for the private sector.

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¹⁸⁹ Clayton Utz, 2013, *Improving the Outcomes of Public Private Partnerships*

Table 14 Contracted PPPs, by procuring Government and sector, 2006-11

	Cwlth	NSW	Vic	Qld	SA	WA	Tas	ACT	NT	Total
Roads	-	9	3	3	-	-	-	-	-	15
Rail/transport	1	4	1	3	-	-	-	-	-	9
Health	-	4	8	3	3	3	2	-	-	23
Education	1	2	3	4	1	-	-	3	-	14
Prisons	-	1	6	-	-	2	1	-	1	11
Water	-	6	12	-	2	1	-	-	-	21
Search & rescue	2	-	1	-	-	-	-	-	-	3
Courts/justice/police	-	-	3	-	1	2	-	-	-	6
Communication	-	-	2	-	-	-	-	-	-	2
Sports & other	-	3	4	-	-	1	-	-	1	9
Other	5	2	2	1	-	1	-	-	-	11
Total	9	31	45	14	7	10	3	3	2	124

Source: Productivity Commission, March 2014, Public Infrastructure Draft Report Volume 1, p. 157.

The ERA has reviewed the use of PPPs in WA and elsewhere and identified areas in which PPPs could be used to improve the efficiency and performance of the Western Australian economy. For social infrastructure these include identifying opportunities to expand the scope of PPPs to incorporate service delivery and bundling low-value projects to provide greater scale. For economic infrastructure, the ERA supports identification of further opportunities for off-balance sheet PPPs.

The role of PPPs in improving the efficiency of government services

The provision of government services is often characterised by a lack of competition due to a market failure of one form or another. Because private sector competitive markets will generally provide more efficient outcomes, in many cases where government is the dominant provider of a service or owner of assets/businesses, a contestable market may provide benefits.

In its 2012 report to COAG, the Productivity Commission noted the lack of competition and associated incentives to promote cost effective outcomes in government service delivery. Pro-competitive reforms to government service provision were identified by the Productivity Commission as a primary source of efficiency improvements, with further gains identified from greater choice and improved quality for consumers of government services. An example cited was health care, where a 2006 study by the Productivity Commission estimated savings of \$3 billion (nationally) from the introduction of greater contestability.

This has important implications for infrastructure planning and delivery because reforms that contemplate a greater role for the private sector in service delivery will in most cases profoundly alter Government's approach to the procurement of the underlying infrastructure.

There is evidence from a number of sectors that private sector involvement in the provision of government services may be more efficient without trading off service levels or the quality expected from the community.

Efficiency of Government service delivery in Western Australia

The Productivity Commission produces an annual Report on Government Services. The stated objective of the report is to help drive improvements and facilitate improved service delivery, efficiency, performance and accountability by providing a repository of meaningful, balanced, credible, comparative information on the equity, efficiency and cost effectiveness of government service delivery.

The results from the 2014 Report on Government Services are summarised in the table at Appendix 3. For the purpose of this analysis, 36 efficiency measures for 17 services are reported from six sectors of Government activity and are ranked relative to the four other mainland States, with a ranking of "1" indicating least efficient and "5" indicating most efficient. The percentage differential between WA and the national average is also reported, indicating the order of magnitude of potential saving available from moving from current practice to average benchmark efficiency levels.

Western Australia scored relatively poorly, with 70 per cent of government services ranked as the least efficient of the mainland Australian States and 86 per cent of services in the two least efficient categories. Of the least efficient services, the average efficiency difference between Western Australia and the national average is more than 34 per cent.

Whilst it is likely there is some effect from Western Australia's relatively small population in terms of reduced economies of scale, it is noted that WA has more than 50 per cent greater population than South Australia which was more efficient in most categories. Where possible, the Productivity Commission has structured the efficiency measures to be as comparable as possible.

The evidence compiled by the Productivity Commission implies that there is considerable scope for efficiency improvements in the delivery of government services in Western Australia and indicates material cost savings may be realised from appropriate reforms to service delivery in targeted sectors.

In the context of infrastructure procurement, the more "pure" the PPP model used, or the greater the level of involvement of the private sector in the outcomes provided by the infrastructure, the greater the likely aggregate saving to Government. This is evidenced by, for example:

- Acacia Prison, where privatisation of the contract to operate the facility has resulted in the lowest cost facility in the WA prison system (see Table 15 below).
- Joondalup Health Campus, where the share price of the private operator who is paid
 with reference to benchmarked costs of similar-sized of public hospital has risen
 3,800 per cent, with clear implications for the differential cost of service provision
 between the private and public sector.

Prisons and hospitals provide two good examples of where expanding the scope of PPP procurement to include core service delivery have led to successful outcomes, both in Western Australia and in other jurisdictions.

Private sector delivery of services – evidence from prisons and hospitals

In Table 15, the 2012 operational cost per prisoner per day is presented for the WA prison system. Acacia prison is the only privately owned and operated prison in the study and operates at the lowest cost per prisoner per day in the prison system.

Research from other jurisdictions mirrors the local experience for PPP prisons. For example, in Victoria the daily average cost of private prisons in 2008/09 was found to be

88 per cent of public prisons.¹⁹⁰ Research into the source of persistent efficiencies of private prisons in the UK identified three main innovations, more flexible deployment of staff, treatment of prisoners and the use of new technology.¹⁹¹

Table 15 WA Department of Corrective Services operational costs per prisoner per day by facility (2012)

Prison	Daily Average Population	Operational Cost per Prisoner Per Day
Acacia	996	136
Albany	308	177
Bandyup	239	185
Boronia	79	188
Broome	115	327
Bunbury	330	164
Casuarina	625	180
Eastern Goldfield	122	216
Greenough	282	164
Hakea	830	142
Karnet	253	224
Pardelup	91	177
Roebourne	161	336
Wooroloo	366	139
Total	4,797	Average: 291

Source: Thirty ninth Parliament of Western Australia, First Session, 2013, Parliamentary Debates: Legislative Council 14 August 2013 (Hansard) p. 3335.

It is important to note that cost efficiencies are not associated with poor performance. For example, the contract to operate the Acacia Prison contains financial incentives for the operator to reach a series of performance benchmarks, which align the financial interests of the private sector operator with the operational outcomes sought by government. As a result of these incentive mechanisms that reward operational outcomes, service level outcomes at Acacia Prison have consistently exceeded Government requirements, in addition to persistent and material cost efficiencies 192.

In the case of hospitals, as shown in Table 16, a December 2009 Productivity Commission research report into the relative efficiency of public and private hospitals found Western Australia to have the largest efficiency gap between public and private hospital sectors of all Australian jurisdictions. The cost of standardised public hospital care in Western Australia, was on average 22 per cent higher than equivalent services from a private

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¹⁹⁰ Victorian Government, May 2008, *Public Accounts and Estimates Committee enquiry into budget estimates*

¹⁹¹ United Kingdom Government, November 2003, House of Commons Committee of Public Accounts – The operational performance of PFI prisons

¹⁹² The Office of the Inspector of Custodial Services conducts periodic assessments of Acacia Prison and publishes a Report of an Announced Inspection. The most recent of such reports in March 2011, which reviewed the first ten years of private operation of the prison, made a key finding that "corporate profits and savings to the taxpayer are not being achieved at the cost of service delivery". The report rated Acacia's performance "at least equal to the best public prison in the State and in many respects superior" (p.iv).

hospital. Comparatively, on a national level the cost of standardised public hospital car was on average only 3 per cent higher than the private sector.

It is reasonable to assume that this gap contributed to the profitability of the ASX-listed provider of public health in Western Australia referred to above, where payment is benchmarked to the local public hospital cost base.

Over subsequent years, public hospital costs in WA rose more and remained consistently higher than other jurisdictions, with the Productivity Commission's 2014 Report on Government Services showing recurrent public hospital costs in WA remain more than 10 per cent above the national average. 193

Table 16 Hospital costs, average per case (2008)

	Western Australia			Australia		
Cost Component	Public (\$)	Private (\$)	Difference (%)	Public (\$)	Private (\$)	Difference (%)
General Hospital	3,094	1,845	68%	2,552	1,953	31%
Pharmacy	202	144	40%	187	68	175%
Emergency	147	11	1,236%	208	34	512%
Medical/diagnostic	1,048	1,275	-18%	798	1,346	-41%
Prosthesis	155	555	-72%	131	542	-76%
Capital	359	281	28%	426	230	85%
Total	5,006	4,111	22%	4,302	4,172	3%

Source: Productivity Commission, 2009, Public and Private Hospitals.

Efficiency gains from private sector provision of services are not limited to prisons and hospitals, with many services amenable to a greater degree of private sector involvement. For example, Western Australia is one of the few jurisdictions not to have a state owned ambulance service and it is one of the only efficiency categories in the above study in which WA was ranked the best in Australia. 194

The role of PPPs in contestable markets for Government services in WA

The ERA views PPPs as an effective mechanism by which to promote competitive or contestable markets for government services.

Creating or expanding contestable markets for services traditionally provided by Government by extending the scope of PPP projects has considerable potential to enhance state productivity through improvements to government efficiency.

The challenge for Government is to establish an environment where services are provided efficiently, at lowest cost and least financial risk to the state. Identification of a service as being the responsibility of government does not necessarily imply that government should directly deliver that service.

¹⁹³ See Appendix 3 for a summary of efficiency measures from Productivity Commission 2014 Report on Government

¹⁹⁴ Australasian Journal of Paramedicine, Volume 8, Issue 4 2012, The provision of ambulance services in Australia

There is substantial national and international evidence that privatised government enterprises operate more cost effectively when they are allowed to operate without government interference in the commercial decision-making processes. 195

The role of the private sector is determined at the infrastructure planning stage, and in some cases the most efficient role for the private sector may include the design, financing, maintenance and operation of the associated infrastructure.

Some recent infrastructure projects have adopted the PPP procurement model but limited private sector involvement to ancillary services. For example, the procurement model adopted for the Eastern Goldfields Regional Prison is "Design, Build, Finance, Maintain", retaining the traditional role of Government in the provision of custodial services. It is not clear whether the business case for the prison included full consideration of other procurement options, however broad evidence of private sector efficiencies in custodial services provided above imply savings to government which may not have been captured under the chosen procurement method.

There are also a number of sectors where PPPs are used extensively in other jurisdictions which are not current practice in WA, such as schools and social housing. In many cases, the requirement for size or scale to justify the use of PPPs which is not available for one project in isolation can be attained by bundling or packaging projects together, either within the one agency or spanning multiple agencies. Examples of this include:

- PPP schools are a common feature in Queensland, New South Wales and Victoria where a number of schools are bundled together to provide sufficient size. 196
- PPP social houses have been common in the UK for nearly two decades, with a Private Finance Initiative introduced in 1998 to allow local authorities to contract with private sector firms to build, improve, manage and maintain the social housing stock. 197

Another alternative approach to bundling projects being contemplated by the Victorian Government is streamlining the PPP model to apply to smaller scale procurement. 198 Simplifying the procurement model will allow certain classes of infrastructure to be delivered more frequently whilst retaining many of the PPP value drivers.

In summary, strategic planning that facilitates contestability in service delivery has the potential to not only lower infrastructure procurement costs, but also can result in a lower cost of recurrent or operating costs associated with use of that infrastructure. Better value for money in the delivery of front-line services can be achieved through contestability, as this will encourage more efficient and more innovative service delivery, whether by the public sector or the private sector. The ERA considers public sector service providers should not be immune from competitive pressures.

Most, if not all, infrastructure projects are suitable to evaluation in the wider context of private sector involvement in service delivery, with the full gains from private sector

¹⁹⁵ See for example Infrastructure Australia, December 2013, Balance Sheet Impacts of Sell to Build

¹⁹⁶ See for example: Queensland Schools Project (Plenary Schools has been chosen to design, construct, commission, finance and maintain eight primary and two secondary schools to 2017); Partnerships Victoria in Schools project (Axiom Education Victoria Consortium to design, build, finance and maintain 11 new schools); and NSW New Schools Project for the design, construct, financing, cleaning, maintaining and security on nine new schools.

¹⁹⁷ Homes and Communities Agency, 2014, *Housing PFI*.

¹⁹⁸ Victorian Department of Treasury and Finance, November 2012, Future direction for Victorian public private partnerships

innovation in infrastructure provision captured where operation of the assets is considered in addition to the more traditional PPP roles of design, construction, maintain and finance.

With regard to social infrastructure, the ERA recommends that, where possible, the scope of PPP projects under consideration be broadened to consider options that include associated service delivery options that allow for greater contestability of government services. Bundling of projects and/or streamlining the procurement model may provide further opportunities to partner with the private sector in infrastructure provision and related service delivery.

With regard to economic infrastructure, the ERA recommends further identification of opportunities to provide infrastructure, off-balance sheet through PPPs.

Contracting with the private sector may introduce significant commercial complexities and unique contractual situations in which the Government may lack prior experience and/or capabilities. It is recommended that Government remain vigilant to the risks associated with such arrangements and ensure appropriate resources are available to evaluate and implement the PPPs.

4.2.9.4 Recommendation

8. Expand the use and scope of PPP's to procure public infrastructure, particularly in cases that will result in core services being delivered for better value for money.

4.2.10 Unsolicited proposals

4.2.10.1 Issue

An unsolicited proposal is an approach to government from the private sector to: build and/or finance infrastructure; provide goods or services; or to purchase a government-owned asset where government has not requested the proposal.

Western Australia is the only mainland State that does not have relevant guidelines in place to deal with unsolicited proposals.

The establishment and potential promotion of a process to encourage private sector input in to infrastructure planning and/or delivery may introduce innovation into infrastructure delivery and potentially alleviate funding pressures.

Such guidelines should seek to balance the protection of private sector intellectual property with competitive procurement principles required of Government to deliver value for money.

4.2.10.2 Submissions

There were no public submissions directly on the topic of unsolicited proposals, although a large number of submissions were supportive of increased private sector participation in the planning and delivery of Government's infrastructure requirements as detailed above.

Likewise, whilst it did not address unsolicited proposals directly, the Productivity Commission's Inquiry into Public Infrastructure made a number of relevant observations:

"Governments are sometimes weak at determining what, where and when infrastructure projects should be scoped and constructed. This stems from deficiencies in using coherent decision-making frameworks – especially scoping and developing transparent cost-benefit analysis rigorous demand forecasting, investigating project risks fully and efficiently allocating risks between public and private partners." ¹⁹⁹

4.2.10.3 ERA analysis

The provision of social infrastructure is core business for government and considerable resources are invested across agencies and trading enterprises for planning and delivery of the facilities and systems required to deliver government services. However Government is not the only source of infrastructure ideas, and in many instances there may be opportunities for the private sector to identify innovative approaches to all aspects of government service delivery, assets and infrastructure.

In particular, in its recent submission to the Productivity Commission inquiry into public infrastructure, Infrastructure Australia emphasised the importance of allowing the private sector a greater role in identifying and delivering infrastructure needs:

"Private sector businesses often independently pursue investment opportunities outside of government processes and they already account for a substantial investment base and influence the provision of infrastructure. In this respect there is a danger in too heavy a reliance on "public infrastructure", where government has a primary role and responsibility for infrastructure planning and provision. This might be seen to minimise industry input and the ability to develop privately financed and funded infrastructure and obscure the identification of real infrastructure needs. The Office agrees with the view that markets are relatively efficient in determining when new investment is warranted. Therefore, as the private sector plays a greater role in the provision and ownership of infrastructure assets they should become more involved in the identification of new investment, with appropriate regulatory oversight." 200

In addition to PPP's, as outlined in Section 4.2.9, unsolicited proposals provide a further mechanism by which the private sector can influence infrastructure outcomes.

Unsolicited proposals in other jurisdictions

The first public-private partnership undertaken in NSW – the Sydney Harbour Tunnel – resulted from an unsolicited proposal²⁰¹. In 1986, the Transfield-Kumagai joint venture approached Government with a proposal to build the Harbour Tunnel. The Government then exclusively dealt with this joint venture without a tender process. Subsequent criticism of the outcomes from this project led to clarity being developed around future unsolicited proposals to balance value for money whilst encouraging private sector input.

In January 2012, the New South Wales Government released a guide for the submission and assessment of unsolicited proposals²⁰². The introduction to the Guide states:

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¹⁹⁹ Productivity Commission, 2013, *Inquiry into Public Infrastructure*, p.8.

²⁰⁰ Office of the National Infrastructure Coordinator: Infrastructure Australia, 2013, Submission to the Productivity Commission Inquiry into Public Infrastructure, pgs.6-8.

²⁰¹ NSW Parliamentary Research Service (August 2013) e-brief: Unsolicited proposals

²⁰² NSW Government, 2012, Unsolicited Proposals: Guide for Submission and Assessment.

"Government is seeking to capture innovative ideas from industry that provide real and tangible benefit to the people of New South Wales. Government will consider directly negotiating with an individual or organisation that presents an Unsolicited Proposal where circumstances support this approach and at its absolute discretion.²⁰³

The introduction explains further:

"While direct negotiation of Unsolicited Proposals may be pursued, Government's default procurement approach is to test the market. This generally results in the demonstrable achievement of value-for-money outcomes and provides fair and equal opportunities for private sector participants to do business with Government.

As such, Unsolicited Proposals should include unique elements that provide justification for entering into direct negotiations with the Proponent. The unique elements may include characteristics such as:

- Intellectual property or genuinely innovative ideas;
- Ownership of real property;
- · Ownership of software or technology offering a unique benefit;
- Unique financial arrangements;
- · Unique ability to deliver a strategic outcome; and
- Other demonstrably unique elements."

The guiding principles in the NSW approach require unsolicited proposals to be assessed against criteria that establish unique benefits of the proposal providing justification to directly negotiate including: value to Government (economic benefit, service delivery and whole-of-life costs); appropriateness of the return on investment obtained by the Proponent given project risks; capability and capacity of Proponent to deliver the proposal; and affordability and appropriate risk allocation.

The New South Wales Government devotes a Budget Paper to Infrastructure which contains a summary of all unsolicited proposals under consideration. It states

"The Government recognises the private sector can offer innovative ideas, approaches and solutions to the State's policy goals and that this should be encouraged."204

In its first year of operation, NSW received 36 unsolicited proposals with 85 per cent not proceeding past Stage 1. The box below details a small number of successful unsolicited proposals from NSW, illustrating the range of possible applications.

²⁰³ NSW Government, 2012, Unsolicited Proposals: Guide for Submission and Assessment.

²⁰⁴ NSW Government, Budget paper No. 4 *Infrastructure Statement* 2013-14 (p.2.6)

Box 13 Unsolicited proposals to the New South Wales Government

- In March 2004, an unsolicited proposal from Westfield lead to an agreement to design and construct new retail/cinema facilities at the western end of the Parramatta Transport Interchange site. Under the agreement, the interchange was upgraded to cater for patronage growth and improve passenger facilities.
- In October 2013 the NSW Government finalised sale of the Queen Mary Building to the University of Sydney to be converted to affordable student accommodation.
- The NSW Government is currently considering an unsolicited proposal from Brookfield Office properties Pty. Ltd. to combine a commercial/ retail development with improvements to the public access areas for the Wynard Subway Station.
- In September 2013, AspireSydney presented an unsolicited proposal to replace and upgrade the Sydney Harbour Bridge, bringing forward strategic construction of the M4 East motorway via re-development of under-utilised Government land between railway stations as illustrated below.²⁰⁵ Government has not responded to the proposal.

Source: New South Wales Government, 2014, Unsolicited Proposals: Premier's Statement.

At the Federal level, Infrastructure Australia's *National Public Private Partnership Policy and Guidelines* (December 2008) contain a description of unsolicited proposals:

"Unsolicited proposals and exclusive mandates can provide a source of innovative ideas about how to improve the delivery of government services. Given their unsolicited/exclusive basis, as a general principle such proposals need to demonstrate unique value for money benefits that allow the government to demonstrate with confidence the reasons for entering into an exclusive arrangement rather than a competitive tender process. Unsolicited proposals must demonstrate an overall community benefit and be consistent with the government's plans and priorities."

Similarly, Queensland includes its unsolicited proposal framework in the (2008) PPP guidance material. Unlike New South Wales, detailed records are not disclosed. However two unsolicited projects are reportedly being developed under "exclusive mandate" (Surat Basin Railway and Wiggins Island Coal Terminal)

The Victorian government released its *Unsolicited Proposal Guideline* in February 2014. A five stage process has been established outlining the criteria and process by which exclusive negotiations are established and relevant information disclosure. The process emphasises four project characteristics that it demonstrates:

- demand (consistent with government policy objectives);
- feasibility (financial, economic, technical and social);
- uniqueness (intellectual property or ownership of strategic assets); and
- value for money.

South Australia's unsolicited proposal details are contained within State Procurement Board *Market Approach Guidelines* (2012). No data are published on project outcomes.

²⁰⁵ AspireSydney, May 2013 Central Park Estate and M4 East Development – An unsolicited proposal to the NSW Government

²⁰⁶ Infrastructure Australia, 2008, National Public Private Partnership Policy and Guidelines, Volume 6, p.16

Internationally, the results are mixed, with the United States and New Zealand federal governments having unsolicited proposal guidelines whilst, for example, Canada and the United Kingdom/Eurozone do not. In 2001 the United Nations released a legislative guide to privately financed infrastructure projects which gave guidance on dealing with unsolicited proposals. In 2007 the World Bank published a paper summarising global approaches to encouraging the private sector to come forward with potentially beneficial project concepts whilst maintaining competitive processes. The study outlined various systems in use around the world which offer varying levels of advantage to the proponent originally presenting the project:

- The **Bonus System** invites additional competition but gives a small advantage to the original bidder;
- The Swiss Challenge publishes an unsolicited bid and offers are invited to beat it.
- The **Best and Final Offer** involves multiple rounds of tendering with the original bidder guaranteed participation in the final round.

Summary

An opportunity exists for Western Australia to actively promote greater input from the private sector into infrastructure provision through the development and promotion of unsolicited proposal guidelines.

Potential advantages to such a strategy include:

- a mechanism by which private sector innovation and technological advancement can be introduced to infrastructure planning and provision;
- greater potential for alternative and innovative funding, financing and charging mechanisms for infrastructure;
- consideration of asset sales that otherwise may not be government policy;
- reduction of demand for government-owned infrastructure;
- potential for alleviation of infrastructure funding pressures; and
- exposing Government Trading Enterprises to the policy may open routes by which industry procurement innovations occur where they would otherwise be opposed.

Care needs to be taken however to ensure the guidelines safeguard against vexatious private sector proposals and projects that are not consistent with government policy. For example, it is open to Government to exclude proposals of a certain nature from consideration, such as gambling or gaming proposals.²⁰⁷

The ERA considers that the development of a transparent process for dealing with unsolicited proposals to Government in Western Australia could provide a source of innovative infrastructure solutions and encourage greater private sector participation in the planning and delivery of infrastructure and related services.

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²⁰⁷ The New South Wales Government is currently is an advanced stage agreement with Crown Resorts Ltd. to deliver an architecturally iconic six-star luxury hotel and gaming facility as a result of an unsolicited proposal. Any exclusive mandate of this nature may or may not be consistent with Government policy and should be considered on a caseby-case basis and in the context of rigorous guidelines defining Government's view of "unique" benefits.

The scope and/or focus of such guidelines can be extended to include policy areas that Government seeks to promote such as asset sales, or specific issues and sectors such as congestion, iconic developments or transport interchanges.

4.2.10.4 Recommendations

9. Develop a process and guidelines for unsolicited infrastructure proposals from the private sector.

4.2.11 Infrastructure WA

4.2.11.1 Issue

A number of submissions to this inquiry advocated a state infrastructure strategy and/or an independent infrastructure advisory board similar to the role Infrastructure Australia plays at the federal level of government.

4.2.11.2 Submissions

The ERA received seven public submissions on the topic of an independent state infrastructure advisory body and/or an associated State Infrastructure Plan; six from industry representative bodies and two from State Government departments.

- Master Builders Western Australia recommended the establishment of a State Infrastructure Council with industry representation and a dedicated Minister. Election commitments can be assessed by the Infrastructure Council
- The Western Australian Local Government Association (**WALGA**) recommended the requirement for publicly available ten-year infrastructure plans be extended to government and regional entities to align with local government requirements.
- The Civil Contractors Federation recommended a comprehensive long term infrastructure strategy that is evidence-based and coordinated, creating a 15-year pipeline of projects driven by cost-benefit analysis. A State infrastructure body was recommended.
- The Department of Transport did not support the establishment of an independent infrastructure advisory board, because decisions are ultimately political. A number of strategic plans and prioritised infrastructure lists are already available.
- The Department of Planning outlined reforms to the State's Infrastructure Coordination Committee and is considering private membership.
- The Chamber of Minerals and Energy recommended establishment of a dedicated economic infrastructure unit and a State infrastructure plan to develop a long term coordinated pipeline of projects in collaboration with the private sector.
- The Chamber of Commerce and Industry criticised the lack of a long term infrastructure strategy, limited long-term prioritisation and the lack of effectiveness of the existing Infrastructure Coordination Committee, being too large and lacking direct industry representation.

4.2.11.3 ERA analysis

As noted, the ERA received a number of submissions in support of the establishment of an independent State-based infrastructure advisory board and/or a State infrastructure strategy establishing a committed pipeline of infrastructure projects. Two states (New South Wales and Queensland) have recently adopted this model, reflecting the role that Infrastructure Australia has undertaken at the federal level since its establishment in 2008.

Proponents of independent infrastructure advice argue that it allows for a rigorous, consistent and transparent evaluation of projects, in particular for long-term projects that sit outside four-year budgetary and electoral cycles. The over-arching objective is to ensure that only the projects with the greatest net benefit are prioritised. In addition, a clear policy and priority framework from an independent advisory body is argued to provide greater certainty for investment commitments by the private sector, both for their own projects and for potential private involvement in public infrastructure projects.

The objective of an independent infrastructure advisory board is to de-politicise infrastructure investment decision-making. This is similar in intent to the role of the Reserve Bank of Australia (**RBA**) in monetary policy. The RBA's objective, under an agreement with the Australian Government, revolves around the objective to maintain CPI between 2-3 per cent. This clear objective allows for transparency and accountability in decision making. Like the RBA in monetary policy, an infrastructure advisory board is tasked with achieving its objectives free from outside influence.

In contrast to monetary policy however, the objectives of infrastructure are multiple, conflicting and complex. The argument against independent infrastructure advice is thus that politicians are the ones best placed to exercise the degree of judgement required to balance multiple, competing and often conflicting objectives of infrastructure investments. In addition, politicians are held accountable for these decisions.

The Productivity Commission's Inquiry into Public Infrastructure examined these issues and made the following comment:

"Notwithstanding the current and foreshadowed role of IA and also of state agencies such as Infrastructure NSW, the output of such bodies is advisory only. Ultimately it is the quality of the actual decisions taken by the relevant minister and cabinet, and by responsible agencies, that is important, at all levels of government."²⁰⁹

The ERA's notes that proper evaluation of infrastructure projects is resource intensive and requires considerable expertise. This expertise would add additional cost and finding skilled staff for existing tasks is difficult.

A primary benefit of an independent advisory body, access to an external peer-review process for project evaluation, has recently been made available to WA by Infrastructure Australia, which provides external expertise and scrutiny to State agencies' proposals.

Under the circumstances, it is considered doubtful that further benefit to rigorous project evaluation can be achieved from an additional State-based advisory board performing a similar function to that of Infrastructure Australia.

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²⁰⁸ See for example NSW Infrastructure Strategy (2012) and Infrastructure Australia Submission to Amendment Bill (December 2013)

²⁰⁹ Productivity Commission, 2014, *Inquiry into Public Infrastructure- Draft Report*, p228.

The ERA further notes the current debate surrounding the *Infrastructure Australia Amendment Bill 2013*, which underscores the difficulty facing infrastructure advisory bodies in remaining independent of government. Whilst the stated intention of the Bill is to:

"strengthen the role of Infrastructure Australia as an independent, transparent and expert advisory body through better clarification of its functions." ²¹⁰

Infrastructure Australia claims the Bill is eroding its independence as a result of clauses that give the Minister power to exempt categories of infrastructure from scrutiny and a prohibition on the publication of findings without the Minister's approval.

The experience of Infrastructure Australia and its track record in terms of influencing actual project funding, particularly in times of changes of government, suggest to the ERA that the impact of a State based advisory body is in practice likely to be limited. The measurable benefit to infrastructure decision making is unlikely to exceed the costs and difficulties of resourcing such an agency.

In addition, the Office of the Auditor General plays an important role in the review of Government performance, in particular in the context of infrastructure planning and delivery. To the extent that divergence from good process is identified and investigated by the Auditor General's Office, Government has access to multiple sources of independent review.

A State Infrastructure Strategy

In terms of a State Infrastructure Strategy, the ERA considers that the existing annual State Budget Papers represent a lengthy and detailed articulation of Government infrastructure intentions, including descriptions of capital projects by sector, objectives of the projects, near term financial impacts and total estimated cost, albeit only over a four-year period.

Complementing the information provided in the annual State Budget are a number of longer term sector-specific strategic infrastructure plans developed in collaboration with the private sector through public submission processes. Examples include the *State Planning Strategy, Directions 2031, Public Transport for Perth in 2031, Regional Investment Blueprints* and the *Water Forever: 50-year Plan(s)*, as shown in Table 17.

Table 17 Strategic Plans by Sector

Sector	Sub-sector	Strategic planning	Department
Water	Drinking Water	Water forever-50 year, 10 year, regional	Water Corporation
	Wastewater	Water forever- recycling and efficiency	Water Corporation
Transport	Roads	CBD Transport Plan	Transport
	Public Transport	Public Transport Plan 2031	Transport
	Ports	Ports Review 2012, Portlink	Transport
	Airports	State Aviation Strategy	Transport
	Rail-freight	Regional Freight Plan	Transport
	Other	WA Bicycle Network Plan, Alternative Transport, Parking	Transport
Social	Health	Clinical Service Framework 2010-2020	Health
Infrastructure	Education	State Budget	Education

²¹⁰ Infrastructure Australia Amendment Bill 2013 *Explanatory Memorandum*

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Other	State Planning	State Planning Strategy (land use)	WA Planning Commission
	Regional Infrastructure	Regional Blueprints (in development)	Regional Dev. Co.'s
	Perth Infrastructure	Directions 2031 and Beyond	WA Planning Commission
	Funding	Under development	Transport

Source: Various WA State Government Agencies

The ERA notes that attempts in the past to develop a coordinated State Infrastructure Strategy have been abandoned after considerable resource expenditure in the face of a change of government²¹¹. It is natural that a new government will bring with it a new set of infrastructure priorities.

On the argument in support of a State Infrastructure Strategy producing a pipeline of committed projects, the ERA agrees with the Productivity Commission on this issue:

"Some participants have suggested that there needs to be a 'pipeline' of public infrastructure projects. The Commission does not see merit in the Australian Government publishing a list of projects into the future, which would not address the fundamental impediments to achieving the efficient provision of public infrastructure in Australia."²¹²

In summary, consistent with reforms outlined in Section 4.2.1, the ERA maintains that the benefits to infrastructure outcomes from Government focusing on following good process and utilising the sources of advice already in place, such as the Auditor General and Infrastructure Australia, will likely exceed any marginal benefits to be gained from changing the structure, source or governance of infrastructure advice to the State Government.

4.2.11.4 ERA conclusion

The ERA does not support the establishment of a State infrastructure advisory board at the present time.

²¹¹ In 2008 the Department of Treasury completed an extensive State Infrastructure Strategy in collaboration with the private sector, which was abandoned after a change of government at the 2008 State Election.

²¹² Productivity Commission, 2014, Inquiry into Public Infrastructure- Draft Report, p.16.

4.3 Divestment of Government assets

4.3.1 Background

The Western Australian Government, like many governments, owns a large number of infrastructure assets and Government Trading Enterprises (**GTEs**), which it uses to provide goods and services to the community. However, government ownership of assets and businesses has recently become a topical issue in Western Australia due to the downgrading of the AAA credit rating by Standard and Poor's on 18 September 2013.

In response to the credit rating downgrade, the State Government has announced a reorganisation of its Business Model and Asset Investment Program. The State Government has stated that it will initially focus on a process to facilitate the sale of underutilised land holdings; discrete port assets; and certain electricity assets.

The Government has stated that the asset sales are part of a broader strategy to 'regain the State's triple-A credit rating and contain projected increases in net debt.'

The ERA supports the Government's review of its asset holdings. Initiating a review of government ownership of assets and businesses is a good way to ensure that the public's interests are being served in an efficient manner.

However, the ERA considers that the review by the Government should focus on a broader range of objectives than regaining the AAA rating and reducing gross debt. Instead, the review should focus on increasing the efficiency and productivity of the assets and businesses, creating a competitive market and ensuring consumers' interests are being best served. The review of assets should include the costs and benefits of divestment to the business itself, the Government and the community.

The ERA considers that the divestment of Government assets that operate in a competitive market, or where a competitive market could be established, will result in the greatest long term benefits for consumers. The application of competition in the provision of goods and services is usually the most effective way to deliver efficient prices and quality services to customers.

However, there are instances where the ability of competition to deliver benefits to consumers is constrained. This failure of the market to deliver benefits to consumers may be due to a variety of situations, which are further discussed in Section 4.3.3.3.

The ERA notes that in most cases, even if there is reason for the Government to intervene in a market, regulated private-sector businesses are better able to meet the needs and wants of consumers than is the Government.

The ERA considers that an asset should only be retained by the Government if there is a clear net benefit in doing so, and if there is no better way of achieving the outcomes through more discrete forms of government intervention.

This section of the report begins with an overview of the public submissions that were received in response to the Discussion Paper regarding government ownership. These submissions have helped inform the ERA's views and approach to reviewing government ownership in Western Australia.

The section also examines why competition generally results in the best outcome for consumers, but also acknowledges the situations where competition is not possible or the

markets may fail for other reasons. These situations provide some rationale for why governments intervene in markets.

This is followed by a brief discussion on the alternative methods of government intervention that could be undertaken, if deemed necessary, to ensure society's interest are being met. These interventions include government ownership of an asset or business, contracting private sector services, taxation for non-market externalities or regulation of private sector provision.

From this process, the ERA has identified six criteria, which, when applied in sequence, determine whether government ownership of an asset or business is warranted.

Due to time and resource constraints the ERA was not able to perform an audit of all government assets and businesses against the six criteria. The ERA has had the time to apply the criteria to four businesses (Western Power, Synergy, Fremantle Port Authority and Water Corporation) in order to illustrate why the criteria are appropriate and also to demonstrate how this process can be applied more generally to the Government's portfolio of assets.

4.3.2 Submissions

Of the six submissions that addressed the issue of government ownership, one was in favour of retaining government ownership, four were in favour of relinquishing government ownership and one called for a full review of government ownership.

The following general comments were made regarding the Government's role in ownership of assets and businesses:

- The Chamber of Commerce and Industry of Western Australia (CCIWA) suggested
 that a regular review of government ownership should be undertaken. Programs
 that are identified to be no longer relevant to a core role of government should be
 relinquished.
- Mr. Sheridan considers that many of the Government owned utilities could be replicated by the private sector. Mr. Sheridan also stated that these utilities were crowding out private sector competitors.

The following comments were made regarding specific industries in Western Australia.

- The Government's role in the water industry:
 - The Water Corporation considers that the establishment of an Independent Procurement Entity (IPE) would not provide any additional benefits over and above the contracting strategy the Water Corporation currently uses.
- The Government's role in the electricity industry:
 - Alinta considers that the Government ownership of electricity assets is no longer necessary from a public good perspective given the regulatory instruments in place. It also considers that relinquishing the electricity assets would reduce the risks faced by the State and result in improved productive and allocative efficiency.
 - The Chamber of Minerals and Energy (CME) expressed that a competitive electricity sector should be pursued as a priority. It considers that this should include the development of market related pricing methods to reward private

sector risk, promote efficiency and provide appropriate price signals to consumers. The CME recommends that the ERA assess the costs and benefits of disaggregating the new Synergy into several gentailers over the long term.

- The Government's role in the provision of ports:
 - The Department of Transport considers that there are some services within West Australian ports that could be delivered more efficiently by the private sector and may be attractive for sale.

The following comments were made regarding conflict of interest:

- CCIWA considers that the objectives and any conflicts of interest within a
 government agency or business should be minimised. It was further stated that
 government trading enterprises should operate with a commercial focus, aiming to
 make an appropriate return to the Government as owner and as tax collector while
 abiding by government policies.
- CCIWA and Alinta consider that safeguards to consumers are best delivered through direct and transparent means rather than government ownership.
- Mr. Sheridan also noted the Government's ability to outsource the operation of an asset to a third party to enable the State to achieve its aim in a politically and socially acceptable matter.

4.3.3 Why does the Government intervene in markets?

4.3.3.1 Competition

The application of competition without any government intervention in the provision of goods and services is usually the most effective way to deliver efficient prices and quality services to customers. Competition and competitive pressures exist in situations where there is rivalry between two or more suppliers seeking to secure the business of a customer.

To ensure they are successful, suppliers in a competitive market are under pressure to offer the most attractive product in terms of price, quality and level of service. Even in situations where a market is served by a single supplier, there may be the threat of an additional business entering the market, this threat alone is an incentive for the supplier to produce the goods and services in a manner consistent with consumer demands.

Competition, in whatever form, drives suppliers to continually seek more efficient methods of providing products and services through efficiency and innovation. The effect of competition and competitive pressures in delivering more efficient production and service delivery can be thought of in three ways.

First, competition for consumers results in suppliers continually seeking to lower the cost of producing products and services. Consider an established supplier selling a given product. If a competing supplier can enter the market and sell a similar product at a lower price, the established supplier can expect to lose market share and may be forced out of business if the established supplier is unable to compete. Competition and competitive pressures guide suppliers to continually seek to reduce costs.

Second, competition for inputs among competing suppliers offering alternative products or services encourages resources to be allocated to where they are most valuable. A supplier seeking to use resources in less efficient ways can usually expect to be outbid by competitors that will use the goods efficiently. This ensures that society as a whole is better off because the limited resources of the economy are being used where they are most valued.

Third, competition compels suppliers to seek innovative ways of doing things. If a supplier is able to invent a new and cheaper way of manufacturing its product (or create an entirely new product), the supplier stands to benefit by attracting additional customers.

While the overall effect of competitive pressures is to drive suppliers to produce goods and services at least cost, allocate goods and services to where they are most valued and to seek new and improved ways of serving customers, competition is not an end in itself. Rather, competitive pressure is an effective mechanism by which customers receive goods and services at levels of price and quality suited to their needs. Hence, competition delivers outcomes that are in the long term interests of consumers.

4.3.3.2 Market power and monopoly

There are instances where the ability of competition to deliver benefits to consumers is constrained. This failure of the market to deliver benefits to consumers may be for a variety of reasons. One such example is where a single business, or monopoly, is the only provider of a good or service and faces no particular constraints due to potential entrants. However, the market can fail even when there are a few firms in the market who hold significant market share.

In situations where the monopoly is free from government oversight and/or regulation, it has an incentive to price above the cost of production. A monopoly position can allow businesses to make excess profits or to pad out costs in ways that are beneficial to management. In either case, this leads to the under-provision of the good or service, even where there is a willingness by consumers to pay the 'efficient' cost of service delivery.

A monopoly can exist for a range of reasons. Government may prescribe that only a single provider of a service exists. Alternatively (and sometimes as a trigger for government prescription), a monopoly may be the most efficient way in which to provide services if large economies of scale and/or scope exist.

- Economies of scale exist where average production costs for a single product fall as output increases.
- Economies of scope are similar to economies of scale but refer to cost savings that result from efficiencies generated by producing a range of similar products or undertaking a variety of related tasks.

In this case, large businesses, or those that produce a range of similar products could, in theory, produce the goods and services at a low cost. However, large businesses may also have the opportunity to price goods and services above the cost of production, and lack of competition could also result in a lower incentive to innovate. The theoretical benefits of lower cost of production could, over time, be outweighed by the loss of benefits from innovation.

While a monopoly may, produce goods and services highly efficiently, the monopoly may not adapt to changes in consumers demand or ensuring that allocation between customers

is efficient. Competitive markets, on the other hand, are capable of achieving technical, allocative and dynamic efficiencies simultaneously.

4.3.3.3 Market failure

Competition itself can in some cases fail to deliver efficient outcomes and can sometimes prove counterproductive. This can occur where business decisions can impact third parties, such as when environmental and public health risks are prevalent, these are known as externalities. This may mean that private sector provision may not be appropriate. However, in general institutional/regulatory arrangements should be sufficient to allow private sector provision.

There are also circumstances where, without regulatory or other intervention, competition simply does not work. This arises, for example, where unrestricted consumption leads to over utilisation of a good or service. For example, people's use of natural water sources would be unlimited without regulation and other intervention which could lead to the exploitation of those water sources.

The nature of price regulation can also lead to circumstances where competitive incentives may result in inefficient patterns of investment or consumption as the price may not reflect the true costs and benefits of those goods or services.

Economic efficiency that is achieved through competition requires that environmental and other related factors are appropriately brought to account to ensure that all costs and benefits are included in the assessment of the good or service (not just direct financial costs).

Additionally, the private sector will not adequately meet the market demand for public goods. People cannot be excluded from using a public good and the use of a public good by one person does not affect the use by other people. Public goods cannot be provided commercially as it is difficult to charge users for their use. These goods can be considered as a pure externality as people who are not party to the provision of the good are benefiting from the good or service being provided. For example, the Government provides and maintains regional parks, the people who use these parks are benefiting from the use but are not involved in the provision or maintenance of the parks.

4.3.4 Public ownership

4.3.4.1 When should a Government be involved in the market?

If some failure in the market exists, giving reason for government to consider intervening in a market, it is important to understand the alternative intervention mechanisms the Government can undertake to rectify this failure. This will allow an assessment of whether the most appropriate mechanism is being utilised.

Alternatively, if there is no failure in the market there should be no need for government intervention in the market. If government intervention is present where no market failure exists the intervention may not be required and should be reviewed.

Before intervention of any kind is implemented, governments should consider whether the measures put in place to correct the market will not actually make the situation worse than if the government left the market alone, or if the problem could be solved more efficiently through an alternative type of intervention. If Government intervention does make the situation worse or there was a more efficient way of intervening this is known as 'government failure'.

Historically, to ensure that certain goods and services are delivered in a manner consistent with society's interests, the Government has owned an asset or business to deliver those goods or services. These assets and businesses have been used as a way of achieving government policy objectives.

However, there are less invasive forms of intervention that the Government can undertake to ensure that goods and services are efficiently delivered to meet consumers' needs and wants.

Broadly, there are a number of ways that government can intervene in the market:

- The Government could be responsible for the provision of the goods or services through full asset ownership and delivery. For example, the WA Government owns the Water Corporation.
- The Government could be responsible for the provision of the good or service, but the private sector is responsible for the delivery of the good or service with standards and regulations specified through contractual arrangements, if necessary. The asset could be owned by either the private or the public sector. For example, the Government owns the public buses in Perth; however, the private sector operates and maintains the buses.
- The Government could explicitly price non-market goods through some sort of tax or charge on an externality (for example, pollution) or force producers to buy limited permits to produce that externality (for example, CO₂ permits).
- The Government could regulate the private sector provision of the good or service.
 For example, the private sector owns and operates the gas assets and business in Western Australia and the Government legislates rules to regulate third party access and safety requirements.

4.3.4.2 Is public ownership necessary?

The ERA considers that even if an unregulated market cannot deliver goods and services consistent with society's interests, regulation of private businesses or correcting of price signals is preferable to government ownership, as private businesses generally operate more efficiently and are better able to innovate.

There are several reasons for the private sector's superior efficiencies and ability to innovate:

- The Government has a wide range of objectives, some of which may be in conflict, and as a result this may impact on the efficient operation of the asset or business. In comparison, the private sector has one main objective: to respond to consumer demand in a way that will maximise profit. The pressure that the market places on a private business encourages cost reduction and efficiency.
- In general, the private sector is better at managing risk than the public sector. The
 private sector is generally better equipped to innovate and diversify risk.
 Furthermore, the private sector is more likely to seek adequate compensation for
 undertaking risk than the Government.
- In general, the private sector has the capacity to be more innovative in the delivery
 of services than does the public sector. In industries which are characterised by
 high levels of innovation and technological change (for example,
 telecommunications) a private sector owner is more likely than a government
 owner to be able to adapt to changes and perform more efficiently.

 As a private sector entity is generally reliant on shareholders and principal creditors to provide funding, the entity has to perform well, by reducing costs and increasing the company's net worth, in order to retain its shareholders and to issue new debt. A government business, on the other hand, has no share price and does not need to continually demonstrate to its debt funders that its risk profile has not changed. Accordingly, a government business has less pressure on it to perform than does a listed company.

Consequently, the ERA considers that private ownership of assets and businesses, appropriately regulated if necessary, is usually the best way to provide goods and services. Private ownership should be the default position and government ownership should only occur when absolutely necessary.

4.3.4.3 Additional issues surrounding public ownership

The ERA acknowledges that some members of society have concerns regarding the divestment of State owned assets to the private sector.

The main concerns with private sector ownership are in relation to possible price increases, the degradation of service and environmental standards, and the abandonment of non-commercial activities that government businesses currently undertake (such as educating consumers on reducing their consumption of electricity to save money and benefit the environment).

However, well-designed regulation can ensure that these concerns are addressed. For example, regulatory bodies can monitor or set prices, regulate service and operating standards to ensure consumers' needs are met, and monitor the achievement of environmental standards.

Furthermore, non-commercial activities can either be undertaken by the relevant State department, or provided through a direct operating subsidy to a private business. The operating subsidy mechanism provides for the subsidy to be transparent, and for government to periodically assess whether the community is getting value for money from the expenditure.

For assets where there may be merit in retaining ownership, an option is to have the assets managed and operated by the private sector on long term leases from the Government. In this case, the Government maintains ownership of the asset but consumers still benefit from private sector innovation and efficiencies. For example, the private sector has long term leases with the New South Wales Government to operate and maintain Port Botany and Port Kembla. At the conclusion of the agreement the asset will be returned to the Government.

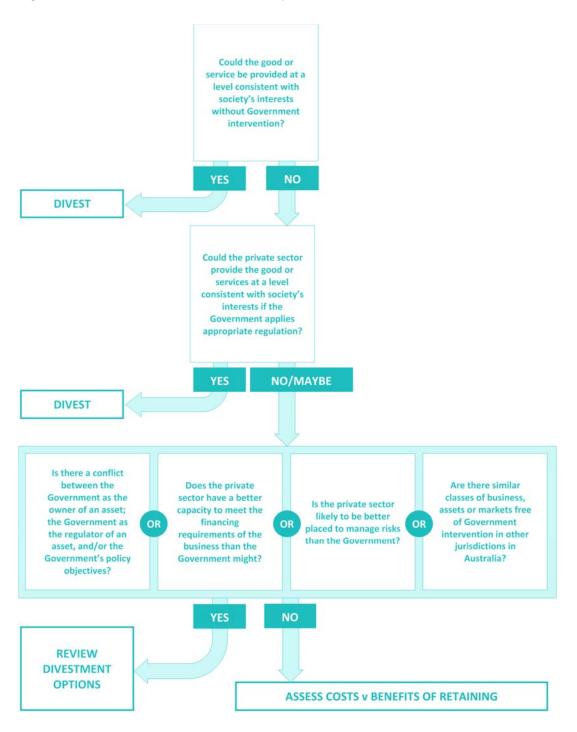
4.3.5 Criteria for reviewing Government ownership

The ERA has developed a set of criteria for the Government to apply in reviewing the reasons for ownership of a business or asset.

In developing the criteria, the ERA analysed and drew from reports that contained ideas and principles regarding best practice for government ownership. In particular, the ERA has drawn on reports by the Productivity Commission, Infrastructure Australia and Commissions of Audit. The ERA was also able to utilise the knowledge it has gained from its regulation, licensing and monitoring roles in developing the criteria.

Figure 24 provides a visual representation of the matters that need to be considered by government when reviewing its reasons for ownership. A more detailed explanation of the criteria is provided after the diagram.

Figure 24 Criteria for Government ownership of a business



1. Could the good or service be provided at a level consistent with society's interests without Government intervention?

In general, this question relies on there being the prospect of competition emerging in the absence of government intervention. If there is the likelihood of competition, and goods and services are priced inclusive of all costs and benefits (including non-market values), then there is no reason for the Government to intervene in the market (other than through the imposition of basic law and the protection of property rights).

If there is no prospect of competition (for example, a natural monopoly or public good) or market prices are not appropriate (for example, the presence of non-market costs or benefits), then Criterion 2 should be considered.

2. Could the private sector provide the good or service at a level consistent with society's interests if the Government applies appropriate regulation?

If the private sector can provide the good or service with appropriate regulation it is likely there is no case for government ownership. The effectiveness of regulation could be ascertained by considering whether:

- · the good or service could be easily identified; and
- the service standards could be easily outlined and written into a contract and the compliance with these could be easily assessed.

If private sector provision with regulation is sufficient to ensure that society's interests are met, there is unlikely to be a need for government ownership.

If there is uncertainty about whether regulation of a private owner would be effective, then Criterion 3 should be applied.

Criterion 3 is made up of four questions, the answers of which may, when taken together, provide a case for divestment. For example, even though there may be uncertainty about whether regulation of a private owner would be effective, if there are many other reasons for why government ownership is problematic, then the asset or business should be reviewed for possible divestment.

Under criterion 3, the more questions answered "yes", the stronger the case for divestment. If the answer is no to each of the questions then government ownership should be retained.

3.A) Is there a conflict between:

- the Government as the owner of an asset;
- the Government as the regulator of an asset; and/or
- the Government's policy objectives?

Government intervention in an asset or market can lead to a situation where the Government faces conflicting objectives. Conflicts of interest may occur in situations where the Government is:

- the owner of an asset, whereby it desires higher prices to increase profits and dividends;
- an economic regulator of the asset, whereby it wants the business to provide the service at a cost reflective price; and

• a social regulator, whereby it might make decisions on a social policy basis (such as providing a below-cost service to some customers).

One of the main issues surrounding conflict of interest is that government often sets the rules to which entities must conform despite the Government owning a business that is a competitive entity within that market. In this situation, it is possible for the Government to tilt the rules and regulations of the market in a way that benefits its own business.

Conflicts of interest can occur even though a government business is corporatised. This is because the Government is still the sole shareholder and is able to influence the business either through formal directions or in informal ways.

If the Government cannot resolve the conflicts of interest that are inherent in owning, regulating and setting policy for a business then it should review its ownership of assets.

3.B) Does the private sector have a better capacity to meet the financing requirements of the business than the Government might?

When reviewing the Government's capability to finance an asset or business, it should be compared to the ability of a private sector entity to finance the same asset or business. In this regard, the Government has established a set of financial targets which it uses to respond to the current economic environment and ensure that the Government is performing effectively.

The targets apply to the whole of the total non-financial public sector (TNPS) and therefore the Government must prioritize its spending within the whole TNPS, including Government Trading Enterprises (GTEs). Hence, the performance and investment requirements of one agency affects the ability of all other agencies to receive government investment. Individual agencies and entities have very little control over their ability to borrow funds.

While this in theory is no different to any other diversified private sector firm, in practice the Government does not have the same flexibility. For example, if a regulated business owned by a private entity was prevented from meeting its license conditions due to shareholder funding restraints, the business has the ability to raise capital, enter joint ventures or sell the asset to another firm to improve efficiency and maximise the benefits to the owner. Furthermore, even if it goes bankrupt, another firm can take over the business. A regulated business that is owned by the Government has more difficulty in entering into these arrangements due to restrictions that apply to the entire government sector.

Consumers of the service may be better off if constraints imposed by the Government were resolved through divestment of the asset, or at least through minimizing government involvement in the asset. Otherwise the Government may go through a long period of under investment in an asset requiring large catch-up expenditures in later years.

3.C) Is the private sector likely to be better placed to manage risks than the Government? For example:

- Is there significant financial or business risk associated with the provision of the service?
- Can the Government diversify away the businesses' financial risk as well as the private sector?
- Is the risk associated with the Government intervention inconsistent with the financial aims or targets of the Government, such as the maintenance of a triple-A credit rating?

The Government should assess each business and asset to determine the types of risk each is facing. The Government should then determine whether the public or private sector is better placed to manage an asset's risk. Consideration should be given as to which sector has the ability to best mitigate the specific risk involved in the asset or business activity.

The concern is whether the type and level of risk undertaken by intervention or ownership of an asset or business is consistent with taxpayer's expectations and with the Government's own financial targets. If it is not, the Government should consider selling the risk to the private sector.

More generally, there is an inherent problem that the government under prices the risk that it faces. A common argument for government ownership is that governments can borrow more cheaply than private businesses. While it is generally accepted that utilities can access Western Australian Government bonds, which have lower interest rates than corporate bonds, this is because Government bonds are underwritten by taxpayers, who can always be relied upon for funding if business risks eventuate. Therefore Government bond interest rates do not account for the risk of the particular business.

This is a concern for government owned assets and businesses as taxpayers are ultimately accountable for financial risk undertaken by the Government and they may not be being adequately compensated. Unlike private sector shareholders, taxpayers are not voluntary shareholders.

As noted in Chapter 3, the Western Australian Government sets its financial targets in a manner consistent with the maintenance or regaining a triple-A credit rating.

The majority of private utilities have a lower credit rating than the Government, hence owning utilities will only detract from the Government's AA+ credit rating and aim of achieving a AAA credit rating. Taxpayers may be compensated for some of these risks through the way prices are set by independent regulators; however the risks are still present and impact on the State's credit rating.

The Government should review its ownership of any business or asset that threatens its financial targets.

3.D) Are similar classes of businesses, assets or markets free of government intervention in other jurisdictions in Australia?

This criterion is more of an indicator, rather than formal criterion, as to whether there is private sector interest in providing the asset or business. If it is provided by the private sector in other jurisdictions in Australia then perhaps the private sector could play a greater role in provision in Western Australia.

For example, Victoria and South Australia have no capital expenditure in the electricity industry because their respective governments do not own the assets. Comparatively, Western Power invested \$940 million in its network during 2012/13.

As the assets are provided by the private sector in another Australian jurisdiction the ERA sees merit in reviewing the private sector capacity for providing the asset in Western Australia.

4.3.5.1 Further Considerations prior to an asset sale

As a supplement to the criteria outlined above, the ERA has identified some additional considerations that should be taken into account prior to the sale of an asset. These are that:

- user charges for that asset should be cost reflective before selling an asset.
- if the good or service is to be provided in a contestable market, the Government should ensure any ongoing subsidies are not impacting the competition in that market. For example, the subsidy should not be tied to one supplier, the subsidy should be able to be received regardless of which supplier the product came from.
- some GTEs may need to be restructured prior to divestment. For example, government ownership in some markets has resulted in monopoly entities that dominate the market. It is important to determine whether these entities are natural monopolies or if they are monopolies caused by regulation (including Government ownership).

4.3.6 Review of Assets

4.3.6.1 Background

The ERA has applied the above criteria to four of the Government owned assets and businesses in Western Australia. The ERA selected these particular assets due to their size and the impact they have on West Australians. Hence, to the extent that the efficient operation of these assets could be improved, then there are large potential benefits for Western Australians.

The assets and businesses reviewed by the ERA include:

- Western Power;
- Synergy;
- Fremantle Port Authority; and
- Water Corporation.

Although this is a small sample of some key assets that may be suitable for divestment, the ERA considers that there are benefits in applying the criteria to all State owned assets and businesses.

4.3.6.2 Recommendations

10. Conduct a full investigation into the divestment of assets that pass the threshold criteria for private ownership.

4.3.6.3 Asset Reviews

Western Power

Asset/Entity description	Western Power builds, maintains and operates the electricity network ²¹³ in the south-west corner of Western Australia. The Western Power Network forms the vast majority of the South West Interconnected Network (SWIN), which together with the electricity generators, comprises the South West Interconnected System (SWIS). Western Power is a statutory corporation established by the Electricity Corporations Act 2005. It is owned by the State Government of Western Australia and is accountable to the Minister for Energy.
Could the good or	Is there Prospect for Direct Competition?
service be provided at a level consistent with society's interests without government intervention?	At present the electricity network is a natural monopoly as it would be uneconomic for another business to serve customers without duplicating the network infrastructure required. ²¹⁴
	Potentially in the future as battery storage technology advances (in combination with distributed generation such as solar PV panels) could provide customers with an economically viable alternative to connecting to the grid.
	Are there any Externalities?
	Yes, there is a risk that the electricity network can cause bushfires. These fires affect people, animals and land that are not connected to Western Power's network and hence are not party to the transaction. The bushfire and its effects are a potential negative externality of the electricity network.
	Furthermore, there is a risk of people being injured by live wires from the electricity network. For example, power lines may snap in strong winds or storms; if someone touches the wire this can lead to severe injuries or death. These safety risks are a potential negative externality of the electricity network.
	<u>Conclusion</u>
	No , as the potential for competition is limited, the service could not be provided by the private sector at a level consistent with society's interests without any government intervention because a monopoly operator could charge more than the cost of providing the service and provide the service at a standard that is less than desired by customers and may pose a safety concern.
	It is unclear whether the private sector would address the externalities in a manner consistent with society's interests.
Could regulation enable the private sector to provide the services at a level consistent with society's interest?	The Electricity Act 1945 and the Electricity Industry Act 2004 (EIA) set out the legislative requirements for transmission and distribution electricity networks in Western Australia. Key subsidiary legislation which regulates these networks includes: • Electricity Networks Access Code 2004 (ENAC) • Electricity Industry (Network Quality and Reliability of Supply) Code 2005 (NQ&R Code) • Electricity Industry Metering Code 2005 (Metering Code)

²¹³ An electricity network contains the transmission and distribution assets such as power poles and power lines.

²¹⁴ Western Power, 2014, How Western Power is Regulated.

- Electricity Industry Customer Transfer Code 2004 (CTC)
- Electricity Industry (Obligation to Connect) Regulations 2005 (OTCR)
- Code of Conduct for the Supply of Electricity to Small Use Customers (Customer Code)
- Electricity (Supply Standards and System Safety) Regulations 2001 (SSSSR)

The ENAC establishes the framework for third party access to electricity transmission and distribution networks with the objective of promoting the economically efficient investment in, and operation and use of networks and services of networks in Western Australia in order to promote competition in markets upstream and downstream of the networks. The Minister for Energy is required to approve any amendments to the ENAC. Currently the Western Power network is the only network covered (regulated) by this Code.

The ENAC requires a regulated network service provider to have an "access arrangement" which must be approved by the ERA. The access arrangement sets out the standard terms and conditions, including price, under which access will be provided to users. The access arrangement is reviewed periodically (typically every five years) at which time the ERA approves the standard services the network service provider must offer, the revenue and pricing policies it must apply, service standard benchmarks it must achieve and various other matters. In addition, the ENAC requires the network service provider to have Technical Rules setting out the technical standards for connecting to and using the network. The Technical Rules are also required to be approved by the ERA.

The NQ&R Code sets standards for the quality (voltage levels and harmonics) and reliability (supply interruptions) of electricity supplied by licensed network service providers, and unlicensed network service providers who are required to comply with the Code under other regulatory instruments, such as State Agreements or an exemption from holding a licence. The Code requires network service providers to publish annual reports on their performance against the criteria set out in the Code.

The Metering Code sets standards for the reliability and accuracy of metering installations, the maintenance of a metering database (containing meter read data), the provision of metering services by the network service provider to retailers and customers, meter data verification and adjustments and the development of relevant documentation.

The CTC regulates the conduct of network service providers in relation to the transfer of customers between retailers that have access to their network. The network does not have to be covered by the ENAC for the CTC to apply.

The SSSSR are administered by the EnergySafety Division of the Department of Commerce, the lead regulator for network safety in the State. The SSSSR require network service providers to comply with applicable safety and reliability standards, ensure their staff are appropriately trained and notify EnergySafety of any safety related incidents or major network alterations.

The subsidiary legislation under the EIA includes specific provisions for residential and small business customers who consume less than 160MWh (or approximately \$40,000) of electricity per annum (small use customers):

 The NQ&R Code requires network providers to make compensation payments to customers if certain standards related to supply reliability and providing advance notice of planned supply interruptions are not met.

The OTCR prescribes timeframes for distribution network providers to provide new connections, or energise an existing connection.

• The Customer Code regulates the conduct of distribution network service providers in relation to disconnection and reconnection of customers for non-payment of a bill (to a retailer), maintenance of a register of customer who require life support equipment and customer complaints handling. Network service providers are required to publish annual reports on their performance against the criteria specified in the Code. The Code requires network service providers to make compensation payments in relation to wrongful disconnection and failure to provide a timely response to complaints.

All of the above legislation would apply to any electricity network regardless of ownership.

Yes, regulation would enable the private sector to provide the service at a level consistent with society's interest. However, it is likely that a decision to relinquish ownership of Western Power would prompt the need to undertake a review of the effectiveness of the existing regulations.

Is there a conflict of interest?

There is an inherent conflict of interest in the Government ownership of Western Power and the legislative powers it has in relation to setting the rules and regulations relating to electricity networks in Western Australia.

As indicated below, the potential conflict of interest between the Government as Western Power's shareholder, Government policy and Government budgetary considerations.

An important check and balance in a regulatory framework is the ability of the service provider to appeal a decision of the regulator. The *Electricity Industry Act 2004* provides for this to happen. However, when the ERA delivered its final decision on Western Power's AA3 Access Arrangement,²¹⁵ the Government issued a directive to Western Power not to appeal the ERA's decision.²¹⁶ A successful appeal would have increased electricity prices and therefore revenue for Western Power. However, price rises are a politically sensitive issue. If Western Power had been privately owned and had a view that the ERA was in error in its decision it may have appealed the ERA's decision.

Yes, there is a conflict of interest with the Government owning the main electricity network service providers, including Western Power, and setting policy objectives and legislation for the regulation of electricity network service providers.

²¹⁵ ERA, 2012, 2012-2017 Western Power's Approved Revised Access Arrangement (AA3).

²¹⁶ Western Power, 2012, Amended proposed access arrangement information for the Western Power Network, p. 8.

Does the private sector have a better capacity to meet the financing requirements?

The Government's overall financial position can restrict the ability of Western Power to efficiently invest in and maintain its network.

Western Power requires substantial on-going financing to maintain its ageing electricity network. In 2012-2013, the Government invested \$1.05 billion in capital improvements to maintain the network; Western Power has outlined further investment requirements of \$2.8 billion to 2016.²¹⁷

The actual capital expenditure by Western Power over the AA2²¹⁸ period was less than the amount approved by the ERA. Western Power noted that its budget allocation from the Government was less than the AA2 capital expenditure approved by the ERA and hence, lower than the ERA's determination of efficient capital expenditure.²¹⁹ A full commercial return was allowed on the approved investment, which the ERA considers that the private sector could have found a way to finance.

With regard to Western Power's impact on overall Government finances, Standard & Poor's has indicated that government owned businesses increase the government's risk profile, explicitly citing electricity businesses.²²⁰

In relation to government underinvestment on assets, Infrastructure Australia recently made the following observation.

Infrastructure assets often require significant ongoing capital expenditure. As assets age, replacement becomes necessary. In addition, as the economy and population grows, many assets will require expansion. When governments maintain ownership of these assets they may be reticent to fund such replacement and expansion because of the impact on their budget, even where there are clear benefits to the community.²²¹

Yes, the private sector would have better capacity to meet the financing requirements.

Is the private sector likely to be better placed to manage the risk?

The main business-specific risks associated with Western Power are:

- Financial risks: interest rate risk, exchange rate risk, ability to finance the asset and the ability to achieve a reasonable rate of return on investment.
- Revenue risks related to uncertainty on future loads and therefore energy transmission demand.
- Changing patterns of energy use in the community, including more energy efficient appliances.
- Asset redundancy risk, for example through technological innovation.
 The growing popularity of renewable but intermittent energy sources
 is a risk to Western Power if they reduce the demands on the
 electricity network.
- Safety risks associated with past underinvestment in maintaining and replacing network assets, particularly wood poles and over ground cables. With approximately 25 per cent of its wood poles located in extreme or high bushfire risk areas, the potential for electricity assets to ignite bushfires is one of the most significant public safety risks for the Western Power network.

²¹⁷ West Australian Treasury, 2013, 2013-14 Budget Statements.

²¹⁸ The AA2 period was from 2009/10 to 2011/12.

²¹⁹ March 2012, Geoff Brown & Associates, Technical Review of Western Power's Proposed Access Arrangement for 2012-2017, pp. 46-47.

²²⁰ Standard and Poor's, 2008, Submission to the Senate Standing Committee on Finance and Public Administration.

²²¹ Infrastructure Australia (2012), Part of the Answer to Removing the Infrastructure Deficit, p. 11

Is the asset/business privately owned in other jurisdictions of Australia	Yes electricity network risk due to its ability to innovate, diversity and price risk. Yes electricity networks are owned entirely by private entities in South Australia and Victoria. The network in the ACT (owned by ActewAGL) is 50 per cent owned by the ACT Government and 50 per cent by the private sector. ²²² Government ownership has been retained in New South Wales,	
	Yes, on the whole the ERA considers that the private sector is best placed to manage electricity network risk due to its ability to innovate, diversify	
	While the private sector would normally have incentives to price its risks and recover them through its tariff to consumers, government does not always do so, leaving tax payers exposed to these risks.	
	Most of the highlighted risks are better dealt with by the private sector through mitigation strategies, insurance or self-insurance. The private sector's recognized incentive and ability to drive innovation and efficiency contributes to its capacity to manage risk.	
	 Physical asset failure and/or damage, such as towers and line damage, power and transformer failure, circuit breaker failure. Operational risk such as cost blow-outs and inefficiencies. 	

Inquiry into Microeconomic Reform in Western Australia: Draft Report

²²² Australian Energy Regulator, 2013, *State of the Energy Market 2013*, pp. 62-63.

Synergy

Asset/Entity description

Synergy operates as an energy retailer and generator in the South West Interconnected System (**SWIS**).²²³

Synergy is a statutory corporation and must comply with the *Electricity Corporations Act 2005* (WA) and other state and commonwealth laws.

Synergy owns an extensive and diverse portfolio of power stations around the state, including in Collie, Kwinana, Cockburn and Pinjar. Its renewable energy portfolio includes wind farms at Albany, Esperance and Kalbarri, and the Greenough River Solar Farm.

In 2012/2013 Synergy retailed approximately 62 per cent of the electricity sold to households and business customers in the SWIS.²²⁴ In 2012/2013 it provided 52 per cent of the generating capacity in the SWIS.²²⁵ However, if bilateral contracts with other independent generators are also considered, Synergy's market share is potentially much higher.²²⁶

Could the good or service be provided at a level consistent with society's interests without government intervention?

Is there Prospect for Direct Competition?

Yes, there is prospect that direct workable competition would emerge in the electricity generation and retail sectors. Indeed, generation and some retail services are currently provided by numerous competing firms in Western Australia.

However, Synergy is in such a dominant position in both the generation and retail markets in Western Australia that it could potentially maintain market power in both sectors even if full competition was allowed. Such problems could be resolved by splitting Synergy into two or more 'gentailers (integrated generators and retailers). Gentailers are common in the eastern Australia market.

Are there any Externalities?

Yes, there are negative externalities to the environment from electricity generation. For example, certain common types of generation create environmental pollution that would not automatically be included in the market price of electricity generation, causing over consumption.

Conclusion

No.

It is likely that the price and level of service would be consistent with consumer's interests as competition would drive lower prices and high standards in the electricity generation and retail.

However, the services would not be provided in a manner consistent with society's interests due to the negative externalities associated with generation. The costs of the environmental degradation would not be internalised if there are no regulations.

²²³ The SWIS extends from Kalbarri in the north, east to Kalgoorlie-Boulder and south to Albany.

²²⁴ Synergy, 2013, Annual Report 2012-13, p. 6.

²²⁵ Verve Energy, 2013, Annual Report 2012-13, p. 13.

²²⁶ Bilateral contracts account for about 80 to 85 per cent of the total energy traded between Market Participants. Source: Economic Regulation Authority, 2013, Annual Wholesale Electricity Market Report to the Minister, p. 12.

Could regulation enable the private sector to provide the services at a level consistent with society's interest? Society is interested in an affordable, safe and reliable energy supply.

The *Electricity Industry Act 2004* regulates the licensing scheme for electricity supply. The licensing scheme has four classes of license: distribution, generation, retail and transmission. The Act also includes provisions for entities to be exempted from the requirement to have a license under certain conditions.²²⁷

If an entity is required to have a license, then the regulatory framework applying to the licensee is the same regardless of ownership.

Environmental externalities from electricity generation can be dealt with by:

- appropriate conditions put in place during the Western Australian and federal environmental approvals processes;
- federal corrective pricing of externalities, such as the carbon tax; and/or
- subsidisation of low pollution technologies under a 'direct action' plan for reducing greenhouse gases.

Yes, regulation would enable the private sector to provide the service at a level consistent with society's interest.

Is there a conflict of interest?

The Government owns Synergy and sets the retail prices for consumers and sets general policies within the electricity sector. There could be conflicts between these roles that may lead to inefficient outcomes. For example, the Government might want Synergy to:

- maximize profits and dividends to the Government;
- keep electricity prices to retail consumers as low as possible;
- operate within the Government's current financial constraints; and/or
- implement government policies, such as energy security.

There is also a conflict of interest between the Government's role of setting policy and its ownership of Synergy. For example, the retail arm of Synergy has characteristics of a monopoly created by regulation. This has emerged due to legislative constraints that prevent retailers, other than Synergy, from supplying customers who consume less than 50MWh of electricity per annum within the area covered by the SWIS (noncontestable customers). This regulation impedes the development of both the retail, and to a lesser extent the generation, markets (generators typically need a bilateral contract with a retailer to underwrite investments in generation infrastructure). However, the regulation could be removed whether Synergy remains in government ownership or not. This regulation protects Synergy from having to compete with electricity retailers for these customers.

Another example of a conflict of interest is the Gas Market Moratorium. The purpose of the Moratorium is to provide competitive neutrality for participants in the small use electricity and gas markets.²²⁸

²²⁷ The Electricity Industry Act 2004 provides for an electricity retailer to be exempt from the requirement to have a licence. The Electricity Industry Exemption Order 2005 sets out a number of class exemptions that accord with government policy, but there is also scope for a retailer to seek an exemption by making application to the Minister for Energy.

²²⁸ Public Utilities Office, 2014, Gas Market Moratorium.

The Moratorium achieves this by preventing Synergy from fully accessing the gas market for as long as gas retailers (for example, Alinta Energy) are denied full access to the electricity market through the restrictions protecting Synergy's customer base. Hence, the Government is artificially restricting competition in the small customer electricity and gas markets in Western Australia. There is a notable imbalance in the application of the restrictions in the electricity and gas markets. The Moratorium only prevents Synergy, not other retailers, from competing with Alinta Energy for small use gas customers covered by the Moratorium, whereas the regulations protecting Synergy prevent any retailer from competing for non-contestable electricity customers.

Yes, there is a conflict of interest with the Government owning and setting policy objectives; there is also a conflict of interest between the government owning Synergy and setting its tariffs.

Does the private sector have a better capacity to meet the financing requirements?

Synergy has an Asset Investment program estimated at \$329 million for the period 2013-17.²³⁰

With regard to Synergy's impact on overall Government finances, Standard & Poor's has indicated that government owned businesses increase the government's risk profile, explicitly citing electricity businesses, especially those which are in a competitive market, such as electricity generation.²³¹

Yes, the private sector has a better capacity to meet Synergy's financing requirements (but only if electricity prices are cost reflective).

Is the private sector likely to be better placed to manage the risk?

Some of the main risks related to generation and retailing activities are stated below:

- Financial risks: interest rate risk, exchange rate risk, ability to finance the asset and the ability to achieve a reasonable rate of return on investment.
- Availability and affordability of fuel supply (normally secured as long term fuel supply contracts).
- Demand risk.
- Customer insolvencies and bad debts.
- Changing patterns of energy use in the community, including more energy efficient appliances.
- Asset redundancy risk, for example through technological innovation. The growing popularity of renewable but intermittent energy sources is a risk to the value of coal and gas fired generation plant.
- Physical asset failure and/or damage, such as towers and lines damage, power and transformer failure, circuit breaker failure.
- Operational risk such as cost blow-outs and inefficiencies.

²²⁹ The limited protection provided by the Gas Market Moratorium was highlighted when, in March 2013, Wesfarmers Kleenheat Gas entered the natural gas market and were able to compete for the Alinta Energy customers covered by the Gas Market Moratorium.

West Australian Treasury, 2013, Budget Papers: Synergy, p.750 and West Australian Treasury, 2013, Budget Papers: Verve Energy, p. 751.

²³¹ Standard and Poor's, 2008, Submission to the Senate Standing Committee on Finance and Public Administration.

Most of the highlighted risks are better dealt with by the private sector through mitigation strategies, insurance or self-insurance. The private sector's recognized incentive and ability to drive innovation and efficiency contributes to its capacity to manage risk.

While the private sector would normally have incentives to price its risks and recover them through its tariff to consumers, government does not always do so, leaving tax payers exposed to these risks.

Furthermore, the risks associated with Synergy are not consistent with the maintenance of the triple-A credit rating.

Yes, the private sector is best placed to manage Synergy's risk due to their ability to innovate, diversify and price risk.

Is the asset/business privately owned in other jurisdictions of Australia

Yes.

Neither Victorian nor South Australian Governments hold any generation assets. In New South Wales, the Government is in the process of selling all its generation assets. In Queensland, around 65 per cent and in Tasmania nearly all generation capacity is owned by government.

New South Wales, Victoria and South Australia no longer hold any retail energy assets. Publicly owned Ergon Energy supplies approximately 35 per cent of retail electricity to small customers in Queensland. In the ACT 90 per cent of retail to small customers is provided by ActewAGL and almost all small customer retail in Tasmania is provided by the publicly owned Aurora Energy.

Private gentailers AGL Energy, Origin Energy and Energy Australia control 36 per cent of generation capacity and service 80 per cent of energy retail customers in the NEM. All three acquired a significant share of the retail market in Queensland (in 2007) and New South Wales (in 2010) following the privatisation of government owned retailers in those states.

Could the asset be divested?

Yes, the assessment of Synergy indicates there are reasons that warrant the Government review the costs and benefits of divesting Synergy.

However, structural reforms (e.g. the establishment of competing gentailers), considerations around market design (such as full retail contestability), cost reflective pricing and independent economic regulation are issues that would need to be addressed prior to divestment.

Water Corporation

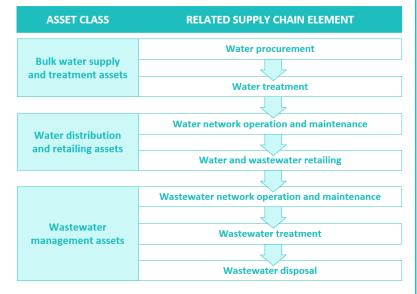
Asset/Entity description

The Water Corporation is the principal supplier of water, wastewater and drainage services to residential and businesses customers in both metropolitan and regional Western Australia. The Water Corporation also provides bulk water to farms for irrigation.

The Water Corporation is a statutory corporation operating under the *Water Corporation Act 1995*.

The Water Corporation is governed by a Board of Directors who are accountable to the Minister responsible for the *Water Corporation Act 1995*. In undertaking the tasks associated with water and wastewater services, the Water Corporation must comply with the relevant health and environmental regulations.

The Water Corporation is a vertically integrated water and wastewater business. It is responsible for providing all elements of the water and wastewater services in the supply chain. Elements of the supply chain can be seen in the figure below.



The three asset classes grouped by the ERA are:

- Bulk water supply and treatment includes providing, operation and managing dams and reservoirs storages for water supply, the State's desalination plants and water recycling plants.
- Water distribution and retailing includes the water pipeline network in Western Australia and retailing services provided to end users.
- Wastewater²³² assets include those associated with collecting, treating and disposing of wastewater in urban areas. This includes the wastewater network and treatment plants.

²³² Wastewater is water that has been used for example the water has been used for washing, in manufacturing processes or as sewerage.

Could the good or service be provided at a level consistent with society's interests without government intervention? The ERA considers that consumers should receive reliable, cost reflective and continuous access to clean water and wastewater services to meet society's interests.

Is there Prospect of Direct Competition?

Bulk water service: Yes, introducing competition in the bulk water supply service would be the most appropriate way to introduce competition in the water industry. The Productivity Commission stated

...the gains from increased competition (in various forms, including competition for the market, yardstick competition and competition from distributed water systems) could be substantial, particularly for bulk water supply.²³³

The ERA has reviewed competition in bulk water previously and proposed the introduction of competition in the bulk water supply chain.²³⁴ In its review, the ERA proposed a detailed methodology of how competition could be developed through the establishment of a central independent procurement entity. This entity would capture the efficiencies of competition, without the costs involved in the structural reform of the water business.

Water and wastewater network business: No, the network business is a natural monopoly as it would be uneconomical for another business to serve customers without duplicating the network infrastructure required. As such, there is limited scope for direct competition in this part of the supply chain. However, indirect competition may be introduced, for example, through outsourcing network expansions and extensions.

Water and wastewater retail business: Yes, with regard to retail services, effective competition may be developed. However, it may be premature to introduce competition at this stage, as it would require significant development of the retail water market design and structure. As such, this may be a longer term aspirational goal.²³⁵

Are there any Externalities?

Yes, there are some externalities related to the provision of clean, safe drinking water and wastewater services. The Productivity Commission has referred to the following externalities in the urban water sector²³⁶:

Health externalities of water and waste water services:
 households benefit not only from an effective service that
 removes their own wastewater, they benefit from their
 neighbours having this service as well, as otherwise significant
 health problems would arise. This is also true for the provision
 of water, as washing in clean water helps reduce the spread of
 disease in the community.

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²³³ Productivity Commission, 2011, Australia's Urban Water Sector Inquiry Report Volume 1, pp. 245.

²³⁴ ERA, 2008, Inquiry on Competition in the Water and Wastewater Services Sector.

²³⁵ For a fuller discussion on ERA's review of Competition in the water sector, see Final Report, *Inquiry on Competition in the Water and Wastewater Services Sector*, 30 June 2008.

²³⁶ Productivity Commission, 2011, Australia's Urban Water Sector Inquiry Report Volume 1, pp. 74-75.

If the provision of water and wastewater services was left entirely to markets, it might be expected that the vast majority of households and businesses would choose to purchase these services. However, some of them would not be able to afford it.

Even if other households were prepared to afford the costs associated with providing the service to this group, it may not be possible for them to arrange for, or compel, this consumption.

 Environmental externalities of wastewater and storm water disposal: A commercial provider of wastewater services would normally try to meet the needs of its customers at minimum cost. Customer needs relate mainly to the removal of wastewater and do not necessarily extend to ensuring that it is treated and disposed of in an environmentally sensitive way. Providers would try to save on treatment costs, failing to protect the environment to the extent that reflects community preferences.

Conclusion

The water and waste water assets are a collection of specific assets, each with differing characteristics.

No, each asset needs varying degrees of government intervention. Government intervention would be necessary even in the most likely candidate for divestment, such as the bulk water supply, where strict rules and compliance surrounding water quality and security would be required.

The extent of the externalities associated with the provision of water justify government intervention in the market to prevent the negative effects on the population.

Could regulation enable the private sector to provide the services at a level consistent with society's interest? Although the Water Corporation is largely a natural monopoly, there are elements of the supply chain that are not and consumers would benefit from a competitive environment in these elements. The conceivable forms of competition in the water and wastewater supply chain are considered in the figure below.

Supply Chain	Is competition conceivable?	Examples of competition
Water procurement and alternative ways of ensuring security of supply is achieved	Yes	A bulk water market could be established with competing suppliers of bulk water. This could be facilitated by third party access. Alternatively, an independent entity could tender for a certain volume of water, level of security of supply, or for a specific project. Demand Management alternatives also provide a way of ensuring security of supply is achieved and can include options such as installing water efficient showerheads, installing recycling systems, water buy backs etc.
Water treatment	Yes	An independent entity could tender for a specified project or outcome.
Water network	No	If the network is a natural monopoly, which it is likely to be within the constraints imposed by non-network substitutes, then by definition competition is not possible, although bypass by large users is possible. However, third party access to the network could facilitate competition in the bulk water and retail/trading markets.
Water and wastewater retailing	Yes	Trading and retail competition could be established. Alternatively, a comparative competition regime could be introduced with retailing/distribution activities separated geographically. In addition, the service provision for an entire market could be put out to tender.
Wastewater network	No	Competition is unlikely given the natural monopoly nature of the network, although by-pass by large users is possible. However, third party access could facilitate competition in the wastewater treatment/disposal market or the retail/trading market.
Wastewater treatment	Yes	Service providers could compete to treat wastewater for either disposal or recycling (via third party access). Alternatively, an independent entity could tender for a specified project or outcome.
Wastewater disposal	Yes	There is already, to some extent, a market for treated wastewater by-products, e.g. for use in the agricultura sector.

Source: Economic Regulation Authority, 2008, Inquiry on Competition in the Water and Wastewater Supply Chain, p.12.

For the services where competition is conceivable²³⁷ the Government should attempt to minimise its involvement in these services. This could be facilitated through procurement of private sector services to operate and deliver the services or full divestment of the service, with adequate regulation if necessary.

Where competition is not conceivable, ²³⁸ the Government should still attempt to minimise its involvement in the services through utilising private sector expertise to maintain and operate the assets.

Yes, where competition is conceivable the services could be provided by the private sector with a low level of government intervention. Where competition is not conceivable the private sector should be utilised to improve efficiency and innovation in service delivery.

For aspects of the water and wastewater services that provide externalities, regulation may be needed to ensure the private sector delivers the services consistently with society's interests. If necessary an operating subsidy could be provided to ensure the non-commercial objectives are met.

²³⁷ These include water procurement and alternative ways of ensuring security of water supply, water treatment, water and wastewater retailing, wastewater treatment and waste water disposal

²³⁸ These include the water network and the wastewater network.

Is there a conflict of interest?

The Government owns and regulates the Water Corporation. In addition, it sets policy objectives, undertakes water planning and seeks to "balance economic, community and cultural benefits." These multiple roles of the Government, invariably leads to conflicts or biases, where the asset is owned by the Government.

The Productivity Commission acknowledges the potential conflict of interest in the water industry;

There is possible tension between the role of governments in promoting efficiency in the sector and their position as owners of water businesses, and therefore the beneficiary of dividend payments.²⁴⁰

The Productivity Commission also stated that;

In general, the overall interests of the community are best served when governments resolve this tension by focusing on promoting efficiency rather than ensuring that dividend payments are always maintained at a particular level.²⁴¹

In January 2013, the ERA published its report on the *Inquiry into the Water Corporation's tariffs*²⁴², which included recommended tariffs for the next three years. The tariffs recommended would have enabled the Water Corporation to fully recover its efficient costs, including an appropriate return on capital. Combining water and sewerage charges, the recommendation for the average household in 2013-14 was a reduction in tariffs of 8.2 per cent or approximately \$100. However, these recommendations were not adopted by the Government. Instead, the Government increased the tariffs by about 6 per cent or approximately \$80 for the average household. This resulted in an additional cost of approximately \$180 from the recommended level for the average household.

This illustrates the potential conflict of interest between the Government being the owner of Water Corporation (shareholder) and its role as a price setter (ideally in the interests of consumers). Consumers of water and sewerage services should not pay more than they would pay under a scenario of independent regulation of this industry, which in turn would seek to reflect the price that it would pay under a competitive market. By paying higher than cost-reflective tariffs, consumers - instead of taxpayers - are providing funds to the State Government for uses other than water and sewerage services, this is effectively a hidden tax on consumers of water.

Yes. The Government has multiple roles and responsibilities in the Water Industry leading to conflict of interest within the Government. The Productivity Commission has recommended greater role clarity and governance arrangements to address this conflict. It noted that:²⁴³

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²³⁹ Department of Water, 2014, What we do.

²⁴⁰ Productivity Commission, 2011, Australia's Urban Water Sector Inquiry Report Volume 1, pp. 67.

²⁴¹ Productivity Commission, 2011, Australia's Urban Water Sector Inquiry Report Volume 1, pp. 67.

²⁴² ERA (2013), Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board

²⁴³ Productivity Commission 2012, COAG's Regulatory and Competition Reform Agenda: A High Level Assessment of the Gains, Research Report, Canberra.

"governments are assigning multiple objectives to their agencies, utilities and regulators, with inadequate guidance on how to make trade-offs among them."

The ERA has reiterated the need for greater governance arrangement in its most recent Inquiry into water and wastewater tariffs.²⁴⁴

Without some governance and/or institutional reform, the Government will continue to have conflicts of interest in the Water Sector.

Does the private sector have a better capacity to meet the financing requirements?

In its 2013 review,²⁴⁵ the ERA outlined the Water Corporation requirements for capital expenditure was estimated to be over \$700 million per annum for 2014-15 and 2015-16.

Typically, the private sector has a better capacity to meet the financing requirements of infrastructure, subject to it achieving a commensurate return and its ability to manage risk.

However, current State funding constraints, the Governments desire to reduce debt levels and the requirement of government funds for the provision of a range of goods and services, mean that there might be risk of underinvestment in some government-owned assets.

Is the private sector likely to be better placed to manage the risk?

Some of the risks associated with the Water Corporation include:

- Financial risks, for example interest rate, exchange rate, access to debt and achieving a reasonable rate of return on investment.
- Physical asset failure and/or damage: key asset failure, pipe corrosion risk, general public liability risk.
- Operational risk for example, cost blow-outs, water treatment quality, inefficiencies, land disputes, electric and magnetic field claims and land owner complaints.
- Demand risk: The total revenue that Water Corporation earns is largely dependent upon the consumption of water. The revenue risk increases with the widening of the gap between actual and forecast demand. This risk is better managed through appropriate tariff structures and by employing better demand forecast techniques; both of which have traditionally been done better by the private sector.
- Natural environment for example, climate change, earthquakes, and water contamination risks.

Most of the highlighted risks are better dealt with by the private sector through mitigation strategies, insurance or self-insurance.

The private sector would normally have incentives to price its risks and recover compensation through their tariff to consumers. The Government does not generally price risk effectively, leaving tax payers exposed to the risk without adequate compensation.

Yes, the private sector would be better placed to manage the risks facing the Water Corporation.

²⁴⁴ ERA (2013), Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board.

²⁴⁵ ERA (2013), Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board, p. 43.

Is the business privately owned in other jurisdictions of Australia

While there are cases where individual water assets are privately owned (e.g. Sydney Water Desalination Plant), this is rare. There are no instances in Australia of a vertically integrated water and wastewater services being privately owned.

An overseas example is the UK, where water businesses were divested in the late 1980s.

No, there are certain aspects of the supply chain are owned by the private sector in other jurisdictions; however there is no evidence that the whole water and wastewater supply chain is owned by a private entity.

Could the asset be divested?

Yes, there might be reasons for private ownership of individual supply chain elements of the water and waste water assets, particularly bulk water assets. Further analysis should be undertaken into the particular supply chain elements that may be suitable for divestment.

The Government should continue to implement appropriate regulation to ensure the risks associated with sub-standard supply, and more broadly the positive externalities of safe water and waste water provision are ensured.

Given the ongoing impost on public finances of the provision of the operating subsidy, there may be opportunities for efficiency gains by auctioning the right to provide certain aspects of the water services (for example, services to country areas) to the private sector.

Regardless of ownership, efficiency of service provision would improve if governance arrangements were clarified and regulatory functions were conducted at arms' length.

Fremantle Port Authority

Asset/Entity description

The Port of Fremantle is a cargo and bulk handling port. The inner harbour handles almost all of the container trade for Western Australia. It also has facilities for livestock exports, motor vehicle imports, other general cargo trades, cruise ships and visiting naval vessels.

The outer harbour, about 22km to the south at Kwinana, is one of Australia's major bulk cargo ports. The outer harbour handles grain, petroleum, liquid petroleum gas, alumina, mineral sands, fertilisers, coal, sulphur, iron ore and other bulk commodities.

Three of the five jetties in the Outer Harbour are operated by private companies, these are the Alcoa, BP Refinery and CBH jetties. The Kwinana Bulk Jetty and the Kwinana Bulk Terminal are owned and operated by Fremantle Ports.

Could the good or service be provided at a level consistent with society's interests without government intervention?

Is there Prospect for Direct Competition?

There may be scope for competition where users have choices over which port or jetty to use, and for intra-port services, such as container stevedoring and towage services.²⁴⁶

However, in general Australian ports have natural monopoly characteristics because of vast distances between ports. Ports form part of a transport network, which would be prohibitively expensive to duplicate and cannot be bypassed. This implies that some form of government intervention may be necessary in this sector.

Are there any Externalities?

Yes, port facilities can be a source of negative externalities in the form of pollution, the handling of dangerous goods and marine hazards. A private provider may not deal with these externalities appropriately in the absence of government intervention.

Conclusion

No, the Port of Fremantle could not be provided by the private sector at a level consistent with society's interests without government intervention to address negative externalities and possibly to deal with issues of market power.

Could regulation enable the private sector to provide the services at a level consistent with society's interest? Western Australia is a signatory in the COAG Competition and Infrastructure Reform Agreement (CIRA), which provided guidance on economic regulation of ports. The purpose of the CIRA reviews was to ensure that (1) where economic regulation is warranted, the regulation conforms to agreed access, planning and competition principles and (2) where port access regimes are required, these regimes are certified under the National Access Regime.

As part of CIRA, Western Australia has agreed that:

 ports should only be subject to economic regulation where a clear need for it exists in the promotion of competition or to prevent misuse of market power;

²⁴⁶ Australian Competition and Consumer Council, 2013, Container Stevedoring Monitoring Report no.15, p. x.

 where the Government decides that economic regulation of significant ports is warranted, it should conform to a consistent national approach; and

 competition will be allowed, unless a transparent public review shows that the benefits of restricting competition outweigh the costs to the community, including implementation.^{247,248}

In terms of economic regulation, COAG has agreed that, wherever possible, third party access to services at ports and pot facilities should be commercially negotiated rather than regulated (while taking into account that users can apply for port facilities to be declared under the National Access Regime.) Reviews of the application of regulation to ports has been undertaken by most States as part of their COAG commitments.²⁴⁹

Regulation can deal with negative externalities associated with operating a port, where necessary.

Western Australia does not have a price monitoring regime in place for ports. However, certain prescribed services at major ports in other jurisdictions have been made subject to price monitoring.

Yes, the asset could be sold to the private sector; however, pricing oversight would need to be considered.

Is there a conflict of interest?

The Government owns the Port of Fremantle and sets policy objectives. These conflicting roles may lead to a conflict of interest.

For example, there is potentially a conflict between the profitmaximizing objectives of the Fremantle Port Authority (which if it does have market power could seek to raise prices above efficient levels, thereby reducing through-put) and its trade facilitation role (which would seek to maximize through-put at the Port). The risk that through-put would be reduced depends on the responsiveness of port users to increases in price and the degree of inter-port competition, as users may reduce their consumption or switch to alternative ports. This will change depending on the port and service.

Unclear, conflicts of interest may exist.

Does the private sector have a better capacity to meet the financing requirements?

The Port of Fremantle requires significant capital expenditure to fund port expansion and growth: Fremantle Port Authority's approved Asset Investment Program for 2013-14 to 2016-17 totals \$336.7 million.²⁵⁰

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²⁴⁷ Council of Australian Governments, 2006, *Competition and Infrastructure Reform Agreement.*

²⁴⁸ The COAG Reform Council has reviewed the State and Territories compliance with CIRA and found that Western Australia has partially complied with the recommendations as at 24 December 2014. Source: COAG Reform Council, 2013, Seamless National Economy: Final Report on Performance.

²⁴⁹ It is understood that a draft report by a consultant titled Council of Australian Governments Review of Western Australian Ports, was published by the then Western Australian Department of Planning and Infrastructure. However, the final report, if completed, does not appear to have been made public.

²⁵⁰ Department of Treasury, 2014, West Australian State Budget, p. 414.

Typically, the private sector has better capacity to meet the financing requirements of infrastructure, subject to it achieving a commensurate return and its ability to manage risk. The private sector has a recognized incentive and ability to drive innovation and efficiency which contributes to the private sector's capacity to meet the financing requirements.

Under current Government funding constraints: Government's desire to reduce debt levels; and the requirement of Government funds for other goods and services that would be more likely to be underprovided by the private sector, mean that there might be risk of underinvestment in some government-owned assets. In relation to government underinvestment on assets, Infrastructure Australia states:

"Private sector owners can be more effective at responding to user demands and finding methods to develop and fund replacement and expansion infrastructure which benefits its consumers." 251

Yes, in general, the private sector has a greater ability to meet the Port's financing requirements.

Is the private sector likely to be better placed to manage the risk?

Some of the main risks a port is exposed to or that it can present include demand, pricing structures, technology changes, environmental damage, asset failure and/or damage, industrial action, force majeure events, marine accidents, financing, operating, political, regulatory and utilities access. Port efficiency can also affect the upstream and downstream supply chain. For instance, port efficiency affects the waiting times for ships to be loaded or unloaded and can also cause congestion for truck and rail access as the goods wait to be loaded.

The private sector is recognized for its stronger management capability, quicker decision-making process, incentives to drive innovation, potentially better industry experience and ability to price risk. These attributes would make it be better placed than the Government to manage most of the risks.

On the other hand, the negative externality aspect of marine safety and pollution control (associated with potential "catastrophic consequences" if they materialize) might mean the government is better placed to manage those risks.

Unclear, although it is likely that the private sector is better placed to manage most risks.

Is the asset/business privately owned in other jurisdictions of Australia

Yes.

Two out of the four major Victorian ports are privately owned.²⁵² The Port of Geelong and Port of Portland were divested in July 1996 and are now owned by Geelong Port and Port of Portland Pty Ltd respectively.²⁵³

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²⁵¹ Infrastructure Australia, 2012, Part of the Answer to Removing the Infrastructure Deficit, p. 11.

²⁵² Recent press reports indicate that the Victorian Government is preparing a scoping study into the possible sale of the Port of Melbourne.

²⁵³ Department of Transport, Planning and Local Infrastructure Victoria, 2014, *Ports and Freights*.

	Flinders Ports Pty Ltd acquired seven South Australian ports in 2001. Flinders acquired the port infrastructure and a 99 year lease over the port and land. ²⁵⁴ The Port of Brisbane was divested on a 99 year lease in 2010 and is currently the only one of 20 Queensland ports that is privately operated. ²⁵⁵ Part of the Abbot Point Port, the Abbot Point Coal Terminal was divested on a 99 year lease. The remainder of the port remains in government ownership. Recently the Port of					
	Gladstone and Townsville port have been flagged for divestment. In NSW Port Botany and Port Kembla were divested on a 99 year lease in 2013 ²⁵⁶ . The NSW Government is also proceeding with					
	the long-term lease of the Port of Newcastle. ²⁵⁷					
Could the asset be divested?	Yes, the assessment of Port of Fremantle indicates there might be reasons that justify the asset being divested. Consideration would need to be given to whether economic regulation, such as pricing oversight, would need to be introduced.					

²⁵⁴ Government of South Australia, 2008, *Review of Significant Ports in South Australia under the Competition and Infrastructure Reform Agreement*, p. 17.

²⁵⁵ Department of Transport and Main Roads Queensland, 2014, *Ports.*

²⁵⁶ Government of New South Wales, 2013, *Port Botany and Port Kembla Lease Finalised.*

²⁵⁷ Treasury of New South Wales, 2013, *Port of Newcastle Transaction.*

5 Reducing the cost of complying with regulation

5.1 Introduction

'Regulation' broadly refers to the bundle of laws, policies, guidelines, standards, and other rules instituted by Government. Regulations affect everyone, both as individual citizens, and as representatives of businesses, clubs, charities and other non-government organisations, and public sector departments and agencies.

Well-designed regulation is an effective tool that allows Government to achieve outcomes that are in the public interest, and so improve the social, economic, and environmental well-being of Western Australians. However, not all regulation is well-designed. Some regulation may be excessively costly for those affected, may not fix the problem it was introduced to address, or may lead to other unintended outcomes.

Poorly-designed regulation is generally indicated by one of the following outcomes:

- 1. **The regulation has a net cost.** That is, when costs to all parties are added, the total cost is higher than the sum of the benefits to all parties
- 2. The regulation has a net benefit, but alternative regulatory options may achieve a greater benefit. For example, the same positive outcome may be achieved using an approach that has lower administrative costs, is less time consuming or expensive for those who are required to comply, or has a reduced negative impact on the wider community.

It is important to recognise that costs and benefits of regulation will not necessarily be spread evenly across all parties. For instance, if new regulation is introduced to discourage deceptive business practices, businesses may directly bear more of the costs, while consumers enjoy more of the benefits.

5.1.1 Costs and benefits of regulation

Costs of regulation

All regulation will create compliance costs for those impacted, to a greater or lesser degree. These may include:

- the use of staff time to fill out forms and perform additional work;
- the use of time and resources to meet and follow up with Government officials;
- recruitment and training of additional staff to undertake to compliance activities;
- the purchase and maintenance of computer systems to manage reporting requirements;
- retraining staff and investing in new systems where compliance requirements change; and
- payment for advice from accountants, lawyers, and other professionals to assist with compliance.

However, compliance costs are not the only significant costs imposed by regulation. Other costs may include:

- application fees and charges (for instance, for licenses and approvals);
- barriers to innovation, in cases where regulatory requirements make it difficult to introduce a new product or service;
- disincentives to entrepreneurs who anticipate that start-up or ongoing compliance costs may make a new business unprofitable;
- delay costs, where there is a lengthy period between an application to start or expand a business, and receipt of the necessary approvals; and
- administrative, monitoring, enforcement, and customer service costs borne by the Government departments who manage the regulation.

Ultimately, the costs of regulation will be borne by the wider community. For example, the prices of goods and services reflect any compliance costs, fees, and business risks faced by the seller.

Benefits of regulation

Regulation generally aims to provide benefits that would not otherwise be available, by solving an existing problem or by preventing a likely problem from occurring in the future. Benefits can be more difficult to quantify than costs and will clearly depend on the exact regulations under consideration, but can include:

- improvements to public health and safety;
- protection of the State's environmental assets, such as native flora and fauna;
- allowing businesses to enter an industry served by a monopoly provider;
- promoting competition by reducing barriers to entry for new businesses;
- encouraging positive employment conditions that attract skilled workers to the State;
- discouraging exploitative, discriminatory, or misleading business practices; and
- increasing the accountability of Government and private business by requiring organisations to collect and publish data and information.

As with the costs of regulation, the benefits are also shared by the wider community, with well-designed regulation creating a safer, more equitable, and more sustainable community.

5.1.2 Forms of regulatory burden

Where the costs of a given piece of regulation outweigh its benefits, that regulation will have a negative effect on citizens and businesses. The magnitude of the negative effect may vary from being an annoyance to those who are impacted, through to damaging the viability of an entire industry.

The negative effects of regulatory burden are driven by two main factors: the direct costs of complying with regulation, and the degree to which the regulation is a disincentive to carrying on a business. The cost effect can make it expensive to carry on a business, which is a direct cost to society and may lead to consumers paying higher prices. The disincentive effect can occur when regulation has significant anti-competitive outcomes, or

Hilmer, F. 2014, Competition Policy from 1992 to 2014, Presentation to the Business Council of Australia on 13 February 2014, accessed 25 March 2014, http://www.bca.com.au/docs/d9695dfb-9c05-49b5-b5a5-aeb96866c400/Fred_Hilmer_Competition_Policy_from_1992_to_2014_FINAL_21.3.2014.pdf.

other outcomes that stifle entrepreneurialism and innovation. These effects are illustrated in Figure 25.

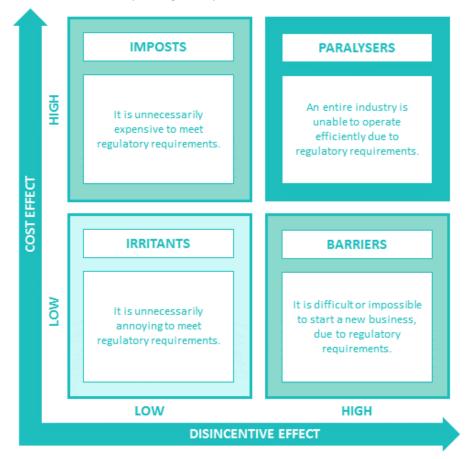


Figure 25 Forms and severity of regulatory burden

Source: Hilmer, F., Presentation to the Business Council of Australia

It is important to note that even regulatory burden that falls into the 'irritant' category can have a significant economic impact in the aggregate.

For example if each small business in Western Australia (over 200,000 in 2012²⁵⁹) is required to submit the same form three times, this may be a relatively minor annoyance for an individual business, but result in many thousands of hours of lost time across the State.

5.1.3 Key forms of regulation in Western Australia

Regulation is applied in many ways. For example, it may take the form of a safety inspection, the registration of an animal, or the granting of a permit for a specific activity. Reform efforts often focus on two very widespread forms of regulation: project approvals, and licensing.

Most businesses and individuals will need to seek an approval or license from a Government authority at some point. It is important that these processes are conducted efficiently to minimise any unnecessary costs to businesses, citizens, and Government.

Western Australian Small Business Development Corporation website, accessed 26 March 2014, http://www.smallbusiness.wa.gov.au/small-business-statistics/.

Problems with licensing and approvals processes are a focus of Section 5.3 which deals with addressing existing regulatory burden, and have been raised in a number of submissions to the ERA (see Section 5.2 for further details).

Project approvals

Both large and small businesses are required to obtain a range of approvals when commencing a new project. For instance, a small business intending to build a new tourism facility may need to obtain a number of environmental, planning, and land use approvals before it can proceed with the project. Approvals are generally granted by the Government department that has oversight of the relevant area. For example, the Department of Environmental Regulation administers various kinds of environmental approvals.

Licensing

The State Government is also responsible for issuing licences across a wide range of sectors. For example, a licence is necessary to operate a quarry, work as a real estate agent, erect a sign in a public place, or to extract groundwater. Western Australian businesses are also subject to licensing requirements imposed by Federal and local governments. The Western Australian Small Business Development Corporation (**SDBC**) maintains a database of over 6,000 federal, state and local government licences that affect Western Australians. These licences play an important role in protecting the health, safety, and rights of citizens.

5.1.4 Recent reform initiatives in Western Australia

Western Australia has made progress in reducing regulatory burden since the Red Tape Reduction Group's *Reducing the Burden* report was published in 2009.²⁶⁰

The Western Australian Government introduced the Lead Agency Framework in 2010, followed by a number of other significant regulatory reform projects during the past five years. These include initiatives undertaken by the Departments of Environmental Regulation; Mines and Petroleum; Planning; and Commerce, as well as a reform programme for building regulation in the State.²⁶¹

This prior work has resulted in changes to the way in which approvals processes affect large projects. The ERA's recommendations strongly support the continuation of these programmes, but also aim to bring the departments involved into contact with other parts of Government who may benefit from their expertise.

5.1.5 Lead Agency Framework

The Lead Agency Framework assists applicants throughout the approvals process, appointing a specific Government department as the applicant's main point-of-contact.²⁶² That department then supports the applicant in working with other agencies, and in navigating the approvals process for the project. Applicants are provided with a custom level of service determined by the size, scale, and significance of the project.

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²⁶⁰ See Appendix 4 for information on the Red Tape Reduction Group and earlier reform initiatives in Western Australia.

²⁶¹ Synergies Economic Consulting's report to the ERA on the cost of red tape in Western Australia highlights Western Australia's striking improvement in recent surveys of regulatory burden in Australia.

²⁶² The Government has also committed to develop the Statutory Approvals Tracking System to be utilised across all lead agencies, providing a portal for industry to access information on projects and approvals.

Applicants who propose large projects are able to access assistance from Government departments under the Lead Agency Framework. They are assigned a permanent project officer or team to assist them in understanding regulatory requirements, working with stakeholders, and liaising with other Government departments.²⁶³ Very large projects that are deemed to be of 'State significance' by Cabinet will receive further support from the Department of State Development.

The Lead Agency Framework has modified approvals processes in Western Australia. However, levels of assistance are tiered depending on the size of the project, with applicants who propose small projects only receiving initial advice. Most proposals fall within this category²⁶⁴, leaving small businesses to negotiate complex approvals processes that span a number of Government departments and authorities. It is likely that these proponents will have less capacity to employ specialist expertise to assist them to navigate government processes than would the larger organisations likely to be behind the large projects that attract the greatest facilitation support under the Lead Agency Framework.

The ERA appreciates that it is not realistic to provide extensive, customised support to every business negotiating the approvals process. However, in recent years technology has made it possible to provide a better co-ordinated approvals service to all applicants. Consequently, in Section 5.3, the ERA has investigated ways in which some of the benefits of the Lead Agency Framework might be extended to small and medium-sized businesses that do not generally receive a high level of support.

5.1.6 The ERA's approach

In spite of recent improvements in Western Australian regulatory practice (detailed in Section 5.1.4 and Appendix 4), in some areas, the costs of regulation still appear to outweigh the benefits. There are also significant shortcomings in the Government processes and safeguards intended to prevent the introduction of poor quality regulation, meaning that successive Governments continue to add to this burden. Further reform efforts are needed, both to target existing problems, and to provide strong protections against the introduction of inappropriate regulation in the future.

This chapter provides recommendations on the reduction of existing compliance costs where these unnecessarily impact businesses and the community, and on strengthening the broader Government processes used to prevent the introduction of additional poorly-designed regulation.²⁶⁵

The areas of the economy that are most heavily impacted by regulatory burden should be targeted for priority reforms. With this in mind, the ERA has:

- identified those areas of the State economy most impacted by poor quality regulation;
- identified a number of recurring issues commonly encountered across various sectors;
- outlined the key practices that result in reforms that successfully reduce regulatory burden; and

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Western Australian Department of Premier and Cabinet 2009, Lead Agency Framework: A guidance note for implementation, Perth.

²⁶⁴ Western Australian Department of Premier and Cabinet 2009, op. cit.

An overview of the key organisations responsible for regulation and regulatory oversight in Western Australia provides further context, and is given in Appendix 4. The Appendix also provides some context as to recent initiatives in regulatory reform in Western Australia.

 provided specific recommendations as to how these key practices can be applied in Western Australia.

This is discussed in Section 5.3.

Addressing existing regulatory burden is an important and challenging task, and was the focus of most of the submissions the ERA received on this issue. Consequently, Section 5.3 provides a thorough discussion of this area.

However, the ERA considers that, in the long term, the more significant challenge for Western Australia is how best to prevent the accumulation of regulatory burden in the future.

In considering the processes intended to safeguard Western Australians against the introduction of further regulatory burden, the ERA has:

- assessed the overall appropriateness of the Government's current regulatory gatekeeping framework;
- analysed the quality of that framework, as it is applied in Western Australia;
- identified the critical points at which the framework fails to provide adequate safeguards; and
- developed a number of practical recommendations targeting the weaknesses that have been identified.

This is discussed in Section 5.4.

5.2 Submissions

Regulatory burden was discussed in a number of the submissions received in response to the ERA's <u>Issues Paper and Discussion Paper</u>. Feedback was provided by a diverse range of Government departments, corporations, community and business advocacy organisations, unions and individuals.²⁶⁶ The submissions noted the costs and uncertainty imposed by inappropriate regulation, and raised a number of common concerns, including:

- inappropriate licensing processes and requirements (particularly relating to trade licensing and liquor licensing);
- slow, unnecessarily complex, and burdensome processes for planning and development approvals;
- failure of departments and agencies to use online delivery to improve services and the provision of information; and
- duplication of regulatory processes and a lack of clear responsibility for approvals.

This section outlines the main points made in submissions received in response to the Discussion Paper.

Western Australian Local Government Association

The Western Australian Local Government Association (WALGA) recommended mandating the use of online application submission services for local councils, stating that this would improve processing and timely granting of approvals.

WALGA also noted inconsistencies between regulatory agencies responsible for the liquor licensing process.

Alinta Energy

Alinta Energy proposed a review of the frequency of gas and electricity license audits and performance reviews. It also questioned the rigour of licensing and regulatory approvals processes in the sector, and the need for a full review of standard form contracts where only minor amendments were requested.

Civil Contractors Federation WA

The Civil Contractors Federation WA (**CCF WA**) raised concerns around the lack of transparency and consistency in government decision-making processes, noting outstanding recommendations from the Government's 2009 *Reducing the Burden* report in this area.

It also supported whole-of-government targets for reducing regulatory burden in the State, and noted that timeliness and accountability around the environmental approvals process could be improved.

Chamber of Commerce and Industry of Western Australia

The Chamber of Commerce and Industry of Western Australia (**CCIWA**) included an extensive discussion on regulatory burden in its submission. It recommended improvements to monitoring, reporting, consultation, and accountability around the

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²⁶⁶ The public submissions are available on the ERA's website.

Regulatory Impact Assessment (**RIA**) process²⁶⁷, and the transferral of all Governmental regulatory reform and gatekeeping functions to the ERA.²⁶⁸

The CCIWA also noted the importance of accountability in furthering regulatory reform, proposing the appointment of a single Minister to oversee reform efforts, and the inclusion of reform targets in performance contracts of senior public servants.

Additionally, the CCIWA provided a range of specific proposals relating to industry reviews, the timeliness of approvals, electronic assessment services, local government laws and processes, transparency in Government decision-making, and the introduction of risk-based assessments.

Master Builders Association of Western Australia

The Master Builders Association of Western Australia (**MBA**) stated that all new legislation should be subject to a RIA process, and that the process should consider the potential effects of the legislation on all stakeholders, as well as any direct costs.

Small Business Development Corporation

The Small Business Development Corporation (**SBDC**) proposed that the Government act to implement all outstanding recommendations from the 2009 *Reducing the Burden* report. It also recommended the streamlining of processes and documentation required by regulators, the encouragement of agencies to adopt a more customer-focused attitude, and the introduction of risk-based compliance requirements for liquor licensing.

The SBDC stated that the State's RIA process should be extended and refined, and that the consultation requirements for the process should be strengthened.

Finally, the SBDC proposed the implementation of a Government-wide online platform acting as a single point of contact for all individuals and businesses who are required to interact with Government regulators.

Chamber of Minerals and Energy of Western Australia

The Chamber of Minerals and Energy of Western Australia (**CMEWA**) proposed a number of reforms to online service delivery, including the establishment of:

- a single portal for information required in multi-agency approvals processes;
- a public database for improved monitoring and auditing of land clearing;
- an online Government case management system for projects conducted in collaboration with industry; and
- establishment of an Environmental Data Library to provide public information on biodiversity, water, and cultural heritage data.

The CMEWA also proposed a whole-of-government initiative to reduce the duplication of information required by Government agencies, a review of the effectiveness of the Lead Agency Framework, and the establishment of a one-stop-shop within Government to facilitate inter-agency co-ordination.

²⁶⁷ See Section 5.4 for further information on the Regulatory Impact Assessment process in Western Australia.

²⁶⁸ The ERA notes that it does not support this recommendation.

It also made a number of specific recommendations relating to improving the timeliness of approvals, introducing risk-based approvals processes, and increasing transparency in government decision-making.

Woolworths

Woolworths stated that the Western Australian liquor licensing process is confusing and inconsistent, and that there is a lack of clarity as to the role of the agencies involved. It proposed the establishment of a single decision-making body, and the introduction of deemed approvals where no decision has been made within a statutory timeframe.

Woolworths also noted the duplication of regulatory requirements, particularly where local government development approvals processes require the same information that has already been provided in support of a liquor licensing application.

Finally, it expressed concern regarding the lack of transparency around Government decision-making processes, recommending the publication of the internal decision-making policies and guidelines used by agencies, and the specification of a clear set of grounds on which local councils can refuse development applications.

5.3 Addressing existing regulatory burden

As discussed in Section 5.1, regulation has a cost, but aims to deliver a net benefit to society. Some regulations may have a large cost, but result in an even larger benefit. However, some regulation can be inefficient, in instances where its aims can be achieved in a less costly way.

In this section the ERA provides a set of recommendations designed to assist Government in reducing these inefficient or onerous regulatory costs imposed by existing regulations in Western Australia.

The ERA has made recommendations that focus on establishing a strong reform programme and improving the Government's capacity to provide support for this programme. It has also identified specific sectors of the economy that are disproportionally affected by regulatory burden, and should be given priority by such a reform programme. However, it has not provided detailed recommendations to resolve issues in those sectors.

In developing its recommendations, the ERA:

- engaged Synergies Economic Consulting (Synergies) to assist in identifying sectors of the State economy most affected by regulatory burden. The report prepared by Synergies is available on the Authority's <u>website</u>.
- identified recurring weakness in the way regulation is applied in Western Australia from the work conducted by Synergies and its own independent research;
- examined national and international reform efforts, identifying common practices that lead to successful reforms; and
- considered how these common practices can be applied in Western Australia to establish a strong and effective reform programme.

5.3.1 Key areas of regulatory burden

Regulation does not affect businesses and individuals equally, and so reform efforts must prioritise the areas where change can deliver the greatest benefit. For instance, some sectors of the economy are more heavily affected by regulatory burden than others, and some processes are particularly difficult or costly for smaller businesses and individuals.

In this section, the ERA identifies four sections of the State's economy that are currently heavily affected by inefficient or onerous regulation, and five weaknesses in regulatory processes that are commonly encountered in most regulatory agencies. An effective reform programme will need to both conduct a detailed examination of problems in heavily affected sectors, and to seek ways to improve regulatory processes across the public sector.

5.3.2 Identification of sectors most affected by regulatory burden

Synergies' analysis of the impact of regulatory burden on various economic sectors was conducted in two stages:

 An initial scan was performed, which involved short-listing categories of regulation that could potentially be regarded as regulatory burden. For each issue identified, a summary was made of the industries and consumer groups affected, the processes through which costs arise and a qualitative ranking of the probable materiality of the issue. The scan was informed by a literature review and consultations with industry bodies and Government authorities.

- 2. The initial scan of issues was followed by a more detailed review of costs, issues and processes, using the following assessment criteria:
 - breadth of regulatory reach, where costs will generally be greater if the regulation affects a large number of businesses or consumers in the economy;
 - economic significance of the affected industry:
 - effect of regulations on small business;
 - direct compliance costs and frequency of these costs; and
 - indirect costs, such as the way in which regulatory burden discourages entrepreneurial behaviour and investment in new projects.

It should be noted that a number of these criteria can be applied to the benefits of regulation as well as the costs. For example, public safety regulations with a broad reach may act to protect many citizens from harm.

Synergies concluded that the four economic sectors most affected by regulatory burden in Western Australia are the:

- food industry sector (a mix of small to medium businesses);
- resources sector (mid-sized businesses through to large corporations);
- tourism sector (mostly small businesses); and
- land and infrastructure development sector (small businesses through to large corporations).

5.3.2.1 Food Industry

In 2011/12, around 55 per cent (\$16.3 billion) of Western Australia's retail trade was attributable to businesses in the food sector. The State also has a substantial food manufacturing sector, valued at \$3.92 billion over the same period. Over 18,000 food-related businesses operate in Western Australia, all of which are subject to a range of compliance requirements.

The industry is regulated by Federal, State, and local laws, in addition to the *Australia New Zealand Food Standards Code*. The regulations address hygiene, the preparation and provision of food, and standards for the export market. Businesses are generally subject to periodic assessments and audits, as well as initial registration requirements, to ensure public health and safety.

Businesses in the sector incur compliance costs such as:

- mandatory industry levies that support research and development;
- costs of developing a food safety plan;
- costs of sampling and laboratory testing of produce (for example, fortnightly testing in the case of local cheese producers);

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²⁶⁹ Synergies Economic Consulting, 2014, Cost of Red Tape in Western Australia, Perth.

²⁷⁰ Ibid.

- registration fees allowing the business to sell produce at local farmers' markets for each shire in which the farmers' markets operate (some of which are once-off fees, and others that are charged on an annual basis); and
- costs associated with audits and safety inspections.

Synergies found that the impact of regulatory burden on businesses operating in the food sector was likely to be high. Businesses in the sector are subject to food safety regulation and local government administration of laws, both of which were determined to have a moderate to high level of regulatory burden for each of the five assessment criteria listed above (being broadness of regulatory reach, economic significance of the industry, the effect of regulations on small business, direct compliance costs, and indirect costs). Regulatory burden in the food sector tends to arise as a result of:

- the number and frequency of assessments and audits;
- duplication of compliance requirements at various levels; and
- inconsistencies in the requirements imposed by State and local governments.

Small businesses in the sector are often disproportionally impacted by compliance costs. This occurs because compliance costs are typically fixed, regardless of the size of the business. Synergies found that the regulatory burden represents a barrier to entry for small businesses that is large enough to deter new businesses from entering the market. This has resulted in reduced business investment, innovation, and reduced customer choice.

5.3.2.2 Mining and resources

Mining and petroleum are of critical importance to the Western Australian economy, representing 37 per cent of Gross State Product in 2013.²⁷¹

The State Government generally takes a lead role in regulating the sector, although the Federal Government may have jurisdiction where projects are covered by national environmental laws, or are on Commonwealth land or in Commonwealth waters. Local governments also have some role in administering planning legislation.

Regulations in the mining sector cover environmental impacts, water resources, indigenous culture and heritage. Businesses in the sector incur a variety of compliance costs, including the procurement of legal and financial advice, and the significant time and effort taken to prepare the documentation required for various approvals processes.

Overall, Synergies found that the impact of regulatory burden on businesses operating in the resources sector was likely to be high. Businesses in the sector undergo substantial environmental approvals, and planning and development approvals processes, each of these being areas where Synergies identified a moderate to high level of regulatory burden. (Synergies noted that the regulatory requirements did not significantly affect small businesses.)

Regulatory burden in the resources sector tends to arise as a result of:

the quantity of the legislation and number of regulatory requirements that apply to
projects in the sector (Synergies considered one project that required 66 separate
approvals, and noted anecdotal evidence suggesting the number may have been
substantially higher in other cases);

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Western Australian Department of Mines and Petroleum website, accessed 26 March 2014, http://www.dmp.wa.gov.au/7846.aspx.

- inconsistency and overlap between regulatory requirements imposed by different levels of Government; and
- duplication of compliance requirements at various levels.

Businesses also raised concerns over the timeliness and procedural fairness of approvals, although the degree of regulatory burden in these areas is difficult to assess given that much of the information is commercially sensitive.

Synergies commented that regulatory inconsistencies in the sector risk inhibiting the confidence of companies to invest in exploration and operations in Western Australia. However, the ERA is aware that the Department of Mines and Petroleum's (DMP) current regulatory reform programme aims to address many of the issues raised above, with the DMP estimating potential savings of almost \$28 million.²⁷²

5.3.2.3 **Tourism**

In 2011/12, the tourism industry contributed over \$8.5 billion to Western Australia's Gross State Product.²⁷³ The sector predominantly consists of small businesses, with 86 per cent of operators being classified as 'small', and employs around 90,000 people. 274

A wide range of licenses, permits, and regulations apply to the Western Australian tourism industry. Again, these are managed by all three levels of government. The regulations cover environmental impacts, safety and transport issues, access conditions for national and marine parks, and indigenous culture and heritage. In some cases, tourism businesses are also subject to food safety requirements.

Regulatory burden in the tourism sector tends to arise as a result of:

- particularly lengthy approvals processes for operators who wish to offer new and innovative experiences;
- inconsistency and overlap between regulatory requirements imposed by different levels of Government; and
- delays in interagency referrals that are required as part of the assessment and approvals processes.

Synergies found that the impact of regulatory burden on businesses in the tourism sector was likely to be high. Tourism businesses must comply with regulations across a particularly wide range of areas, many of which have a disproportionate impact on small businesses, and were found to have a high level of burden on most of the assessment criteria above.

Businesses in the sector incur compliance costs such as:

- the costs of preparing information to comply with reporting requirements;
- costs associated with recurring audits and inspections.
- fees required to submit applications, and acquire operating licences and permits; and
- any investment required to comply with operating standards.

Synergies Economic Consulting, op. cit.

Tourism Western Australia, 2012, Tourism Satellite Account - Western Australia 2011 - 2012, Perth.

Synergies noted that regulatory burden in the sector poses a risk that innovative tourist offerings will be hampered or never emerge because of difficulties in obtaining approvals, reducing the range of tourism options in Western Australia, and resulting in a potential loss of economic benefits.

5.3.2.4 Land and infrastructure development

Land and infrastructure development impacts all Western Australians. It involves strategic planning for future development of towns and regions, management of land supply for different classes of use, and provision of broad direction for urban and regional development throughout the State. On a day-to-day level, it also involves decision making by various authorities on planning schemes, subdivisions, and specific development proposals. As noted in Section 5.1.4, the area has been the focus of a number of reform projects in recent years.

Development in Western Australia is largely administered by the *Planning and Development Act 2005*, and by the *Town Planning Regulations 1967* that governs the local planning schemes prepared and adopted by local government. A range of bodies have a role in the regulation of planning in the State, including the Western Australian Planning Commissions (WAPC), the Department of Planning (DoP), local governments, and Development Assessment Panels (DAPs).

Regulatory burden in the development sector tends to arise as a result of:

- inconsistencies between State planning strategy and local government policies and planning schemes; and
- duplication of responsibilities across Government departments in relation to large housing and infrastructure developments.

Synergies found that the impact of regulatory burden on businesses operating in the development sector was likely to be high. Businesses in the sector are subject to planning and development approvals processes, and local government administration of laws, both of which were determined to have a moderate to high level of regulatory burden for four of the five assessment criteria. Synergies noted that these regulatory requirements did not affect small businesses significantly, since land developers tend to be large businesses.

Businesses in the sector incur compliance costs such as:

- the time taken to prepare, submit, and provide supporting material for development applications and planning scheme amendments;
- costs of complying with specific development requirements, such as signage and heritage requirements;
- fees and charges for applications;
- administrative fees for specific functions (for example, verification that a development accords with approved drawings); and
- developer contributions for the provision of infrastructure.

However, Synergies found that these costs of doing business in the sector were not the most significant contributor to regulatory burden, with delays and uncertainties in obtaining approval to develop being a greater concern. The Master Builders Association highlighted the costs of holding funding until approval is granted, noting that developers commonly manage this by including a 'risk premium' in the cost of building projects, which is then passed on to property buyers.

Both Synergies' analysis and the submissions received in response to the ERA's Discussion Paper suggest there is considerable scope for improvement in this sector. However, the ERA notes that significant progress has been made in this area, following the extensive review of building recommendations conducted in 2010-11. The Department of Planning is also conducting a second phase of reforms, focused on improving statutory decision-making processes, land use planning, and land supply.

5.3.3 Recurring weaknesses in regulatory processes

The ERA has identified five key weaknesses that are common in regulatory processes (both licensing and approvals) across the public sector. These weaknesses were identified based on Synergies' findings, submissions to the Issues Paper and Discussion Paper, and on research into best-practice regulation in other jurisdictions. These weaknesses are listed below, along with examples of the costs they impose, and relevant case studies.

1. Duplication

Businesses often have to comply with processes that require multiple forms to be submitted to various agencies, often requesting the same data in a slightly different format. This imposes unnecessary costs on both citizens and business owners, such as:

- the time taken to complete paperwork;
- the time and effort involved in finding out how to submit paperwork to each agency; and
- an increased likelihood of errors or delays due to the volume of paperwork involved in the process;

Duplication also imposes costs on Government, where agencies bear the costs of producing their own forms, processing the information received, maintaining databases, and liaising with other departments to resolve problems caused by inconsistent records.

2. Lack of electronic lodgement facilities

The majority of Australian businesses now use the internet to perform a variety of functions, including banking, administrative tasks, sales and procurement. Both citizens and businesses expect to be provided with an option to complete compliance processes online. Where this facility is not available, they may incur costs such as:

- the time taken to visit a Government office, where forms are not available online or need to be submitted in-person;
- the time and resources used to fill out and mail forms; and
- slower processing of applications and paperwork, where forms are processed and manually entered into the system by Government staff; and use of business hours to submit paperwork, rather than having the convenience of lodging forms electronically, at any time of day.

Box 14 Case Study: Reducing duplication and improving online lodgement facilities

A family-owned cheese producer in the South West reported that food safety regulations require it to:

- register with Dairy Australia to operate a commercial dairy business;
- pay an annual industry levy to Dairy Australia;
- register with the Department of Health and submit a food safety plan; and
- register individually with each Shire where the business wishes to sell produce at local farmers' markets. (This requirement contradicted initial advice provided by the Department of Health that the business would only need to register with the Department to sell products at farmers' markets.)

Synergies, 2014 – Cost of Red Tape in Western Australia

An online portal managing food safety compliance could simplify this process substantially, by:

- providing a single electronic form for the initial registration process, using this
 information to populate the necessary forms, and sending applications on to the
 appropriate departments and agencies;
- providing a facilitator with experience in food licensing requirements to assist with queries, and give correct information about local government requirements;
- allowing the business to track the progress of outstanding applications; and
- notifying businesses when annual industry and council fees are due, and providing an online payment facility where credit card payments can be made to the appropriate agency.

The role of technology in reducing duplication and improving service delivery is discussed in detail in Section 5.3.4.3.

3. Inconsistencies

Inconsistencies between laws, policies, and roles can make the regulatory system difficult to navigate. Some inconsistencies may result from pieces of regulation that are explicitly contradictory, but many result from the way in which different agencies interpret the regulations they administer. This can impose costs such as:

- the cost of employing legal and financial consultants where requirements are particularly complex and contradictory;
- delays in commencing a new business venture where one agency is willing to approve an application but approval is blocked by another agency with a different interpretation of the regulation;
- the time taken to negotiate with multiple agencies to resolve inconsistencies and disputes; and
- a reluctance to pursue a new business venture where regulations are confusing and unclear as to whether the necessary approvals can be obtained.

Box 15 Case Study: Resolving inconsistencies and improving inter-agency communication

An established Western Australian tourism company offers helicopter tours over the Swan River and has been attempting to obtain approval to land at a disused helipad in East Perth. The business has obtained approval from the owner of the site. However, it has not been able to progress with the project due to a lack of agreement between two key bodies who both have the authority to block the project.

The Metropolitan Redevelopment Authority has informed the business owner that the helipad cannot be safely used, due to its proximity to riverside developments. However, the Civil Aviation Authority has informed the business owner that the helipad is still an appropriate place to land and launch helicopters, and considers that it can safely be used.

Synergies, 2014 – Cost of Red Tape in Western Australia

Authorities in this position can reduce regulatory burden for businesses by coming to a common position. Even if the two authorities had agreed that the helipad could not be safely used, this could have been communicated quickly, saving the applicant the time and effort of attempting to negotiate with each body.

The importance of improving co-operation between agencies is discussed in detail in Section 5.3.4.1.

4. Lack of a 'risk-based' approach

Under a risk-based approach, businesses that propose small or low-risk projects are subject to simpler compliance requirements, while high-risk processes will undergo a more comprehensive assessment. A system that applies the same requirements, regardless of the nature of a project or application, tends to impose disproportionate costs on smaller projects and businesses. This can impose costs such as:

- the cost of legal and financial consultants to assist in meeting compliance requirements, even for a very small project;
- the time taken to negotiate with a range of different agencies to require approvals, often resulting in delays where one agency takes longer than the others to process an application;
- administrative costs and loss of time for Government agencies who are required to conduct extensive assessments for very small projects; and
- a reluctance to start a new small business or expand an existing small businesses, where heavy compliance costs outweigh the potential returns.

5. Complex and poorly communicated processes

Regulatory burden can arise when compliance processes are confusing and difficult to navigate, particularly where there is a lack of communication between the regulatory body and the applicant. Unnecessarily complex processes, accompanied by inadequate communication, impose costs such as:

- the cost of legal and financial consultants where the regulatory process is too complex for the applicant to navigate;
- the time taken to understand the regulatory requirements and processes, including delays caused when inaccurate or outdated information has been provided;

- the time taken to submit gueries and ask for clarification;
- delays caused when the information provided is outdated or otherwise inaccurate;
- managing cash flows to meet unanticipated costs that were not made clear at the commencement of the application process; and
- reluctance to start a new small business or expand an existing small businesses, where the regulatory requirements appear to be overly confusing.

Box 16 Case Study: Providing risk based assessments and user-friendly processes

A South West winery decided to convert fruit packing sheds into a retail outlet where products could be sold to the public. The owner had held a producer's licence for 17 years, the winery had passed six inspections without incident since it opened, and the project itself was relatively small.

Nevertheless, the process of obtaining a liquor licence for the new outlet took over eight months and cost around \$34,000. A large proportion of this cost was spent engaging a legal professional to assist with the complex application process, in spite of the Department of Racing, Gaming and Liquor's claim that the process can be managed without outside assistance.

The licensing process was not allocated to a particular officer, making queries and communication with the Department particularly difficult for the owners. Nor did the Department provide the owners with a clear timeframe within which the application would be approved or rejected.

Because of the slow process and uncertainty, the owners incurred additional expenses, including the cost of leasing two properties simultaneously while they waited for a decision by the Department.

Consultation undertaken by the WA Department of Treasury and Finance 2009, 12 February 2009, for the Reducing the Burden report.

A risk-based and well communicated approvals process could have reduced delays and costs for both the owner and for the agencies involved.

The scale of the project, in addition to the owner's history of regulatory compliance suggest that the project may have been eligible for simplified regulatory requirements, had a risk-based system been in place.

Additionally, the communication issues could have been resolved by assigning applications to a specific officer for processing, providing information about the timeframe involved, and providing guidance on the local government requirements relating to the approvals process.

The importance of designing processes that reflect the needs of citizens and businesses is discussed in detail in Section 5.3.4.5.

The ERA notes that its Discussion Paper also identified specific areas such as liquor licensing and occupational licensing that are potentially disproportionately affected by regulatory burden. After further investigation, the ERA has concluded that problems in these areas appear to relate to broader weaknesses in the way licensing and approvals are managed in Western Australia. Reflecting this, the following sections do not focus on these areas specifically, but rather identify ways in which to improve regulation more generally.

5.3.4 Common practices leading to successful reforms

Regulatory reform is challenging and can fail when it is not backed by a well-developed plan and broad support. This section provides a list of practical recommendations to assist Government in its continued efforts to reduce regulatory burden in Western Australia. The ERA developed this list and its recommendations by:

- conducting a literature review to identify the principles and practices consistently present in successful reform programs;
- assessing the way in which each of these practices works to deliver effective regulatory reform; and
- reviewing the practical application of these practices in other jurisdictions.

The ERA identified six key practices as a result of this process. These key practices are:

- improving co-operation between public sector agencies;
- · establishing leadership and accountability;
- using technology to improve services and efficiency;
- setting clear and measurable objectives;
- designing processes to meet the needs of users; and
- using consultation and participation to design better reforms.

Reform efforts are extremely vulnerable to the personal concerns and needs of all stakeholders involved. Reforms can be derailed at any point in the process by a group that considers itself disenfranchised by the reform process, especially where centralised oversight or service delivery has been proposed. For instance:

- a senior official who finds a reform contradicts their other responsibilities may not encourage staff to implement changes and monitor their progress;
- a team of public servants who have not been provided with the tools to implement a reform may apply it slowly, inconsistently, or not at all; or
- a group of business stakeholders who do not understand the reasoning behind a reform may seek ways to circumvent the process rather than work with officials to adapt to the change.

Reflecting this, the manner in which reforms are implemented can be as important as the actual content of the reforms.²⁷⁵ Regulatory reform must involve practices that maximise 'buy-in' from all parties involved (for example, by rolling out large reforms one department at a time, taking on feedback and adjusting reforms as necessary before proceeding to the next department). Successful implementation needs to balance analysis and measurable targets with practices that inform and engage administrators and stakeholders.

5.3.4.1 Improving co-operation between public sector agencies

Lack of communication and duplication of requirements across departments can be frustrating and imposes unnecessary reporting requirements and delays. All departments and local government authorities affected by a given regulatory process should be directly involved in designing reforms on a collaborative basis.

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²⁷⁵ Polidano, C. 2001, "Why Civil Service Reforms Fail", Public Policy and Management Working Paper no. 16, Institute for Development Policy and Management, Manchester.

Co-operation between relevant government departments is important at both the design and implementation stage of reforms, and for on-going regulation and service delivery.

Co-operative reform development

Co-operative efforts require clear guidance and structure.²⁷⁶ This structure could be provided by a central agency responsible for steering reform efforts, and providing practical support such as:

- assistance to departments in developing clear and measurable cross-departmental goals;
- assistance to departments in reporting to Parliament on joint initiatives;
- · implementing efficient data and information-sharing practices;
- incentives for departments to set up joint initiatives (such as the United Kingdom's 'Invest to Save' programme, which encouraged cross-departmental collaboration by providing financial incentives where two or more agencies worked to co-operatively deliver services in more innovative, efficient, and locally-responsive ways);²⁷⁷
- innovation funding to invest in joint projects with other agencies and local governments; 278,279 and
- broad oversight and advice as needed, across the life of reform projects.

Western Australia has used a central taskforce approach to some extent in the past, convening the Red Tape Reduction Group (**RTRG**) in 2009. However, the RTRG's work focused on identifying and quantifying regulatory burden, rather than providing ongoing assistance for reform efforts.

Other Governments have appointed teams to take on a steering role, rather than a reporting role, in regulatory reform. For instance, the United Kingdom's regulatory reform programme falls under the jurisdiction of the Cabinet Office²⁸⁰ while Canada's is managed by the Treasury Board.²⁸¹ The Department of Premier and Cabinet would be well-suited to a similar role in Western Australia, given its current responsibilities already include providing co-ordination and leadership around complex cross-agency issues.

Reform initiatives need to recognise that departments may have pre-existing internal reform programmes. This existing work should be taken into account and integrated into the reform process as much as possible, rather than imposing a top-down reform structure that disregards work already done. This works both to maintain existing momentum and departmental investment in regulatory reform, and also to allow departments to share existing expertise and knowledge with other parts of Government.

Co-operative service delivery

Departments should adopt a co-operative approach to regulation and service delivery where they have joint or overlapping responsibilities.

OECD 2009, Rethinking e-government Services: User Centred Approaches, Paris.

²⁷⁷ Australian Public Service Commission 2007, *Building Better Governance*, Canberra.

²⁷⁸ Gore, A. 1993, From Red Tape to Results: Creating a Government the Works Better and Costs Less, Washington D.C.

²⁷⁹ Ryan, C. M. & Walsh, P 2004, 'Collaboration of Public Sector Agencies: Reporting and Accountability Challenges, International Journal of Public Sector Management, Bradford.

²⁸⁰ The equivalent of Western Australia's Department of Premier and Cabinet.

²⁸¹ The Cabinet committee responsible for the Canadian public service.

A business or individual trying to comply with regulatory requirements generally expects to engage with 'government', not with a variety of separate departments and authorities. Complying with regulation across a variety of agencies can be daunting, especially for small businesses seeking to undertake a development or pursue a project. Even minor proposals may need to be compliant with several sets of regulations. 283, 284

Many agencies independently collect substantially the same information, in their own format, and this information is not always shared effectively between agencies, as Western Australia has no whole-of-government information management framework to facilitate this. Better collaboration between agencies, particularly in terms of information management, can reduce inefficiencies in administration and compliance.

A 'one-stop-shop' approach to service delivery seeks to ensure a business or citizen is able to achieve regulatory compliance for a project via a single point-of-contact, even though the necessary approvals may need to be granted by multiple agencies.²⁸⁵ One-stop-shops can incorporate both an online service portal, and access to the same integrated services at a physical location such as a neighbourhood centre. Section 5.3.4.3 discusses how technology can be used to implement such an approach.

Recommendations to improve co-operation between public sector agencies involved in the reform process in Western Australia

Central leadership and co-ordination is necessary to accelerate regulatory reform in Western Australia.

This role could be undertaken by the Department of Premier and Cabinet (**DPC**), or by the Economic Reform division within the Department of Finance. These two agencies have different roles in relation to regulation. The DPC has a policy and co-ordination role while the Economic Reform division includes the Regulatory Gatekeeping Unit (**RGU**), and has a regulatory and administrative role. It is not clear which agency would be best placed to undertake the lead agency role. This will be the subject of further investigation in the preparation of the ERA's Final Report.

The ERA refers to the agency taking on this leadership and co-ordination role as a 'lead reform agency' throughout the rest of this chapter, given that both the Department of Premier and Cabinet and the Department of Finance could fulfil this function.

5.3.4.2 Establishing leadership and accountability

Developing and implementing an effective regulatory reform programme can be an extremely challenging undertaking. Such programmes require both high-level support and accountability to be successful. A lack of visible, senior leadership can seriously hamper reform efforts. For example, the most recent Canadian Federation of Independent Businesses (**CFIB**) Red Tape Report Card compared regulatory reform achievements across all provinces. Alberta ranked poorly compared to many other provinces, a result that was attributed specifically to a lack of leadership. The CFIB's Director noted that leadership

²⁸² Newfoundland Labrador Red Tape Reduction Task Force 2007, Report of the Red Tape Reduction Task Force to the Minister of the Department for Business, St. John's.

Steele, J. & Thomas, A, 1998, The One Stop Shop Approach to Development Consents, London.

The Western Australian public sector consists of over 300 individual departments, boards, and authorities, many of which have some form of regulatory authority. While there is not sufficient information available to determine precisely how many of these agencies have the power to make policies, rules, or regulations, or enforce standards, the ERA notes that the majority of Government bodies appear to have some degree of authority to make or enforce regulations.

²⁸⁵ Steele, J. & Thomas, A, 1998, op. cit.

in regulatory reform had been sporadic in Alberta, with three different ministries being responsible for reform programmes over a two year period, and the province's Premier being 'largely invisible' throughout the process.²⁸⁶

In addition to appointing an agency to lead the reform programme across Government (as recommended in Section 5.3.4.1 it is also necessary to establish leadership and accountability within departments, and at a Ministerial level.

Recommendations to establish leadership and accountability

Within departments, linking Government reform targets to performance indicators for senior departmental staff can encourage involvement in the reform process. The support and recognition of senior staff can also drive staff at all levels to identify regulatory problems and seek solutions.²⁸⁷

At a Ministerial level, leadership and accountability are best demonstrated through a commitment to specific, measurable objectives, and regular public reporting of reform progress. (The ERA notes that the

Lack of high level political support is probably the first issue practitioners think about when they are asked about barriers. Support from powerful entities can make the difference in actually facilitating reform. However, even if this support has been obtained at early stages of the process, the lack of continuous support can also block efforts.

OECD 2009 – Overcoming Barriers to Administrative Simplification Strategies

reforms undertaken in response to the RTRG's findings have not been publicised in a central location, which has made it difficult to appreciate the full impact of the reform programme.)

5.3.4.3 Using technology to improve services and efficiency

Technological reform offers a practical approach to reducing regulatory burden by reducing administrative costs, both for business and Government.²⁸⁸ For instance, the Dutch Interior Ministry estimated in 2010 that 40 per cent of recent administrative burden reductions for citizens had been technology-related. ²⁸⁹ The use of technology to improve the way information is shared and managed is called Information and Communications Technology (**ICT**).

However, effective technological reforms require a broad understanding of departmental needs and processes across Government, and a clear overarching strategy. This is particularly important when seeking to implement reforms that aim to improve the way in which multiple departments work together. Almost all Australian governments have introduced an ICT policy in recent years, to improve collaboration between Government departments and service delivery. Most jurisdictions have established an office headed by a Chief Technology Officer, Chief Information Officer, or similar to manage this policy area.²⁹⁰

²⁸⁶ Airedrie Echo article, 'Red Tape Report raises eyebrows', accessed 13 March 2014, http://www.airdrieecho.com/2014/02/04/red-tape-report-raises-eyebrows>.

²⁸⁷ Western Australian Department of Treasury 2010, op. cit.

²⁸⁸ Ho, A. T, 2002, 'Reinventing Local Governments and the E-Government Initiative', Public Administration Review, Hoboken.

²⁸⁹ OECD 2010, op. cit.

²⁹⁰ This role involves exercising broad responsibility for the policy area in the way that, say, the Information Commissioner oversees policy relating to freedom of information and privacy.

Western Australia is currently the only Australian State that does not have a Government ICT strategy, ²⁹¹ and is yet to appoint a public official to develop the State's capacity in this area. As detailed in Table 18 Western Australia currently trails the rest of the country (with the exception of the Northern Territory) in identifying current technologies that are used elsewhere to drive efficiency and reduce regulatory burden.

Table 18 Information and Communications Technology reform progress (as at March 2014)

	WA	Cwlth	NSW	Vic	Qld	SA	Tas	ACT	NT b
Published ICT strategy		Ø	8						
Appointed office or agency with oversight for ICT ^a	8	Ø	8						
Appointed Chief Technology Officer or equivalent	3	Ø	9	Ø	Ø	Ø	8	Ø	&

Source: ERA analysis, Australian State and Federal Government websites

There has been some momentum within the Western Australian Government to reform this area in the past, but this momentum seems to have dissipated in recent years. The Department of Premier and Cabinet (**DPC**) previously investigated opportunities to establish an ICT programme in Western Australia, having formerly established a working group to investigate the State's ICT needs and opportunities²⁹² but this does not appear to have resulted in any material outcomes. ²⁹³ The ERA understands that this working group's findings supported bringing Western Australia's policies and practices into line with those in place in other States.

Technological improvement and innovation can be drivers of efficiency. The ERA considers that re-opening this area of policy development will allow the State to identify cost-effective and innovative opportunities to reduce regulatory burden. This section considers two key areas where modernising the State's approach to information and communication may deliver considerable benefit:

- Using technology to deliver services more efficiently: the difficulty of navigating regulatory processes that span multiple agencies was a common theme in submissions to the ERA's Discussion Paper. Online 'one-stop-shop' services are increasingly being used to remove this inefficiency.
- 2. Using technology to work more efficiently within Government: collecting and managing the information used in regulatory processes results in costs for Government. New information management technologies mean that it is no longer necessary for Government departments to bear these costs.

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^a (Cwth: Dept. of Finance and Deregulation; NSW: Dept. of Finance and Services; Vic: Dept. of Business and Innovation; Qld: Dept. of Science, Information Technology, Innovation and the Arts; SA: Dept. of Premier and Cabinet; Tas: Dept. of Premier and Cabinet; ACT: Chief Minister and Treasury Directorate)

^b The NT Government appears to use the term 'ICT' to refer broadly to any computer use, and so its 'ICT Strategy' is not comparable.

Australian Information Industry Association Website, State Government ICT Strategy Briefing 2013, accessed 7 April 2014 at https://www.aiia.com.au/?page=State_Govt_ICT_Strat

²⁹² Communication with the Department of Premier and Cabinet, 20 March 2013.

Further, in the mid-2000's the DPC operated an Office of e-Government responsible for overseeing strategies for electronic service delivery and other ICT-related opportunities, which investigated a range of relevant issues including electronic service delivery, for example, Office of e-Government, 2008, Citizen Centric Government Electronic Service Delivery Strategy for the Western Australian Public Sector, Perth.

Using technology to deliver services

The establishment of a range of portals organised by 'life-event' (for example, starting a business or completing an apprenticeship) can provide users with a simple, one-stop-shop for regulatory compliance. Such portals have been implemented widely in both Australian and international jurisdictions, and at various levels of Government.²⁹⁴ For instance, searching for 'starting a business in Australia' takes users to the business.gov.au portal,

which aims to provide all the necessary information, tools, and application forms necessary to comply with regulatory requirements relevant to establishing a new business.

Online services can also be used to receive, process and track information more efficiently, interact with applicants, and distribute information to the relevant

Efforts to strengthen co-operation and networking across ministries could continue by applying a life-event approach ... where initiatives address an entire life situation of a citizen or company, such as creating a new company or having a child.

OECD 2008 - Making Life Easier for Citizens and Businesses in Portugal, Paris.

departments. For example Western Australian Department of Mines and Petroleum has made significant progress in this area. Since 2009, it has improved its assessment process by accepting online lodgement of exploration applications, mining proposals, mine closure plans, and environment plans. Moreover, it also provides online tracking of applications, and is currently working to expand this feature.

Small businesses tend to be disproportionately affected by regulatory requirements, and could benefit significantly from the wider introduction of such improvements. Currently, they are asked to provide the same data to the ATO, State Revenue Office, WorkCover, local governments and state regulatory bodies (such as water, transport and electricity regulators), environmental regulators at all levels of government, and administrators of various efficiency and labelling schemes.²⁹⁵

The SBDC has recognised this issue and developed a Business Licence Finder Tool that allows users to search for information on over 6,000 Federal, State, and local government licences. The tool provides the user with contact information for the relevant department, a list of the forms that must be completed, and detailed compliance information. However, businesses still ultimately need to deal with each of the individual regulatory bodies, and submit the same information multiple times.

Establishing a way for these businesses to submit this information just once could save significant time and effort. Administrators can receive queries and applications from a central point and distribute them to the relevant departments, reducing the burden on the applicant. Applicants also benefit from being provided with a facilitator to track applications, and follow up on problems or delays. This model has been adopted in the Netherlands, where a 'facilitated licensing' approach for various regulatory processes provides businesses and citizens with assistance in navigating Government requirements.²⁹⁶

Online service delivery is not necessarily a substitute for other forms of access to government services, and can pose accessibility challenges. However, the same systems

²⁹⁴ Further examples include the United Kingdom's 'Everything Regulation Wherever It's Needed' (ERWIN), the Australian Government Online Service Point Program, and sub-national initiatives such as the New South Wales Not-for-Profit Compliance Support Centre.

²⁹⁵ Productivity Commission 2013, *Regulator Engagement with Small Business*, Canberra.

²⁹⁶ OECD 2006, op. cit.

can also be used by administrators to more efficiently deliver services in-person. For example, Mexico has recognised accessibility issues by establishing Digital Community Centres across the country, assisting users that are not able to use online services. The centres provide assisted access to Government services at all levels, as well as information on health, the economy, and education.²⁹⁷ The service delivered in person is consistent with the service provided online, and both provide access to a single point-of-contact within Government.

Using technology to work more efficiently within Government

Technology also assists Government departments in administering regulation efficiently. For instance, the United Kingdom's Data Interchange Hub allows departments to access data that has been collected across government securely and easily.²⁹⁸ Such systems save departments the expense of collecting, processing and storing the same data multiple times, in addition to reducing the administrative burden for applicants.²⁹⁹

Such improvements in data management can provide better and more efficient services, but it is also important to acknowledge legitimate concerns around privacy. Where individuals and businesses submit information to a central portal, they should have clear information on which departments will receive that information, and how it will be used.

Recommendations to improve the use of technology to improve services in Western Australia

Improved information management and one-stop-shops are well-recognised ways to reduce regulatory burden, but they cannot be developed by departments in isolation. To realise the benefits of technological change, Western Australia needs stronger leadership in technological reform.

This can be achieved by following the example of other Australian jurisdictions and establishing an office within Government with oversight of ICT policy and direction. This office would typically be headed by a Chief Technology Officer, and be placed within the

Another innovative approach to cutting red tape is the application of ICT tools to simplify government operations and reduce the cost of transactions.

However, the impact of e-government...goes beyond the simplification of administrative procedures and operations. e--government has been recognised as a key policy tool to transform government (i.e. towards a government that costs less, provides user-focused quality services and uses ICTs to better engage citizens in policy making.

OECD 2009 – Overcoming Barriers to Administrative Simplification Strategies

Department of Premier and Cabinet, or Department of Finance.

Most importantly, this office should not be appointed to take on a service delivery role (as, for example, the former Office of Shared Services). Rather, it should work with the Department of Premier and Cabinet to identify and develop technology-based strategies and drive innovation and technological reform within Government.

The Australian Federal Government also has extensive expertise in this area and provides resources and support to State and local governments. The Federal Department of Finance has appointed a Chief Technology Officer to provide infrastructure, expertise, and services

²⁹⁷ OECD 2009, Rethinking e-government Services: User Centred Approaches, Paris.

²⁹⁸ OECD 2010, op. cit.

²⁹⁹ Similarly, Belgium has established a public authority to collect data from all departments and at all levels of government, and facilitates data access for other public services requiring the same data. Comparable datasharing initiatives also exist in the Netherlands, Korea, Norway, the United States, and Finland. (OECD 2006, Cutting Red Tape: National Strategies, Paris.)

to Australian governments, and could assist the Western Australian Government in improving its service delivery and information sharing capabilities. The Western Australian Government should approach the Federal Department of Finance to investigate the level and nature of support available.

5.3.4.4 Setting clear and measurable objectives

A reform effort should have clear and measurable objectives, and provide a deadline for meeting those objectives.³⁰¹ Reforms that do not set clear targets are likely to fail.

For instance, in 1995 the United States passed the *Paperwork Reduction Act* to reduce regulatory burden. However, the agency responsible for implementing the Act did not ensure that 'paperwork burden' was measured consistently. Additionally, annual targets for paperwork reduction were not set until it was too late in the year for most departments to comply. Some departments also reported that the long-term reductions required under the Act were impossible to achieve, given the regulations they were required to administer. As a result, the targets set under the Act were not achieved, and the measurements of paperwork burden provided by agencies were unreliable, bringing into question the value of reform efforts.³⁰²

Effective measurement begins with establishment of a clear baseline to identify the overall level of regulatory burden in the State, and the level of regulatory burden across each sector. This baseline measurement can assist in prioritising reform efforts, and in setting targets and measuring progress.

The Western Australian Government's Red Tape Reduction Group used the Business Cost Calculator (**BCC**) model developed by the Federal Office of Best Practice Regulation to measure regulatory burden. This model is based on one developed by the Dutch Ministry of Finance that is widely used across the world and calculates the administrative costs associated with a piece of regulation. However, the Australian BCC model modifies this approach to include all direct compliance costs. For example, it would include the cost of training necessary to keep up with regulatory requirements, whereas this would not be captured under the Dutch model. 303,304 Continued use of the BCC will assist in providing results that are comparable with those calculated in previous years.

³⁰⁰ Australian Government Department of Finance website, accessed 14 March 2014 http://www.finance.gov.au/about/, and communication with the Office of the Chief Information Officer, 13 March 2014.

³⁰¹ OECD 2009, op. cit.

³⁰² United States General Accounting Office 1997, Testimony before the Committee on Small Business: Paperwork Reduction, Governmentwide Goals Unlikely to be Met, Washington D.C.

³⁰³ OECD 2010, Why is Administrative Simplification So Complicated? Looking Beyond 2010, Paris. While a robust measurement methodology is critically important for regulatory reform, the OECD has made the point that measurement requires sound data and information, stressing the need for effective data-collection and data-sharing mechanisms. OECD 2009, op. cit.

The Standard Cost Model (SCM) developed by the Dutch Ministry of Finance is widely used across OECD countries to provide a methodology for mapping and measuring regulatory burden, and to set up a quantitative target for reduction. Although the SCM only assesses administrative costs, the Federal Government's Office of Best Practice Regulation has developed the BCC methodology, based on the SCM, which considers all direct compliance costs. (Australian Government Office of Best Practice Regulation 2013, OBPR Best Practice Regulation Handbook, Canberra.)

Recommendations to ensure Western Australia's regulatory reform objectives are clear and measurable

The BCC approach used by the Red Tape Reduction Group in producing the *Reducing the Burden* Report should be re-applied to calculate an updated assessment of regulatory burden in the State.

This assessment should be used by a lead reform agency to develop and publish measurable targets for regulatory reform, in consultation with senior departmental staff. Departments must then commit to achieving these targets within a defined timeframe.

5.3.4.5 Designing processes to meet the needs of users

Departments that provide user-friendly processes and good customer service can reduce the time and effort needed to comply with regulation. Individuals and businesses benefit from shorter wait times, accurate paperwork, and staff who provide timely access to

information. Additionally, agencies that consider regulated businesses and citizens as customers are more likely to recognise compliance costs when both designing and implementing regulation.

In its 2014 Report on Government Services, the Productivity Commission noted that Western Australia scored particularly poorly The system will continue in the role of regulator, but will also act as an expeditor and facilitator for the client. There must be a client focus permeating the system.

Newfoundland Labrador Red Tape Reduction Task Force - Report of the Red Tape Reduction Task Force

relative to other Australian States and Territories in terms of service delivery, finding that Western Australian Government services are among the most inefficient in the country. This suggests that the State may not be accessing the efficiency benefits that a customer service focus can deliver.

Regulatory processes can be tested using a 'process mapping' technique, where the reform team audits individual processes by going through an application procedure, identifying any problems that arise at each step. Improved processes can then be designed to provide a better, more efficient service. The information gained from the mapping exercise is also useful in developing appropriate service standards.

Emphasising the importance of service standards can also lead to a general improvement in the way services are delivered. For example, when customer service is linked to performance assessment, staff are given a strong personal incentive to contribute to regulatory reform initiatives, and to help clients navigate the system efficiently. Recognition of outstanding performance, as practiced in a variety of jurisdictions of can also help prioritise customer service, as well as communicating the Government's commitment to efficient service delivery.

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³⁰⁵ OECD 2001, Regulatory Reform in Italy: Government Capacity to Assure High Quality Regulation, Paris.

³⁰⁶ For instance, in Bahrain the government delivers annual awards in different areas relating to e-government, and on Egypt's National Service Day, a prize is awarded to the agency providing the best public services. OECD 2006, op. cit. In 2006, the Australian Government also introduced the ICT Awards Program to recognise individuals and teams in the information and communications technology field. (Australian Department of Finance website, accessed 10 March 2014, http://www.finance.gov.au/collaboration-services-skills/australian-government-ict-awards-program/

Customer service can be measured across entire departments. For example, Canada's Red Tape Reduction Action Plan required regulators to publish a customer service charter, and to report annually against the service targets it specifies.³⁰⁷

Many Western Australian Government agencies already publish customer service charters, outlining the set of core service standards they intend to meet. ³⁰⁸ These measures are generally developed through an internal review of services offered, consultation with customers, and analysis of complaints and feedback. The exact metrics used should be specific to the nature of the work undertaken by each organisation. ³⁰⁹ For instance, an agency that grants licenses or permits may specify how long it will take to respond after an application has been submitted.

Recommendations to improve the customer focus of agencies Western Australia

The Government should ensure that every department with a regulatory role has a customer service charter that provides a commitment to specific and measurable customer service standards. Departments should be required to publish these commitments on their website, and display them in areas where staff provide services to the public.

A lead reform agency should:

- review the customer service charter of each department with a regulatory role, ensuring that the service standards in the charter are measurable, appropriate and, at a minimum, consistent with similar service standards applied in other Australian jurisdictions; and
- assist departments in identifying specific areas that may benefit from process mapping, and provide practical support as required.

Each department should then be required to publish its actual customer service outcomes in its annual report, against the commitments made in its customer service charter.

Finally, achievement against the service standards in the charter should be one of the key performance indicators used to assess the performance of all senior departmental staff.

5.3.4.6 Using consultation and participation to design better reforms

Effective consultation with stakeholders encourages broad participation in reform initiatives, from the identification of regulatory burden, through to the development of solutions and implementation of reforms. It allows stakeholders to contribute to policies and understand the aims, timeframes, and successes of reforms.³¹⁰

For instance, the United Kingdom's 'Red Tape Challenge' has focused on harnessing the experience and ideas of those who deal with regulation on a day-to-day basis. The Red Tape Challenge (RTC) has provided regular updates on the aims and progress of the RTC initiative, allowed businesses and individuals to provide feedback on various regulatory

³⁰⁷ Treasury Board of Canada 2013, The 2012-2013 Scorecard Report: Implementing the Red Tape Reduction Action Plan, Ottawa.

For example, the Western Australian Public Sector Commission's Customer Service Charter states that the Commission aims to: answer telephone calls promptly and respond to telephone messages by the end of the next working day; respond to verbal queries within 5 working days; respond to written queries within 10 working days; respond to complaints within 10 working days; update you on the progress of your query or complaint if a delay is likely; and acknowledge and rectify when an error has occurred. (Public Sector Commission website, accessed 25 March 2014, http://www.publicsector.wa.gov.au/sites/default/files/documents/customer_service_charter_0.pdf)

³⁰⁹ The South Australian Government's Customer Service: Good Practice Guide provides Government departments with advice on the development of service standards and a customer service charter.

³¹⁰ OECD 2009, op. cit.

topics, and has accelerated the decision-making process.³¹¹ The initiative's new 'Business Focus on Enforcement' phase will give trade associations and business representatives a leading role in identifying regulatory enforcement issues and developing solutions.³¹²

Good communication can also help combat the resistance to change that arises when those affected do not fully understand the reform proposal. Further, if reform goes unnoticed, support tends to diminish. It is important to communicate progress and reform successes to build a sense of ownership around the regulatory reform process.

Recommendations to improve levels of communication and participation throughout the reform process in Western Australia

A lead reform agency should consider areas where broad consultation will be valuable, and ways in which citizens and businesses can best be engaged. Complex or broad regulatory problems (such as those identified in Section 5.3.2) require specific, well-targeted consultation plans. When developing reforms in such areas, a lead reform agency should convene working groups that include public, private, and community-sector representatives to contribute to the analysis of regulatory burden in these fields, and to assist in developing practical solutions.

³¹¹ Technolopis Group report to the European Commission 2012, *Public Sector Innovation: Case Study on the Red Tape Challenge in the United Kingdom*, Brighton.

³¹² United Kingdom Cabinet Office website, accessed 10 March 2014. https://www.redtapechallenge.cabinetoffice.gov.uk/

5.3.5 Recommendations

- 11. Appoint a lead reform agency (either the Department of Premier and Cabinet, or alternatively the Department of Finance) to work closely with senior departmental staff across all areas of Government to develop regulatory reform targets and monitor, enforce, and publish performance against the targets.
- 12. Set Key Performance Indicators for regulatory reform targets for senior departmental staff.
- 13. Establish an Information and Communications Technology (**ICT**) office within Government (the Department of Premier and Cabinet, or alternatively the Department of Finance) to:
 - a. identify technology-based strategies to reduce regulatory burden in Western Australia:
 - b. develop and implement a policy and implementation plan for ICT reform in the State; and
 - c. provide ongoing support to the Western Australian public sector, in the areas of service delivery, strategic ICT policy and planning, public sector innovation, and information management, focusing on reducing the level of regulatory burden.
- 14. Update the Red Tape Reduction Group's 2009 assessment of regulatory burden in Western Australia, to measure current levels of regulatory burden in the State.
- 15. Require departments with a regulatory role to:
 - a. establish a customer service charter with clear and measurable service standards;
 - b. have this customer service charter reviewed by a lead reform agency responsible for the reform programme;
 - c. publish this customer service charter online, and display it in areas where staff provide services to the public;
 - d. include a report on actual performance against the service standards in the departmental Annual Report; and
 - e. set Key Performance Indicators for service standards for senior departmental staff.
- 16. Where regulatory problems are particularly broad or complex, establish working groups that include public, private, and community-sector representatives to assist in developing solutions.

5.4 Safeguards against future regulatory burden

5.4.1 How can we prevent the implementation of poor quality regulation?

To prevent the introduction and accumulation of poor quality regulation, it is important to address the two main ways in which it arises.

Firstly, poor quality regulation can be introduced when Government proposes a new rule (be it a law, policy, or another type of regulation) to address an issue. At this stage, other available solutions should be considered, and the original proposal should be examined to determine whether it is necessary and appropriate, and whether it is likely to introduce new costs and problems. Regulation should only be introduced if it has a net public benefit. In Western Australia, as in all other Australian jurisdictions, the Regulatory Impact Assessment (RIA) process is applied to ensure the costs and benefits of proposed reforms have been adequately considered.

Secondly, regulatory problems can develop over time. Regulation may be well-designed when introduced, but may become unnecessary or outdated, or may have long-term consequences that were not foreseen when introduced. This type of burden can best be identified and removed by the use of an effective review process, as described in Section 5.4.6.

Appendix 4 provides a more detailed explanation of the points at which regulatory burden can arise, and the types of safeguards that can be applied at each stage of the process.

5.4.2 Regulatory Impact Assessment

Western Australia currently uses RIA to identify poor quality regulation before Government decisions are finalised. RIA is applied to all new and amending legislation and regulation to ensure that costs and benefits have been appropriately identified.

What is Regulatory Impact Assessment?

RIA is designed to improve the quality of Government decision-making by considering the likely consequences of a proposal, and any practical alternatives. It is an established tool, having been introduced in the United States in the late 1970s and the United Kingdom in the 1980s, and is now used in almost all OECD countries and a growing number of developing countries.³¹³

RIA does not, in itself, define best practice policy development and regulation. Rather, RIA is a tool that assists Government in achieving best practice regulation. It does this by providing a strong filtering process that identifies poor quality regulatory proposals before these are implemented.

Practically, the RIA process, when applied properly, consists of the steps shown in Figure 26. The process is generally managed by a regulatory gatekeeping unit, in collaboration with the department responsible for the decision. If required, the department responsible for the proposed regulations performs the necessary analysis and prepares a document called a Regulatory Impact Statement (**RIS**). ³¹⁴ In producing this document, the regulatory

³¹³ OECD 2002, Regulatory Policies in OECD Countries: From Interventionism to Regulatory Governance, Paris.

³¹⁴ RISs are not prepared for the majority of pieces of proposed legislation. Rather, they are required in cases where a certain level of risk that a proposal will create an unnecessary regulatory burden. The exact criteria that trigger the requirement for a RIS vary from jurisdiction to jurisdiction.

gatekeeper has responsibility for assessing the quality of the RIS and confirming the department's finding that the proposed regulation has an overall benefit to the community.

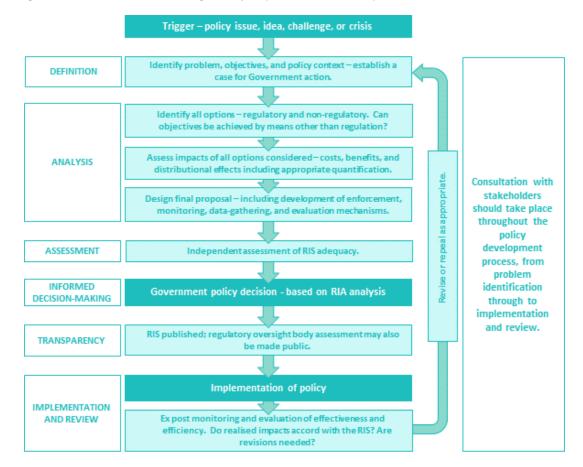


Figure 26 Schematic of the Regulatory Impact Assessment process

Source: Productivity Commission

In principle, a regulatory gatekeeper will report its findings back to decision-makers, and where the proposal is likely to result in a net cost to business, Government, or the community, the responsible government department should explore other options or develop an alternative approach. ³¹⁵

The process is most efficient where Departments begin analysis at an early stage, where a tentative proposal can be considered in light of the evidence, and easily modified before any commitment has been made.

Is Regulatory Impact Assessment just introducing further regulatory burden?

Where poorly designed regulation is introduced, the costs are borne by the wider community. An effective RIA process, in addition to reducing overall regulatory burden, can transfer these costs back to decisions-makers and Government. This is because Government departments and the Regulatory Gatekeeping Unit (**RGU**) bear any costs of implementing the RIA process and eliminating inappropriate regulation, with the RGU

³¹⁵ In practice, in Western Australia, the unit responsible for regulatory gatekeeping will find a proposal to be either compliant or non-compliant with RIA standards. The agency responsible for the proposal will then proceed to Cabinet, and the gatekeeping unit will provide a comment to Cabinet as to whether or not the matter has been found to be compliant. The specific application of RIA in Western Australia is discussed later in this chapter.

providing feedback on compliance that is used by departments in assessing the appropriateness of the reform proposal.

However, where inappropriate regulation is introduced, the cost of complying with that regulation will be borne by businesses and the community. In applying the process, the Government makes a once-off investment in quality control, to avoid inadvertently creating these ongoing costs for businesses and individuals.

The RIA should not be an unreasonable burden to any department already engaged in robust cost benefit-based decision making. It would be reasonable to expect that a Government department would investigate alternative options and assess the main costs and benefits of a proposal even in the absence of the RIA process. The RIA simply formalises a process that government departments should be applying.

Is Regulatory Impact Assessment an effective safeguard?

Studies have consistently found that a properly applied RIA process is effective at preventing the introduction of poorly designed regulation, and likely to improve the quality of Government decision-making.³¹⁶ However, the degree of effectiveness can vary significantly, being dependent on how well the process is applied, and the commitment of Government to using the process as a tool to develop better decisions rather than as a 'ticking the boxes' exercise to justify decisions that have already been made.

In short, RIA is an effective safeguard against regulatory burden, where it is properly applied, but its benefits will not be realised where there is little commitment to applying it as a filtering and problem-solving tool.

5.4.3 Regulatory Impact Assessment in Western Australia

Western Australia's RIA process is managed by the Regulatory Gatekeeping Unit (**RGU**), currently part of the Department of Finance. The RGU was created in 2008, and commenced operations on the 1 December 2009. It is currently the unit responsible for assessing the quality of RIS documents, where required by the *Regulatory Impact Assessment Guidelines for Western Australia* (the **Guidelines**).317

Given the importance of RIA as the State's main safeguard against regulatory burden and sub-optimal decision-making within the public sector, it is critical that the area be adequately resourced and prioritised. The ERA considers that the establishment of the RGU was a significant step in improving Western Australia's regulatory framework, and that the unit has considerable expertise and experience in the assessment of regulatory issues. However, as discussed further in this chapter, the lack of a legislative mandate for the RIA process, and the existence of provisions that allow the RIA process to be circumvented by Government can impede the RGU in taking on an authoritative gatekeeping role. Consequently, the ERA's recommendations have been developed with a focus on empowering the RGU (and more broadly, Government decision-makers) to ensure that the regulatory decision-making in Western Australia is robust, transparent, and consultative.

A detailed study of the cost effectiveness of RIA was conducted in Victoria in 2011. (Abusah and Pingiaro, 2011) It found that every dollar of expenditure incurred by participants in the process resulted in savings of between A\$28 and A\$56. Similarly, a number of international studies (Shapiro, 2007; Portney, 1984; Hahn and Tetlock, 2008; Deighton-Smith, 2007; Novion and Jacobzone, 2011) found that that a well-applied RIA process clearly delivered a net benefit, although the evidence of actual success showed mixed results due to the poor application of the process in some jurisdictions.

The Government of Western Australia 2010, Regulatory Impact Assessment Guidelines for Western Australia Updated July 2010, Perth.

The Guidelines

The Guidelines were introduced with the intention of establishing the principles of good regulation identified by the COAG Taskforce on Reducing Regulatory Burdens on Business.³¹⁸ They provide detailed guidance on:

- the practical application of the RIA process, including scope, best-practice analysis, and documentation;
- the roles and responsibilities of Ministers, Agencies, and the RGU in satisfying the RIA requirements; and
- regulatory reporting requirements for parties involved in the RIA process.

The RIA process, as applied in Western Australia

State Government departments are required to complete a brief Preliminary Impact Assessment (**PIA**) when proposing a new policy or legislation and submit this document the RGU for assessment. Where the RGU finds a proposal is likely to have significant effects and, does not fall into a category subject to an exception³¹⁹, the department then prepares a full Regulatory Impact Statement (**RIS**).^{320,321} (Note that RISs are generally only required for a small number of regulatory proposals. For instance, between 2009 and 2012 only 5.5 per cent of proposals undergoing the PIA process subsequently required a RIS.)³²²

Upon receipt of a RIS, the RGU will:

- assess the RIS for compliance with the Guidelines; and
- issue a Compliance Notice to the agency when the requirements are met.

The Guidelines indicate that the RIS document and Compliance Notice should also be published at this time, but the ERA has not been able to find evidence that this occurs on a consistent basis, as indicated later in Figure 28. Government would be expected not to proceed with new legislation or policy in cases where a Non-Compliance Notice has been issued.

5.4.4 Assessing the quality of Western Australia's Regulatory Impact Assessment process

5.4.4.1 How does Western Australia's process compare to that of other jurisdictions?

The Guidelines established by the Western Australian Government in 2010 are consistent with most (but not all) of the recommendations of OECD and COAG best practice

³¹⁸ These principles are provided in Appendix 4.

³¹⁹ The exceptions generally relate to specific areas such as taxation and electoral issues, which are often subject to other impact assessment mechanisms.

³²⁰ See Appendix 4 for a more detailed explanation of the RIA process in Western Australia.

Where consultation is required (as is the case for most proposals that may result in significant negative effects) the department will first prepare a Consultation Regulatory Impact Statement (CRIS) to obtain feedback from stakeholders. Having considered any submissions received in response to the CRIS, the department will then produce a final Decision Regulatory Impact Statement (DRIS).

³²² Based on figures reported in Western Australian Hansard, Legislative Assembly, Tuesday, 19 June 2012.

³²³ Public disclosure of RIS documents does not appear to meet this requirement at the present time.

As noted later in this chapter, the ERA attempted to locate online copies of these documents using a number of search techniques, and found some but no means all of the RISs that have completed. The ERA acknowledges the possibility that additional documents may have been published, but are undiscoverable using normal means. If this is the case, the ERA would not consider this to represent an adequate level of disclosure.

frameworks³²⁵, and with effective implementation and a number of key modifications have the potential to provide a sound basis for decision-making and policy development. However, as discussed in Section 5.4.4.2, the effectiveness of the Guidelines is materially compromised by a lack of transparency and accountability, and the retention of mechanisms that allow the RIA process to be circumvented relatively easily.³²⁶

Further, Western Australia is one of only two States not to have established a legal mandate for the RIA process, relying instead on the application of the Guidelines. While this, in itself, does not necessarily diminish the quality of the Guidelines, it does not serve to demonstrate a whole-of-Government commitment to the process.

Benchmarking information in Appendix 4 provides further detail as to how Western Australia's process compares to that of other States, highlighting its key strengths and weaknesses.

5.4.4.2 What are the major shortcomings of Western Australia's process?

Timing of the Regulatory Impact Assessment process

The Productivity Commission has commented that, 'in a minority of [Australian] agencies, RIA is appropriately viewed as integral to structuring and informing the development process', but for the majority of agencies RIA was regarded as 'merely a formal framework for consultation...or as a requirement to be 'ticked-off' at the end of the policy development process in order to get legislation introduced'.³²⁷

Best practice RIA emphasises both early and ongoing consultation to assist in decision-making, and for regulation to be designed in tandem with the RIA groundwork, allowing it to be adapted as the costs and benefits are better understood. Where a RIS is only written at a late stage, there is little opportunity for the RIA process to add value or improve Government decisions. In such cases, the process merely introduces an additional expense for Government, while making little or no difference to Government decisions. Given that RISs are required infrequently, and only in cases where proposals are likely to have a significant negative impact, the ERA considers it essential that adequate resources and time are provided for public consultation.

Stakeholder engagement should also be encouraged at an early stage in the process, increasing the opportunities for meaningful contribution. Publication of Preliminary Impact Assessment (**PIA**) documents (as practiced in a number of internal jurisdictions) would serve to highlight proposed regulation at an early stage, and could provide advanced notice where a consultation document is to be prepared. The ERA notes that proposed legislation at the PIA stage will not yet have been considered by Cabinet, but does not consider that this should necessarily limit opportunities for public discourse and input at the policy development stage.³²⁹

³²⁵ Productivity Commission 2012, Regulatory Impact Analysis: Benchmarking, Research Report, Canberra.

³²⁶ The lack of transparency and disclosure around RIA processes in the State, in itself, makes it challenging to perform a robust assessment of the effectiveness of the RIA framework and the economic impact of any issues relating to its implementation.

³²⁷ Productivity Commission 2012, op. cit.

³²⁸ The Federal Government captures this principle by separating the notion of an 'options-stage RIS' from a 'details-stage RIS', highlighting the way that a well-applied RIA process spans both decision-making and disclosure. (Further information is provided on the website of the Federal Department of the Prime Minister and Cabinet.)

The ERA notes that some PIA documents may be subject to confidentiality conditions.

Availability of exemptions

The Western Australian RIA process allows for a Minister for Finance Exemption (formerly known as a Treasurer's Exemption) from RIA requirements to be sought by Ministers, and granted in 'exceptional circumstances'. However, the Guidelines do not define 'exceptional circumstances' and do not require application of a public interest test in the granting of an exemption (a requirement in most other States and Territories).

In practice, the granting of an exemption appears to be at the discretion of the Minister for Finance, with neither the granting of, nor the reasons for granting an exemption being subject to public disclosure.³³⁰ Additionally a Minister for Finance Exemption may be granted at any point in the RIA process, a condition that the Productivity Commission has found to subvert the integrity of RIA, as it allows non-compliance to be disguised as a late exemption.³³¹

In Western Australia, there are no disclosure requirements for exemptions granted. In 2012, the Productivity Commission expressed concern over the poor level of disclosure in this area observed across a number of jurisdictions, contrasting this to the robust disclosure practices of the Federal and Victorian Governments.³³²

As a result of this lack of disclosure, it is not possible to identify the subject of Government decisions that have received an exemption from the RIA process, let alone the reasons for granting any exemptions. However, statements made by the Treasurer to Parliament indicated that 7 exemptions were granted between 1 December 2009 and 19 June 2012.

Additionally, Western Australia remains the only jurisdiction in Australia where election commitments are generally exempted from the RIA process. While a Minister is still formally required to request an exemption from the Minister for Finance (who then seeks advice from the RGU before granting an exemption), the Department of Treasury has stated that "In practice, most election commitments are granted a Treasurer's Exemption [now a Minister for Finance Exemption] in Western Australia."

In its 2012 *Regulatory Impact Analysis: Benchmarking* research report, the Productivity Commission expressed concern over this approach, noting that:

"although there is often little prospect of RIA conducted for an election commitment influencing policy outcomes in the short-term, there can be an important transparency benefit from a full disclosure in a RIS of the impacts of the announced policy relative to alternative options that may or may not have been considered."

Western Australia's Small Business Development Corporation (SBCD) has expressed concern on several occasions, regarding both the lack of disclosure around exemptions, and its perception that an unreasonably large number of Minister for Finance Exemptions have likely been granted. The Department of Finance notes that the SBDC is referring to 'exceptions' where a proposal falls into a category (as defined by Government, in the *Guidelines*) that does not require a RIS, in contrast to Minister for Finance, where a proposal that does not fall into one of those categories is granted a specific exemption. The Department for Finance further states that it has only approved a small number of exceptions. The ERA notes the exact number of these exceptions has not been publicly disclosed.

Productivity Commission 2012, *op. cit.* The Commission stated that 'There is scope to minimise potential abuse of exemptions by allowing applications only immediately after the requirement for a RIS has been triggered. At this stage, the responsible minister should decide between proceeding with the RIS or seeking an exemption — any genuine emergency circumstance should already be evident.

³³² Productivity Commission 2012, op. cit.

³³³ Department of Treasury, Western Australia, 2012, Response to the Productivity Commissions Draft Report 'Regulatory Impact Assessment: Benchmarking, Perth.

It further noted that removal of the exemption may act to 'discourage ill-considered commitments being made during election campaigns or implemented thereafter'.

This lack of scrutiny of election commitments is particularly concerning, given that of all Government decisions, these decisions are arguably the least likely to be evidence-based.

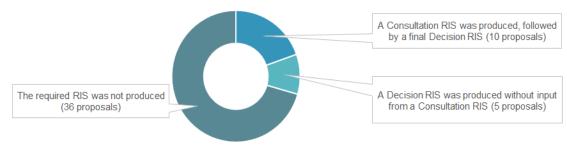
The ERA considers the availability of exemptions under the Guidelines introduces a significant weakness to the State's RIA process. The issues described above can be addressed by a revision of the Guidelines to modify the availability of exemptions to exceptional circumstances (subject to a clear definition of exceptional circumstances) removing the automatic exemption for election commitments, and limiting the timeframe during which exemptions may be granted. As discussed in the next section, requiring the Government to disclose the granting of, and reasons for, any exemptions will improve Government accountability for compliance with these provisions.

Transparency³³⁴ and accountability

Currently, disclosure and publication requirements of the RIA process are minimal, and are poorly enforced. The Guidelines require the RGU to publish an annual compliance report. However, in 2012 it was stated in Parliament that no such annual reports had been published during the three years of the RGU's operation. The RGU has advised the ERA that it does provide compliance reporting and related information to Parliament, but that this information is not released to the public.

In June 2012, the Treasurer was questioned in Parliament as to the number of RISs required and RISs completed since December 2009. ³³⁵ The Treasurer provided information from the Department of Treasury that 51 Government proposals were found to require a RIS during the period, due to likely significant negative impacts on business, consumers, or the economy. ³³⁶ However, he also stated that only 15 Decision RISs were actually prepared during the period, as shown in Figure 27. ³³⁷ A public consultation phase resulting in the publication of an earlier Consultation RIS appears to have been undertaken in 10 of these 15 cases. ³³⁸

Figure 27 Outcomes for proposals requiring a RIS due to likely significant negative impacts (1 Dec 2009 - 19 Jun 2012)



Source: Western Australian Hansard

The Government has published no information to explain why the 51 proposals determined to require a RIS between 2009 and 2012 only resulted in 15 Decision RISs being completed.

337 Ibid.

338 Ibid.

³³⁴ 'For RIA processes, transparency means the availability of, and ease of access to, information held by government on regulatory policy development and decision making. Transparency also means that government regulatory decisions are clearly articulated, the rationales for these decisions are fully explained, and the evidence on which the decisions are based is publicly accessible.' (Productivity Commission 2012, *op. cit.*)

³³⁵ Based on figures reported in Western Australian Hansard, Legislative Assembly, Tuesday, 19 June 2012.

³³⁶ *Ibid.*

Nor has it disclosed the nature or status of the 36 proposals for which no RIS has yet been delivered.

The ERA appreciates that the RIA process generally applies to complex proposals, and that the time between the request for a RIS and the implementation of legislation may be several years. However, in relation to the information shown in Figure 27, the ERA notes that these figures were provided by the Treasurer in mid-2012, relating to the 2009 – 2012 period, and that it has only been able to find evidence of the publication of one more Decision RIS and one more Consultation RIS since that time.

In the case of these 36 proposals for which no RIS has been delivered, there are a number of reasons why the RIS may not yet have been produced. These include circumstances where:

- the proposal is still undergoing the RIA process;
- a Minister for Finance Exemption from the RIA process was granted; or
- the proposal was withdrawn or rejected.

The Treasurer stated to Parliament that between 1 December 2009 and 19 June 2012, two proposals were completely rejected and two were partially rejected, and further, that 7 exemptions had been granted over the period (detail as to the nature of these proposals was not provided).³³⁹ He also stated that 20 proposals were in the process of being finalised, 7 were undergoing consultation, and 11 were under further review.³⁴⁰ Since, as noted above, the ERA can only find evidence of the publication of two more RIS documents since 19 June 2012, it is unclear as to what outcomes were reached for the other proposals.

Consequently, it appears that a significant number of proposals for which the RIA process had not yet been completed at 19 June 2012 may now have been undergoing the RIA process for between 18 months and 4 years.³⁴¹ However, due to a general lack of transparency, it is impossible to determine precisely how many proposals are still undergoing the RIA process at the present time, the subject of those proposals, nor how long the process has taken to date.

Given the importance of consultation in the relatively small number of instances where a RIS is required, it is concerning that a number of proposals may have been in progress for such a length of time with little disclosure of the nature of the proposal and no indication that a Consultation RIS on the subject will be forthcoming in the future. As discussed earlier in this section, and in Section 5.4.5, providing advanced notice of issues undergoing the RIA process is an important factor in sourcing meaningful stakeholder feedback.

The ERA has also identified weaknesses in the publication process for RIS documents. Currently the Guidelines require agencies to publish Decision RISs online at the conclusion of the decision-making process. However, an analysis of the availability of RIS documentation indicates that actual disclosures fall well below this standard, with a significant number of RISs being apparently unavailable on any Government website. The ERA considers this lack of publication is most likely to result from a lack of process and co-ordination, rather than active avoidance of disclosure on the part of agencies. In contrast, most jurisdictions assign responsibility for publication and disclosure of RIS

³³⁹ *Ibid.*

³⁴¹ That is, a period that falls between the length of time from 1 December 2009 to the present date approximately 4 years), and the date of the Treasurer's statements (being 19 June 2012) to the present date (slightly more than 18 months).

documents to the regulatory gatekeeping agency, removing the burden from individual departments, and providing a searchable central repository of documentation to the public.

To assess the adequacy of RIS disclosure in Western Australia, the ERA attempted to locate online copies of the 10 Consultation RIS and 15 Decision RIS documents referred to in Figure 27.³⁴² As indicated in Figure 28 no documents are available for 7 (40 per cent) of the 15 proposals that were subject to a RIS between 1 December 2009 and 19 June 2012. For a further 6 proposals, only the initial Consultation RIS document is available, providing no indication as to how the proposal may have changed as a result of public consultation. The ERA was only able to find one proposal for which both the Consultation RIS and Decision RIS were available.

Figure 28 Publication of RIS documents for proposals where a RIS was completed (1 Dec 2009 – 19 Jun 2012)343



Source: Western Australian Hansard, ERA analysis

The current lack of disclosure in the Western Australian RIA process results in a number of undesirable outcomes.

- It fails to inform parties impacted by a proposal, making it difficult to understand how submissions and feedback on the preliminary Consultation RIS (CRIS) have contributed to the final Decision RIS (DRIS).
- It prevents any comprehensive scrutiny of the Government's decision making process, and the quality of the evidence supporting Government decisions.
- It obscures cases where Government has proceeded with a decision, in spite of significant negative effects having been identified in the RIS.

Further, the lack of control given to the RGU over the publication of RIS-related information prevents it from effectively performing (and being seen to perform) its core gatekeeping functions. This makes it difficult for the RGU to provide the public with the information needed to hold decision-makers accountable for the quality and consequences of regulatory decisions.

To date, in spite of the disclosure requirements they contain, the Guidelines have not been effective in implementing the timely, accessible public release of RIS documentation, so as to avoid these undesirable outcomes. Best practice RIA specifically addresses this problem by requiring the publication and disclosure process to be managed centrally by the relevant gatekeeping authority, rather than managed on an *ad hoc* basis across various Government

³⁴² In doing this, the ERA used both a search engine (Google) and the wa.gov.au online search (a search covering all Government departments and agency sites). Advanced search skills and significant time were needed to locate even the 10 RIS documents that were found, of the 25 sought. While these 10 documents are technically available online, it would not be reasonable to describe these as 'accessible', given the difficulty in locating them.

³⁴³ While this relates to the period from December 2009 to June 2012, the ERA also took note of more recent publications. The level of disclosure does not appear to have increased over the past 18 months, as the ERA was only able to locate one more Consultation RIS and one more Decision RIS.

departments. Accordingly, the ERA has provided a list of specific recommendations at the end of this chapter, covering both the management of the disclosure process, and specific information that should be covered by that process.

The ERA considers that shortcomings discussed above can be effectively addressed by:

- improved specification of departmental responsibilities in the Guidelines, assigning clear ownership of the disclosure process to the RGU, and requiring any outstanding compliance reports to be released as soon as possible; and
- modifications to the Guidelines bringing the existing minimum disclosure requirements more closely into line with best practice.

5.4.5 Further opportunities for improvement

In addition to the issues of transparency and exemptions, there are a number of other opportunities for improvement.

Technical guidance

As noted by both the Productivity Commission³⁴⁴ and the Department of Treasury³⁴⁵, the Western Australian RIA process would be significantly enhanced by the provision of quidance to departments on quantitative approaches such as Cost Benefit Analysis, and by requiring more robust quantification of costs and benefits for a RIS to be deemed compliant. Similarly, quantification should also apply to the PIA process. Such guidance is already provided in the guidelines developed in other States, and it would require minimal work to adapt these to the Western Australian guidance material.

In-house skills

As discussed in Section 5.4.2, the ERA considers that key analytical skills such as Cost Benefit Analysis should be part of the core skill set maintained in all decision-making departments and agencies. Regardless of demands of the RIA process, evidence-based analysis is a precondition for quality decision-making, not an add-on to the decision-making process to be largely outsourced to consultants.

The provision of targeted training in Cost Benefit Analysis and other evidence-based techniques for decision-making and policy development would be a worthwhile investment, strengthening not only the RIA process, but the quality of Government policy across the board and reducing ongoing consulting expenses.

Independent oversight

Best practice regulatory gatekeeping indicates that it is most appropriate for RIAs to be administered by an independent organisation. However, in Western Australia this task is currently the responsibility of the Department of Finance, as it contains the RGU. This is a significant departure from best practice, and threatens the ability of the RGU to provide the public with the information necessary to Government accountable for regulatory decisions.

Establishing the RGU as an independent authority would address this issue directly, and provide an opportunity for the unit to further develop its capacity as an independent advisor on regulatory issues, in addition to its role as an issuer of Compliance and Non-Compliance Notices. However, the ERA considers that a similar result may be achieved by providing

345 Western Australian Department of Treasury 2012, Response from the Department of Treasury, Western Australia, to the Productivity Commission's Draft Report Regulatory Impact Analysis: Benchmarking, Perth.

³⁴⁴ Productivity Commission 2012, op. cit.

the RGU with a legal mandate and substantially increasing the transparency of its operations (as discussed in Section 5.4.4.2), in combination with the appointment of the Office of the Auditor General (**OAG**) as an independent overseer.³⁴⁶

The Productivity Commission has highlighted likely benefits of establishing a recurring review of the implementation and effectiveness of the RIA process, to be undertaken by the OAG, similar to the practice adopted in the United Kingdom.³⁴⁷ Establishment of a similar process in Western Australia has the potential to ensure the RIA process continues to be effectively and efficiently applied.

Consultation

Effective consultation is critical in avoiding the introduction of poor quality regulation. Although stakeholders often have a vested interest in a particular outcome, they will also live with the consequences of a regulatory decision on a day-to-day basis and therefore will be well placed to alert decision-makers as to likely problems. They may also be able to demonstrate the effects of similar decisions in the past, and propose innovative non-regulatory solutions.

Given the value to the Government in consulting with stakeholders, it is important to provide adequate time and notice to allow these parties to provide informative submissions. Western Australia does not currently specify a minimum consultation period upon the publication of a Consultation Regulation Impact Statement (**CRIS**). Nor do the Guidelines provide for a formal process to advise stakeholders ahead of time that a CRIS is to be published on a given topic. The consultation process in Western Australia would be significantly improved by the introduction of these provisions.

It should be noted that RISs are only conducted where the regulation is expected to have a significant negative impact. As discussed in Section 5.4.4.2, between 1 December 2009 and 19 June 2012, only 51 regulatory proposals were determined to have a significant negative impact. ³⁴⁸ Given that the consultation process only applies when this criterion is met, the ERA considers that it is important to ensure stakeholders have an adequate amount of time to respond.

5.4.6 Post-implementation review

Over the past two decades, Western Australia has made a great deal of progress in the area of legislative and post-implementation review. As a result of the Federal Government's National Competition Policy (**NCP**) the State Government committed to a wide-scale review, which, by 2010 had resulted in the review of 291 pieces of Western Australia legislation.³⁴⁹ The review brought about significant changes, with 25 per cent of those pieces of legislation being amended, 34 per cent consolidated into new Acts, and 13 per cent repealed.³⁵⁰ Since

³⁴⁶ The ERA also notes that in Queensland and Victoria, the two states where the RIA process is managed by an independent agency, that agency is also the State's independent regulator. (The Queensland Competition Authority, and the Victorian Competition and Efficiency Commission respectively.) While the ERA has a similar role to these agencies, it considers that administration of the RIA process may constitute a conflict of interest with a number of its other functions. Consequently, the ERA is not an appropriate body to administer the RIA process in Western Australia.

³⁴⁷ Productivity Commission 2012, op. cit.

³⁴⁸ Western Australian Hansard, 2012, op. cit.

³⁴⁹ Based on the ERA's analysis of current acts containing a review clause, and information provided in National Competition Council, Legislation Review Compendium, 6th (final) edition, Canberra.

³⁵⁰ *Ibid*.

this time, the Government also conducted a 'Repeal Week' in 2013, resulting in the removal of 43 pieces of obsolete legislation.³⁵¹

Most legislative reviews in the State are conducted by the department to which the legislation relates, under the direction of the relevant Minister. Where appropriate, departments engage consultants to provide expert advice, or reviews are performed by other Government agencies when specific expertise with a level of independence is deemed necessary. For instance, the *Auditor General Act 2006* was reviewed by Parliament's Joint Standing Committee on Audit, the *Legal Profession Act 2008* by the Attorney General, and the *Grain Marketing Act 2002* by the Economic Regulation Authority.

Scheduled reviews

Legislation passed in recent years has also been more likely to include a formal 'Review of Act' clause, mandating a timeframe for a once-off or recurring review of each Act. The NCP process resulted in the completion of many overdue reviews, and reviews for more recent legislation have generally been completed within a year of becoming due, resulting in the majority of Acts containing a review clause being currently compliant with review requirements.³⁵²

The ERA has noted several opportunities to continue to strengthen this culture of review, including the standardised application of post-implementation review to quasi-regulation (discussed further in Appendix 4), a 'catch-up' process for Acts overdue for a review, and default inclusion of a standard 'Review of Act' clause for all new legislation where such a clause is appropriate.³⁵³

The future integrity of the review process would be strengthened by the introduction of a policy specifying:

- criteria triggering the mandatory inclusion of a Review of Act clause in new legislation;
- criteria for selecting the most appropriate Government or external organisation to perform the review;
- criteria to guide legislators in identifying how frequently a review should be performed;
- standard wording for the Review of Act clause.

Best use of public sector expertise

While relatively straightforward reviews may be well conducted by the relevant department, there are a variety of agencies and commissions who may be better placed to conduct complex technical reviews as an independent inquiry. In Western Australia, such bodies include the Office of the Auditor General, and the Law Reform Commission, in addition to the ERA. Additionally, agencies that operate with a degree of independence are well suited to conduct reviews that are likely to be particularly political or contentious.

³⁵¹ Media Statement, 19 November 2013, accessed 7 April 2014 at http://www.mediastatements.wa.gov.au/pages/StatementDetails.aspx?listName=StatementsBarnett&StatId=7969

³⁵² That said, a small number of Acts with a review clause are yet to be reviewed as scheduled, a situation that should be remedied by the Government as soon as possible.

³⁵³ The development of a set of criteria defining legislation that should or should not be subject to a Review of Act clause is beyond the scope of this Inquiry. However, in implementing the ERA's recommendations on the inclusion of such clauses, it will be important to give consideration to the development of such criteria.

The quality of Western Australia's legislative review process will be enhanced by a shift away from the default referral of reviews to the line agencies responsible for the regulation, and increased use of other independent agencies and committees, where these have expert knowledge of the subject matter. Additionally, reviews conducted by departments can benefit from an increase in collaboration with agencies that can offer specialised skills and experience.

5.4.7 Recommendations

- 17. Replace the Regulatory Impact Assessment Guidelines for Western Australia with a statutory mandate establishing the Regulatory Impact Assessment process, and defining the roles and responsibilities of the Regulatory Gatekeeping Unit.
- 18. Establish a five-yearly recurring review of the implementation and effectiveness of the Regulatory Impact Assessment process, to be undertaken by the Office of the Auditor General.
- 19. Transfer responsibility for the central publication, but not preparation, of Regulatory Impact Assessment documentation to the Regulatory Gatekeeping Unit, including the timely publishing of:
 - a. Preliminary Impact Assessments;
 - b. Consultation and Decision Regulatory Impact Statements;
 - c. Compliance Notices and advice of non-compliance;
 - d. statements of the supporting rationale for any non-compliant proposals adopted by Government, to be provided to the Regulatory Gatekeeping Unit by the Government;
 - e. notices of exemptions (including the supporting reasons for approval of the exemption);
 - f. notices of any changes made between a Consultation Regulatory Impact Statement and the subsequent Decision Regulatory Impact Statement, to be included with the Decision Regulatory Impact Statement; and
 - g. a current list of all proposals undergoing Regulatory Impact Assessment, including the status of each, with the exception of cases where Cabinet-in-Confidence restrictions apply.
- 20. Amend the Guidelines (or their legislated replacement) to:
 - a. limit applications for exemptions, including Treasurer's exemptions, to the period immediately after the requirement for a Regulatory Impact Statement has been triggered;
 - b. limit the granting of exemptions to exceptional circumstances (such as emergency situations) where a clear public interest can be demonstrated:
 - c. remove the capacity for exemptions to be granted in the case of election commitments, except where exceptional circumstances apply; and
 - d. require timely publication of the reasons for all exemptions granted.
- 21. Establish a training and resourcing initiative to ensure that all Government departments involved in the preparation of Regulatory Impact Statements and Preliminary Impact Assessments have the capacity to conduct key analytical work (such as cost benefit analysis) in-house.

- 22. Mandate a 30-day minimum consultation period for Regulatory Impact Assessments, where consultation is undertaken as a part of the Regulatory Impact Assessment process.
- 23. Empower the Regulatory Gatekeeping Unit to develop and conduct postimplementation reviews for all non-legislative proposals that have been subject to a Regulatory Impact Assessment.
- 24. Direct the Regulatory Gatekeeping Unit to perform an audit of legislation overdue for review, and set a schedule for the review of these Acts.
- 25. Establish a review policy to be applied to all new legislation, specifying:
 - a. criteria triggering the mandatory inclusion of a Review of Act clause;
 - b. criteria for identifying the most appropriate Government or external organisation to perform the review;
 - c. criteria to guide legislators in identifying how frequently a review should be performed; and
 - d. standard wording for the Review of Act clause.

6 Review of State taxes

6.1 Introduction

State taxes are an important source of revenue for the Western Australian Government, estimated to account for a third of the Government's revenue sources in 2013/14. 354

However, all taxes impose costs on the economy despite being a necessary revenue source. These include:

- efficiency costs, which result from the distortion of decisions of taxpayers due to State taxes:
- compliance costs, which are the costs to businesses and individuals of meeting their obligations arising from the tax system; and
- administrative costs to the State Government of raising taxes.

Payroll tax, transfer duty and land tax are the most significant and broadest tax bases available to the State Government. The efficiency costs arising from payroll tax, residential transfer duty and land tax in Western Australia alone are significant and have been estimated to be in the order of \$1 billion per annum. Hence, it is necessary that any examination of microeconomic reform consider the efficiency effects of State taxes.

The ERA has sought to identify options for reforming the current system of State taxes in Western Australia to minimise these costs to the Western Australian economy. The ERA engaged Synergies Economic Consulting to assist it with its review of State taxes. Specifically, Synergies were engaged to: develop reform options to achieve a more modern tax system for the State; and conduct an analysis of the benefits and costs associated of recommended changes.

The remainder of this Chapter is structured as follows:

- an overview discussion of the need to reform State taxes;
- a brief discussion of the principles of good tax design;
- a summary of submissions received in response to the Discussion Paper on State taxes:
- a discussion of efficiency effects of the three main taxes in Western Australia being payroll tax, transfer duty and land tax; and

http://www.treasury.wa.gov.au/cms/uploadedFiles/StateTaxReview_InterimReport.pdf [Accessed 26 February 2014].

Inquiry into Microeconomic Reform in Western Australia: Draft Report

Western Australian Treasury, 2013, 2013/14 Economic and Fiscal Outlook, p. 83, accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/State_Budget/Budget_2013_14/bp3.pdf

Synergies calculated this figure by applying KPMG's estimates of the pre-reform average efficiency costs (22 cents for payroll tax, 31 cents for transfer duty and 6 cents for land tax) to 2012/13 collections of payroll tax (\$3,475.7 million), residential transfer duty (\$764.84 million) and land tax (\$568.2 million) to calculate the pre-reform efficiency cost. (Sources: KPMG Econtech, (2010), CGE Analysis of the Current Australian Tax System, p.5. Department of Treasury, 2014, 2013/14 Overview of State Taxes and Royalties, p. 2.) Synergies has assumed that residential transfer duty accounts for 46.25 per cent of total transfer duty collections of \$1,653.7 million in Western Australia in 2012/13. This is based upon communication with the Western Australian Treasury and the State Tax Review conducted in 2006. Government of Western Australia Department of Treasury and Finance (2006). State tax review – interim report, May 2006, p. 174. Available from:

 a discussion of options for reforming State taxes in Western Australia and the relative merits of these options.

6.2 Background

Australia's Federal system has limited Western Australia's opportunities to pursue genuine reform of State taxes. The Australian Constitution (and the High Court's interpretation of it) prevents States from levying taxes on certain bases (like the sale of goods) and the Federal Government effectively prevents State Governments from levying taxes on bases that they could legally apply taxes to by applying taxes to these bases itself (like the income tax base). 356

The consequence of this is that the State Governments are left with comparatively narrow and inefficient tax bases, rather than broad bases, which are more efficient for tax collection purposes. This in turn has some important practical implications for the State Government, businesses and individuals.

State tax collections can be quite volatile and unpredictable, contributing to difficulties experienced by State Government's in formulating budgets. The narrow taxes that the States can access limit the ability of the State Governments to raise sufficient revenue to meet their expenditure responsibilities. However, successive Western Australian Governments have compounded this problem by eroding the tax base through concessions and exemptions during times of prosperity.

The consequence is that State Governments are highly reliant on the Federal Government for funding. Commonwealth grants are expected to account for 31 per cent of Western Australia's total revenues in 2013/14.³⁵⁷ This causes several issues including; decreased accountability to taxpayers because of lack of clarity about the level of government responsible for service delivery; budget uncertainty for State governments; and decisions made that may not align with community expectations because of the centralisation of expenditure decisions with the Commonwealth.³⁵⁸

Tax rates on narrow tax bases need to be higher than tax rates on broad tax bases in order to collect the same amount of revenue. The consequence of the combination of high rates and a large number of exempt activities is that businesses have the incentive and the opportunity to invest time and effort into activities to avoid or minimise the amount of tax they pay. The following are examples of avenues businesses have to reduce their payroll tax liabilities.

 Attempting to engage employees as independent contractors (because payments made to legitimate independent contractors are not subject to payroll tax) to reduce payroll tax and other payroll related liabilities (such as superannuation and workers' compensation). The pay-roll tax legislation includes a specific anti-avoidance provision that enables the Commissioner of State Revenue to tax arrangements that are effectively one of employer and employee.

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³⁵⁶ Department of Treasury and Finance, 2006, Discussion Paper on Commonwealth-State Relations, accessed from: http://www.treasury.wa.gov.au/cms/uploadedFiles/commstate_relations_report_march2006.pdf on 31 March 2014, p. 12

³⁵⁷ Western Australian Treasury, 2013, 2013/14 Budget Paper No. 3 Economic and Fiscal Outlook, p. 83.

³⁵⁸ Department of Treasury and Finance, 2006, Discussion Paper on Commonwealth-State Relations, accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/commstate_relations_report_march2006.pdf on 31 March 2014, p. 14.

- Sending parts of their operations off-shore, where wages and tax liabilities are lower.
 The Chamber of Commerce and Industry advise that some of its professional
 services members are hiring staff in South East Asian countries to complete work
 that could otherwise be done in Western Australia as a way of reducing staff
 numbers and not increasing their payroll tax obligations.³⁵⁹
- Deciding not to employ additional staff to avoid exceeding the exemption threshold for payroll tax and finding alternative means to grow their businesses (such as greater use of capital) or simply not growing the business at all.

Such behaviour, as well as reducing State tax collections, impedes the growth of the State economy, by diverting activity to other jurisdictions, dampening overall activity and acting as a distraction to business owners (as the time and effort spent on minimising tax liabilities comes at a cost of other more productive activities, such as growing businesses).

Inefficient taxes also distort the behaviour of individuals. The most obvious implications for individuals arise from transfer duty on the sale of residences. Transfer duty is a significant impost with a maximum rate of 5.15 per cent³⁶⁰ applied to the cost of buying a dwelling in Western Australia. Transfer duty may influence home-owners not to move house when it would be desirable for them to do so in the absence of transfer duty. This can have a number of negative effects on individuals, State tax collections and the economy more generally including:

- acting as an impediment to labour mobility for example, an individual may choose
 not to relocate for work because of the cost of transfer duty associated with buying
 a new home; and
- inefficient use of housing stock people may stay in particular dwellings when it no longer suits their needs and thereby prevent other people from accessing a dwelling of a suitable size. For example, empty-nesters may not downsize their homes and people with growing families may decide to extend their home rather than moving to an established dwelling of an appropriate size.

In subsequent sections of this chapter, the ERA has assessed several options for reforming State taxes, recognising the inefficiencies associated with the current system. The ERA has primarily focussed on reform options that can be achieved by the Western Australian Government acting alone.

However, as noted by the Chamber of Commerce and Industry, the ability to achieve meaningful reform will require the Commonwealth and State tax systems to be addressed as one regime to address the imbalance between the revenue raising capacity and spending responsibilities of the Commonwealth and State Governments.

The ERA agrees that the ideal outcome would be wholesale reform of revenue raising capacities and expenditure responsibilities of all three levels of Australian Government (being Commonwealth, State and Territory and local governments) to ensure that there is broad alignment between revenues and expenditures at each level of government. The Goods and Services Tax (**GST**) reforms of the early 2000's were a partial attempt at reforming Commonwealth-State financial relations, but have done little to reduce the overall

³⁵⁹ Communication between CCIWA and ERA, dated 18 March 2014.

Josephartment of Treasury, 2014, 2013/14 Overview of State Taxes and Royalties, p. 10 accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/_Treasury/Publications/2013-14_overview_of_state_taxes_and_royalties.pdf

reliance of the States on the Commonwealth. Further reforms of this nature would be very difficult to achieve, and cannot happen through the efforts of one State acting alone.³⁶¹

Even if State taxes are reformed in the absence of reform to Commonwealth-State financial relations, it would still be best to act in conjunction with other States and Territories to avoid any unintended cross-border effects. For example, reforms to payroll tax in Western Australia may create further complexities for businesses operating in Western Australia and other Australian States and Territories.

6.3 Minimising the efficiency, compliance and administration costs of taxes

The efficiency, compliance and administrative costs of taxes can be minimised by applying the core principles of good tax design, which stipulate that taxes should be efficient and simple.

In general, an efficient tax is one that minimises changes in behaviour (including to work, save, invest or consume).³⁶² The efficiency cost of taxes are reduced when the tax base is kept broad (that is, there are few concessions and exemptions), which in turn allows the tax rate to be kept low while still raising sufficient revenue. The combination of the broad base and the low rate reduces the incentives of taxpayers to change their behaviour in order to avoid taxes.

Efficiency costs are also reduced when the tax burden is greatest on immobile tax bases and lowest on more mobile tax bases. This helps to ensure that the tax base does not shift to jurisdictions with lower tax rates.

KPMG Econtech were engaged by the Commonwealth Treasury to estimate the efficiency costs of taxes (including State taxes) as part of the Henry Review of Taxation. KPMG Econtech used Computable General Equilibrium analysis to estimate:

- the average efficiency cost which is the welfare loss per dollar of tax revenue currently raised; and
- the marginal efficiency costs which is the additional loss in welfare for an additional dollar of tax revenue raised.

KPMG Econtech's estimates of the efficiency costs of taxes are influenced by the mobility of the tax base and the narrowness of the tax base. The efficiency costs estimated by KPMG Econtech for payroll tax, transfer duty and land tax are discussed later in this Chapter.

Taxes should be as simple as possible, as simpler taxes result in lower compliance and administration costs for taxpayers, and make it easier for taxpayers to pay the correct amount. This, in turn, makes it easier for the Government to collect the revenue owed.³⁶⁴

³⁶¹ The Commonwealth Government is in the process of developing white papers on taxation reform and reform of the Federation. This work may be of assistance in resolving these issues.

³⁶² The main caveat to this being taxes that are deliberately designed to change behaviour (for example, when externalities are present).

³⁶³ KPMG Econtech, (2010), CGE Analysis of the Current Australian Tax System, p.2.

³⁶⁴ Productivity Commission, 1996, Stocktake of progress in microeconomic reform.

Tax compliance costs are those costs that are "incurred by taxpayers, or third parties such as businesses, in meeting the requirements imposed on them in complying with a given structure and level of tax". ³⁶⁵ These include the labour costs associated with meeting tax obligations (for example, filling out tax returns) and the cost of hiring tax professionals.

Administrative costs are the "costs incurred by (mainly) public sector agents in order to administer the tax-benefit system". This primarily consists of the costs associated with running and maintaining the tax system, and includes such things as public education on tax issues, processing tax returns, conducting tax assessments and collecting taxes.

6.4 Western Australian taxes

In developing options for reforming taxes in Western Australia, the ERA has focussed on payroll tax, residential transfer duty and land tax. These are three of the most significant and broadest tax bases available to the State Government, which is reflected in the fact that these three taxes account for 58 per cent of Western Australia's tax collections in 2012/13.³⁶⁷

Other taxes collected by the Western Australian Government include insurance duty, vehicle licence duty, landholder duty and gambling taxes. Significant reforms have already been made to small, inefficient State taxes, particularly as part of the GST reforms of the early-2000s. Further reforms focussed on minor State taxes are unlikely to yield significant efficiency gains.

Each of the three main State taxes are described in some detail in the report prepared by Synergies. A high level overview of each tax and an assessment of its efficiency is provided in the following sections.

6.4.1 Payroll tax

Payroll tax is levied on wages paid or payable by an employer, when its total Australia-wide wages exceed \$750,000 per annum. A rate of 5.5 per cent is levied on each dollar above the tax-free threshold.³⁶⁸

Payroll tax has the potential to be a highly efficient tax if it is applied to a broad base and at a low rate. This is because the base (labour) is relatively immobile and cannot relocate to avoid the burden of payroll tax.

However, the efficiency of payroll tax is reduced because of the high exemption threshold (which results in a large number of small businesses being exempt from the tax base) and the number of concessions and exemptions, which together equal 57 per cent of the

³⁶⁵ Sandford, C. Godwin, M. and Hardwick, P., 1989, Administrative and Compliance Costs of Taxation, Bath: Fiscal Publications, page 10.

³⁶⁶ Allers, M., 1994, Administrative and Compliance Costs of Taxation and Public Transfers in the Netherlands, Groningen: Wolters-Noordhoff, Page 19.

³⁶⁷ Assumes that residential transfer duty accounts for 46.25 per cent of transfer duty. Synergies Economic Consulting, 2014, Review of Western Australia's tax system, A report for the Economic Regulation Authority, p. 38. Department of Treasury, 2014, 2013/14 Overview of State Taxes and Royalties, p.2 accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/_Treasury/Publications/2013-14_overview_of_state_taxes_and_royalties.pdf

³⁶⁸ Department of Treasury, 2014, 2013/14 Overview of State Taxes and Royalties, p.2 accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/_Treasury/Publications/2013-14_overview_of_state_taxes_and_royalties.pdf

revenue collected.³⁶⁹ There are around 12,000 businesses paying payroll tax in Western Australia out of a total potential number of taxpayers of 220,000.³⁷⁰

The current form of payroll tax in Western Australia distorts economic decisions.

- The exemption threshold may provide incentives for businesses to remain small. This distortion is amplified by the necessity of using a higher marginal rate to achieve revenue targets.
- The narrow-base of payroll tax may distort the composition of employment, as some workers are likely to leave businesses that pass on the additional cost to the workers and seek higher wages in exempt businesses. Exemptions therefore introduce biases into the allocation of labour.
- Payroll tax effectively increases the cost of labour to businesses which affect the optimal mix of factors of production, thus producing an efficiency loss to the economy.
- The effective decrease in real wage encourages workers to substitute labour for leisure (although this would be true even for a comprehensive payroll tax).

Nevertheless, there are some advantages arising from the current payroll tax exemptions.

- The exemption thresholds reduces the compliance burden on small businesses that would arise from remitting payroll tax by exempting businesses with payrolls under \$750,000 per annum.
- Exemptions and concessions for particular types of employment can be used as a policy measure to encourage (or at least not discourage) those types of employment. For example, the Chamber of Minerals and Energy and the Chamber of Commerce and Industry noted in their submission the importance of payroll tax exemptions for wages of apprentices and trainees under approved training contracts.

However, the latter of these can also be achieved in more transparent ways that do not distort the tax base, such as the payment of direct grants to employers who employ workers in certain groups.

The marginal efficiency cost and average efficiency cost of payroll tax in its current form were estimated for the Henry Review of Taxation to be 41 cents and 22 cents per dollar of revenue raised respectively. This means an additional dollar raised in payroll tax imposes a loss of efficiency (the value of economic production to households) of 41 cents. Moreover, the total cost imposed on households is around one-fifth of the revenue collected of around \$760 million per year.

Based upon 2012/13 estimated actuals of payroll tax collections of \$3,477 million and foregone revenue of \$1,968 million from thresholds and exemptions. Source: Government of Western Australia (2013). Budget Paper 2013-14, economic and fiscal outlook, budget paper no. 3, p. 90 and 116. Available from: http://www.treasury.wa.gov.au/cms/uploadedFiles/State_Budget/Budget_2013_14/bp3.pdf [Accessed 3 February 2014]

Based on analysis performed by Synergies Economic Consulting. The current number of taxpayers (around 12,000) is based on data as at November 2013 provided by Treasury and represents the number of taxable entities in WA. The number of potential taxpayers (around 220,000) is the number of operating businesses as at June 2012 based on ABS data, catalogue no. 8165.0 *Counts of Australian Businesses, including Entries and Exits*, Jun 2009 to Jun 2013

³⁷¹ KPMG Econtech, (2010), CGE Analysis of the Current Australian Tax System, p. 5.

³⁷² This has been calculated by applying the estimated average efficiency cost of payroll tax of 22 cents per dollar to 2012/13 collections of payroll tax in Western Australia of \$3,475 million.

However, modelling by KPMG indicates that there is considerable potential for the efficiency of payroll tax to be improved. A revenue neutral, uniform payroll tax has an average excess burden of 13 cents.³⁷³ This implies a total efficiency cost of \$450 million, compared to the \$760 million cost of the current payroll tax regime.

6.4.2 Transfer duty

Transfer duty is a form of property tax. This tax is levied on the purchaser of a dutiable property for the transfer of property as prescribed in the *Duties Act 2008*. Transfer Duty applies to four types of property acquisition: businesses; residential property; interest in a partnership; and leases.

In this Draft Report, the ERA has focused on transfer duty levied on residential conveyances. Synergies estimates that transfer duties on residential conveyance account for 46.25 per cent of total transfer duty collections in Western Australia. This is based on data from State Tax Review undertaken in 2006 that owner-occupier purchasers amount to around 37 per cent of the conveyance duty base. RelWA data also suggests that around 20 per cent of purchases of residential properties are for investment purposes. Extrapolating from this information would mean that investor purchases amount to 9.25 per cent of the total conveyance duty base, which, when added to 37 per cent equals 46.25 per cent. The strange of the total conveyance duty base, which, when added to 37 per cent equals 46.25 per cent.

Transfer duty is considered inefficient because people can avoid paying transfer duty by changing their behaviour. In particular, transfer duty discourages people from buying and selling properties in order to avoid transfer duty. This has flow on consequences that may have an economic cost. For example, households may:

- elect to accept the cost and inconvenience associated with extending and renovating their home rather than moving to a larger dwelling;
- choose not to downsize their dwelling and thereby occupy a larger dwelling than they require, to the detriment of other families that may require a larger dwelling; or
- may elect not to relocate for work.

The marginal and average efficiency cost of conveyancing duties were estimated by KPMG Econtech to be 34 cents and 31 cents per dollar of tax revenue raised. The should be noted that these estimates were for total conveyancing duty, including both residential and commercial. KPMG Econtech notes that these efficiency figures may underestimate the efficiency costs because of the difficulties of modelling the distortion between renting and buying a house. The same stress of the difficulties of modelling the distortion between renting and buying a house.

³⁷³ KPMG Econtech, (2010), CGE Analysis of the Current Australian Tax System, p. 63.

³⁷⁴ Government of Western Australia Department of Treasury and Finance (2006) State tax review – interim report, May 2006, p. 174. Available from: http://www.treasury.wa.gov.au/cms/uploadedFiles/StateTaxReview_InterimReport.pdf [Accessed 26 February

³⁷⁵ Based on advice from the Western Australia Treasury.

³⁷⁶ Synergies Economic Consulting, 2014, Review of Western Australia's tax system, A report for the Economic Regulation Authority, p. 38.

³⁷⁷ KPMG Econtech, (2010), CGE Analysis of the Current Australian Tax System, p. 5.

³⁷⁸ KPMG Econtech, (2010), CGE Analysis of the Current Australian Tax System, p. 6.

Applying an average efficiency cost of 31 cents to estimated residential transfer duty collections in 2012/13 implies a total efficiency cost of \$237 million per annum.³⁷⁹

The marginal economic cost and the average economic costs for transfer duty are large and similar. The implications of this are that transfer duty is inefficient and that removing exemptions and concessions will do little to improve the efficiency of stamp duty.

6.4.3 Land tax

Land tax is levied on the aggregate unimproved value of land using a progressive rate scale.

Land tax has the potential to be a highly efficient and stable tax because the tax base (land) is immobile, preventing individuals from taking action to avoid the tax. The immobile and fixed supply of land theoretically limits the possibility of the tax being passed on to other groups within the economy and instead forces the incidence of the tax to fall on existing landowners. (However, it should be noted landowners will pass on land tax costs to users of land, when there is a high demand for property.)

Land tax does not have an adverse effect on investment in property. This is because land tax is applied only to the unimproved value of the land and not any buildings or other improvements to the property.³⁸¹

In practice, land tax is not as efficient as it could be because of the land value exemption threshold, as well as exemptions and concessions applying to different land uses (affecting their relative attractiveness). In some cases, the Government has made a deliberate policy decision to grant exemptions for particular land-intensive purposes in order to ensure that such uses are not discouraged. Notable examples include primary production, caravan parks and bushland covered by a conservation covenant.

KPMG has estimated the marginal efficiency cost and average efficiency cost of land tax to be 8 cents and 6 cents per dollar of tax revenue respectively. KPMG Econtech note that these efficiency costs may be underestimated because the modelling did not take into account the progressive rate structure and exemption thresholds and potential variability of land tax paid by industry. Representations are structured and exemption thresholds and potential variability of land tax paid by industry.

Applying an average efficiency cost of 6 cents to the 2012/13 land tax collections of \$568.2 million³⁸⁴ implies a total efficiency cost of \$34 million per annum.

A uniform land tax does not distort decision and therefore has an average efficiency cost of zero. 385 Compared to other taxes the efficiency costs are small, which is why a broad based land tax is an essential part of any efficient tax system.

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³⁷⁹ This has been calculated by applying the estimated average efficiency cost of transfer duty of 31 cents per dollar to the 46.25 per cent share of total transfer duty collections of \$1,653.7 million in Western Australia in 2012/13, which is estimated to represent collections on residential conveyances. Synergies Economic Consulting, 2014, Review of Western Australia's tax system, A report for the Economic Regulation Authority.

³⁸⁰ Commonwealth Treasury. (2009). p. 48.

³⁸¹ Commonwealth Treasury. (2009). p. 247.

³⁸² KPMG Econtech, (2010), CGE Analysis of the Current Australian Tax System, Final Report, 26 March 2010, p. 5.

³⁸³ KPMG Econtech, (2010), CGE Analysis of the Current Australian Tax System, Final Report, 26 March 2010, p. 6.

³⁸⁴ Department of Treasury, 2014, 2013/14 Overview of State Taxes and Royalties, p. 2 accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/_Treasury/Publications/2013-14_overview_of_state_taxes_and_royalties.pdf

³⁸⁵ KPMG Econtech, (2010), CGE Analysis of the Current Australian Tax System, Final Report, 26 March 2010, p.53.

6.5 Submissions

6.5.1 Chamber of Commerce and Industry

The Chamber of Commerce and Industry (**CCIWA**) considers that a program of genuine state tax reform can have a significant impact on the efficiency and flexibility of the Western Australian economy.

The CCIWA considers that there is scope for reform in the short term (despite limitations imposed by the Federal system of government) and recommends several short-term reforms to State taxes. The CCIWA considers that payroll tax is a priority area of reform to improve Western Australia's tax competitiveness. CCIWA recommends lifting the exemption threshold to \$1.5 million to address the bracket creep from rising wages over the past decade and to index the threshold to ensure these issues do not arise thereafter. CCIWA also recommends reducing the rate of payroll tax payable to the national weighted average (4.95 per cent) to bring the state in line with other states.

CCIWA also recommends simplifying the rates and thresholds for land tax and transfer duty and incorporating Metropolitan Region Improvement Tax (**MRIT**) into the land tax base.

CCIWA also considers that a more comprehensive tax reform agenda is an important objective over the longer term to provide the State Government with a much more stable and predictable source of revenue, while making the overall tax base more efficient.

In the long term, CCIWA recommends that the feasibility of replacing transfer duty with a broad-based land tax be investigated reflecting that land tax is a more efficient and stable tax base due to the immobile nature of land.

CCIWA considers that the abolition of payroll tax is an important objective over the longer term and suggests that it would result in higher rates of employment. CCIWA also recognises that while it may be economically efficient to have a payroll tax system with as broad a base as possible, the benefits of maintaining the existing payroll tax exemptions are likely to outweigh any administrative costs, and as a result, the exemptions should be maintained. For example, CCIWA note that:

- exemptions on the first two years of wages of people with disabilities and Indigenous Australians provide incentives to employers to employ people from these groups, which remain some of the most under-represented groups in the work force; and
- exemptions on the wages of apprentices and trainees reduces the upfront cost to
 the employer of sending an employee on training, or makes the employment of an
 apprentice more economic. The exemption also reflects that in many instances,
 employees on training may be less productive than if they were not.

6.5.2 Chamber of Minerals and Energy

The Chamber of Minerals and Energy (**CME**) supports genuine reform of the Australian taxation system. CME recommends that a systematic approach be taken to significant tax reforms involving a green paper, a white paper and an exposure draft.

CME considers government fiscal policy must not adversely impact the Australian resources sector's international competitiveness.

CME acknowledges that payroll tax and land tax can be efficient forms of taxation, but exemptions and thresholds distort behaviours and create inefficiencies. However, the Chamber of Minerals and Energy stated in its submission to the Discussion Paper that:

"Broadening the payroll tax or land tax bases to offset a decrease in transfer duty rates would not be viewed as genuine taxation reform nor would it necessarily remove any of the inefficiencies it is seeking to improve.

Fundamentally, taxes should be easily administered and monitored, simple, predictable and equitable. In order to have state based taxes that meet these principles without having significant detrimental impact on the state's revenue base, there needs to be genuine taxation reform at both a state and federal level to address this national issue with a focus on broadening the taxation base and appropriately distributing the GST so Western Australia is best able to manage its economy."

Payroll tax exemptions for apprenticeships and traineeships are critical to industries in the Western Australian economy that have a heavy reliance on such employees.

Stamp duty on the purchase of properties discourages turnover and potentially restricts mobility, which has been a key concern of Western Australian resources businesses. CME considers that the land-rich provisions³⁸⁶ in the stamp duty legislation create inequities for mining companies in Western Australia. CME recommends these provisions be brought into line with other States (for example by increasing the threshold from \$1 million and excluding exploration tenements from the definition of land).

6.5.3 Master Builders Association

The Master Builders Association (**MBA**) does not support a broadening of payroll tax in any way as it is a penalty tax on employing people. The MBA considers that the payroll tax should be abolished but recognises this is unrealistic in the absence of a greater and fairer return of GST to the state.

Replacing land transfer tax with payroll tax is a complex issue and should not be dealt with in a truncated time line. A Risk Impact Statement is essential in any consideration of this issue.

MBA sees substantial commercial and economic merit in moving from the current stamp duty-based to a broad land tax based system of property taxation. However, the MBA's support for such a transition is conditional on a number of factors including any legislative changes to increase reliance on a broadly based land tax be: directly and formally linked to countervailing reductions in the stamp duties on impacted property; and, occur in a progressive manner over a reasonable transitional period, with the 'grandfathering' of existing stamp duty/land tax payments on any given property asset.

6.5.4 Small Business Development Corporation

The Small Business Development Corporation (**SBDC**) strongly disagrees with the notion that the tax system could be made more efficient by redistributing liability from transfer duty to payroll tax.

Landholder duty is imposed where a relevant acquisition occurs in a corporation or unit trust scheme, and that corporation or unit trust scheme directly or indirectly has an entitlement to Western Australian land valued at \$2 million or more. Landholder duty is raised under the provisions of Chapter 3 of the Duties Act 2008 ('Duties Act'). Source: Office of State Revenue, 2008, Landholder Duty Fact Sheet, accessed from https://www.finance.wa.gov.au/cms/uploadedFiles/_State_Revenue/Duties/Landholder_Duty.pdf on 24 March 2014.

The current payroll tax system has a significant and negative impact on small business growth and productivity in Western Australia, affecting the State's competitiveness compared to other jurisdictions. Payroll tax is inequitable as it heavily effects businesses involved in labour intensive industries and does not take into consideration a business's ability to pay.

The Government's commitments to reducing the payroll tax liabilities of small businesses through incremental increases to the threshold are welcome. However, further reforms are needed given the disparity in the planned increase to the threshold and the escalation of labour costs over the last decade.

The SBDC believes there is a need to reduce the number of small businesses currently liable for payroll tax in order to stimulate growth in the sector and therefore boost the Western Australian economy.

6.6 Options for reforming State taxes

The ERA engaged Synergies to identify options for reforming the Western Australian taxation system that would reduce the efficiency costs of the taxation system. In providing guidance to Synergies on the development of options for reform, the ERA indicated that the package of reforms should:

- be revenue neutral;
- conform to the principles of good tax design;
- be able to be implemented unilaterally by the Western Australian Government;
- focus on payroll tax, transfer duty and land tax; and
- should be significant in nature (that is, not simple 'housekeeping' changes that involve altering individual rates and concessions and exemptions).

Synergies identified three strategies for reforming State taxes:

- Option 1 broaden the base and lower the rate of all three taxes to increase their efficiency;
- Option 2 increase reliance on efficient taxes and reduce or abolish the inefficient taxes; and
- **Option 3** introduce a new broad based tax (specifically a State-based income tax) to replace or reduce the rate of less efficient taxes.

The Option 3 involves introducing a State-based income tax; abolishing transfer duty and payroll tax; and removing all concessions on land tax and increasing the rate (while retaining the progressive scale). It is assumed that the State-based income tax would rely on the Commonwealth income tax administration system to avoid duplicating collection and administration systems.

The ERA considers that implementation of a State-based income tax is likely to be prohibitively difficult. Introducing a State-base income tax would require the cooperation of the Commonwealth Government, particularly if it were to rely on the Commonwealth administrative systems. The Commonwealth Government is unlikely to be willing to cooperate to apply a new tax on Western Australians from which it would receive no financial benefits.

Furthermore, extending the GST is a more logical option for reform if Commonwealth Government cooperation is required, as there is already legislation and other arrangements in place for the Commonwealth to collect this tax and disburse it to the States.³⁸⁷ Consumption taxes have been found to be more efficient than income taxes.³⁸⁸

For these reasons, Option 3 is not given further consideration in this chapter. Option 1 and Option 2 are discussed in more detail below.

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³⁸⁷ It should be noted that this option represents revenue sharing, rather than tax base sharing. The fact that revenue sharing reduces the autonomy and flexibility of the State's finances should be taken into account.

³⁸⁸ A one per cent revenue neutral shift from income tax to consumption tax is estimated to result a 0.74 per cent increase in Gross Domestic Product in the long term. Source: Johansson, A, Heady, C, Arnold, J, Brys, B & Vartia, L. (2008). Tax and economic growth, OECD Economic Department Working Paper no. 620, OECD, Paris.

6.6.1 Broaden the base and lower the rate of all three taxes

The first tax reform option identified by Synergies involves:

- broadening the base of payroll tax, transfer duty and land tax by removing all concessions and exemptions identified by the Western Australian Treasury in its Statement of Tax Expenditures; and
- lowering the rate for payroll tax, transfer duty and land tax, such that the revenue raised by each tax stays the same.

The following tables include summary statistics of the pre- and post-tax changes related to Option 1, including: gross revenue³⁸⁹, net revenue, proportion of tax revenue, size of tax base, tax rate, number of tax payers and compliance costs.

The assumptions underpinning the calculations in the following tables on Option 1 and in the subsequent section on Option 2 are set out in Appendix A of the Synergies report. By way of summary, the key assumptions are as follows:

- Revenue collected under the base case (that is, pre-reform) is 2012/13 tax collections from the 2013/14 Overview of State Taxes published by the Treasury of Western Australia.
- Transfer duty on residential conveyances is assumed to be 46.25 per cent of total transfer duty collections.
- The tax revenue foregone from major exemptions and other concessions that depart from the general Payroll Tax, Transfer Duty, Land Tax and MRIT has been obtained from the Tax Expenditure Statement in the 2013-14 Budget (budget paper no. 3) published by The Government of Western Australia.³⁹⁰
- Data on residential property sales in 2012-13 was obtained from the Real Estate Institute of Western Australia (REIWA). The data lists the number of transactions undertaken and the total value of the transactions within each bracket of the rate scale for residential Transfer Duty.
- Landgate provided data on the number of valuation entities in Western Australia, along with the total value of land within the relevant brackets of the Land Tax rate scale.

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³⁸⁹ In removing exemptions and concessions, tax will be collected from entities that were previously not liable for tax. In the instance of Payroll Tax and Land Tax, certain entities that will be subject to tax under the reform options are financed by the State Government. For Payroll Tax these include public hospitals and State Government departments. For Land Tax these include public charitable or benevolent institutions.

Gross revenue from the reform options include tax revenue collected from the above entities, while net revenue excludes this revenue.

Certain exemptions may include both public and private entities (for example, the schools and colleges exemption from Payroll Tax). Revenue collected from these categories has been included in the net revenue.

³⁹⁰ The Government of Western Australia (2013) 2013-14 Budget, economic and fiscal outlook, budget paper no. 3, 8 August 2013, p. 116.

Table 19 Broadening the tax bases and lowering the rate - indicative summary of change (based on 2012/13 figures) 391

		Pre- change			Post- change	
	Payroll Tax	Residential Transfer Duty	Land Tax	Payroll Tax	Residential Transfer Duty	Land Tax
Gross Revenue (\$m)	\$3,475.70	\$764.84	\$568.20	\$3,854.40	\$764.84	\$580.20
Net Revenue (\$m)	\$3,475.70	\$764.84	\$568.20	\$3,475.70	\$764.84	\$568.20
Proportion of tax revenue	41.70%	9.18%	6.82%	41.70%	9.18%	6.82%
Size of tax base (\$m)	\$63,195	n/a	n/a	\$98,985	\$33,941	\$380,302
Tax rate	5.50%	Table 20	Table 21	1.91%	Table 20	Table 21
Number of taxpayers	12,178	n/a	n/a	221,956	71,611	988,549

Table 20 Residential Transfer Duty rate scale

Value of dutiable property	Rate (Pre-change)	Rate (Post-change)
\$0 to \$120,000	1.90%	0.90%
\$120,001 to \$150,000	2.85%	1.34%
\$150,001 to \$360,000	3.80%	1.79%
\$360,001 to \$725,000	4.75%	2.24%
Above \$725,000	5.15%	2.43%

Table 21 Land Tax rate scale

Value of land	Rate (Pre-change)	Rate (Post-change)
0 – 300,000	0.00%	0.00%
300,001 – 1,000,000	0.10%	0.02%
1,000,001 – 2,200,000	0.53%	0.12%
2,200,001 – 5,500,000	1.37%	0.32%
5,500,001 – 11,000,000	1.64%	0.38%
Over 11,000,000	2.43%	0.57%

Synergies estimates that the efficiency benefit of implementing Option 1 in Western Australia could be in the order of \$460 million per annum.³⁹²

A summary table comparing payroll tax, transfer duty and land tax liabilities under the existing tax regime and under Option 1 and Option 2 is included in Section 6.6.3 below.

³⁹¹ Note that gross revenue is higher than net revenue, since the removal of exemptions and concessions will result in certain public entities (for example, hospitals and State Government departments) paying tax.

Synergies calculated this figure by first applying KPMG's estimates of the pre-reform average efficiency costs to 2012/13 collections of payroll tax (22 cents), transfer duty (31 cents) and land tax (6 cents) as sourced from page 2 of Overview of State Taxes and Royalties to calculate the pre-reform efficiency cost. Synergies then applied KPMG's post-reform estimates of average efficiency costs for payroll tax (13 cents), transfer duty (15.5 cents, being half of 31 cents) and land tax (0 cents) to the post-reform collections. Synergies took the difference between these two amounts as the efficiency benefit of introducing Option 1.

The key benefits of this option are that it would improve the efficiency of the Western Australian tax system. The removal of concessions and exemptions and the lowering of the tax rates will reduce the distortions to decision making in labour hire, land use and land transfers.

The key disadvantages of this option are that:

- transfer duty, which is the least efficient of the three state taxes, is retained; and
- the removal of the exemptions and concessions result in a considerable number of taxpayers being brought into the tax bases for payroll tax and land tax, with associated compliance and administration costs.

Increasing the reliance on efficient taxes will mean that individuals and businesses that are currently exempt from paying payroll tax and land tax will be drawn into tax bases. Existing exemptions for:

- Payroll tax include: charities, religious organisations, government departments, hospital, schools and public benevolent institutions; the wages of apprentices and trainees employed under approved training contracts; the wages paid for new employees with a disability in their first two years of employment (subject to certain eligibility criteria); parental leave, volunteer emergency services work and certain prescribed fringe benefits paid by employers to employees in remote areas. In addition, removing or lowering the exemption threshold for payroll tax will draw a large number of small businesses into the base.
- Land tax include: principal places of residence and land used in primary production (such as mining and agriculture), caravan parks, land owned by religious bodies, charitable or not for profit organisations, retirement villages, public hospitals, universities and other educational institutions. Concessions are available to primary production purposes that do not meet the income test for a full exemption and for property developers.

The value of these tax concessions is significant. The Department of Treasury estimates that significant exemptions for payroll tax amounted to \$1,968 million in 2012/13. Of this, the tax-free threshold accounted for \$1,236 million in 2012/13.³⁹³ The Department of Treasury also estimates that exemption from land tax (including Metropolitan Region Improvement Tax) amounted to \$393 million in 2012/13.³⁹⁴

To varying degrees, the existing thresholds, concessions and exemptions are likely to be perceived as fair and reasonable by the general public and the business community. This has been reinforced by several submissions to the Discussion Paper on tax reform. For example:

- CCIWA and SBDC support increasing the exemption threshold for payroll tax;
- CME has specifically stated that this reform option (that is, broadening the payroll tax or land tax bases to offset a decrease in transfer duty rates) would not be viewed as genuine taxation reform.

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³⁹³ Significant exemptions include the tax-free threshold, schools and colleges exemption, public hospitals exemption, apprentices and trainees exemption and various exceptions for charities, and State and Local Government organisations. Western Australian Treasury, 2013, 2013/14 Economic and Fiscal Outlook, p. 116, accessed from: http://www.treasury.wa.gov.au/cms/uploadedFiles/State_Budget/Budget_2013_14/bp3.pdf

Western Australian Treasury, 2013, 2013/14 Economic and Fiscal Outlook, p. 90 and 116, accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/State_Budget/Budget_2013_14/bp3.pdf

The ERA considers that State taxes should be used for the sole purpose of raising revenue and that exemptions and concessions should be kept to a minimum in order to reduce the efficiency costs of the tax system.

The ERA acknowledges that removing exemptions and concessions for existing State taxes could cause hardship for individuals and businesses that currently rely upon those exemptions and concessions. In part, this burden may be mitigated by reductions in the tax rates paid for by extending the tax base, reflecting that the tax reform options considered in this chapter have been designed to be revenue neutral for the State Government.

Any additional assistance that the Government considers needs to be provided to particular sections of the community should be delivered outside of the taxation system as a specific, targeted and transparent concession. Such concessions are well established, as described in the box below. These concessions could be paid for by applying higher tax rates than those contemplated in the revenue neutral versions of Option 1 and Option 2.

Box 17 Social concessions in Western Australia

The Western Australian Government provides a number of social concessions to make some specific services more affordable. These concessions take a number of different forms including rebates, discounts, and waivers. Eligibility for concessions is variously based on age, income, service to country or special needs or disadvantage.

The Western Australian Government is forecast to provide \$860 million of social concessions in 2013/14.¹ The largest concessions in this category in 2011/12 (which was the last audited outcome year) are:

- the rental subsidy for public housing tenants (estimated to be valued at \$215 million in 2011/12);
- local government rate rebates for pensioners (estimated to be valued at \$86 million in 2011/12); and
- Transperth fare concessions and free travel on Transperth services for pensioners (estimated to be valued at \$82 million in 2011/12).²

In addition to these social concessions, the Western Australian Government provides operating subsidies to public corporations for the provision of electricity, water and public transport services at less than cost reflective prices. Major operating subsidies in 2013/14 include:

- \$684 million to subsidise public transport provision through the Public Transport Authority;
- \$433 million for the provision of household water and waste water services in country areas at prices set by the Government to match metropolitan water prices and \$132 million for the provision of water concessions to pensioners and seniors; and
- \$420 million paid to Synergy and Horizon for the tariff adjustment payment to provide electricity at tariffs below the cost of providing electricity.³
- 1 Western Australian Treasury, 2013, 2013/14 Economic and Fiscal Outlook, p. 283, accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/State_Budget/Budget_2013_14/bp3.pdf
- 2 Western Australian Treasury, 2013, 2013/14 Economic and Fiscal Outlook, p. 285, accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/State_Budget/Budget_2013_14/bp3.pdf
- 3 Western Australian Treasury, 2013, 2013/14 Economic and Fiscal Outlook, pp. 305 306, accessed from http://www.treasury.wa.gov.au/cms/uploadedFiles/State_Budget/Budget_2013_14/bp3.pdf

6.6.2 Increase reliance on efficient taxes and reduce or abolish inefficient taxes

The second option identified by Synergies involves increasing the reliance on efficient taxes and reducing or abolishing the inefficient taxes. Synergies proposes that this be achieved by:

- removing all concessions and exemptions on land tax and raising the rate (while retaining the progressive scale) and therefore significantly increasing the amount of revenue raised by land tax; and
- removing all concessions and exemptions on payroll tax and lowering the rate such that the total net revenue raised by payroll tax remains the same; and
- abolishing transfer duty on residential property.

The following tables include summary statistics of the pre- and post-tax changes related to Option 2, including: gross revenue, net revenue, proportion of tax revenue, size of tax base, tax rate, number of tax payers and compliance costs.

Table 22 Greater reliance on efficient taxes - indicative summary of change (based on 2012/13 figures) 395

		Pre-change			Post- change	
	Payroll Tax	Residential Transfer Duty	Land Tax	Payroll Tax	Residential Transfer Duty	Land Tax
Gross Revenue (\$m)	\$3,475.70	\$764.84	\$568.20	\$3,854.40	\$0.00	\$1,343.54
Net Revenue (\$m)	\$3,475.70	\$764.84	\$568.20	\$3,475.70	\$0.00	\$1,333.04
Proportion of tax revenue	41.70%	9.18%	6.82%	41.70%	0.00%	15.99%
Size of tax base (\$m)	\$63,195	n/a	n/a	\$98,985	\$0.00	\$380,302
Tax rate	5.50%	Table 20	Table 23	1.91%	0.00%	Table 23
Number of taxpayers	12,178	n/a	n/a	221,956	0.00	988,549

Table 23 Land Tax rate scale

Value of land	Rate (Pre-change)	Rate (Post-change)
0 – 300,000	0.00%	0.00%
300,001 – 1,000,000	0.10%	0.12%
1,000,001 – 2,200,000	0.53%	0.63%
2,200,001 – 5,500,000	1.37%	1.64%
5,500,001 – 11,000,000	1.64%	1.96%
Over 11,000,000	2.43%	2.91%

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³⁹⁵ Note that gross revenue is higher than net revenue, since the removal of exemptions and concessions will result in certain public entities (for example, hospitals and State Government departments) paying tax.

Synergies estimates that the efficiency benefit of implementing Option 2 in Western Australia could be in the order of \$580 million per annum.³⁹⁶

A summary table comparing payroll tax, transfer duty and land tax liabilities under the existing tax regime and under Option 1 and Option 2 is included in Section 6.6.3 below.

Option 2 shares some of the benefits of Option 1, in terms of reducing the efficiency costs associated with payroll tax and land tax by removing the exemptions and concessions. The key benefit of Option 2 is the abolition of transfer duty on residential property transactions. This reform will remove one of the major distortions in the property market.

Implementing Option 2 would also provide the Government with a more stable revenue source because payroll tax and land tax are more predictable sources of revenue than transfer duty, which is influenced by the volatility of residential property transactions.

As with Option 1, the major cost of Option 2 is the large increase in the number of taxpayers and the consequent implications for compliance and administration costs.

6.6.3 Comparison of options

The ERA considers that Options 2 is preferable to Option 1 because Option 2 results in the abolition of transfer duty on residential property, which is a highly inefficient tax.

Synergies has prepared case study examples of the tax liabilities under the existing tax regime and Option 1 and Option 2 for payroll tax, transfer duty and land tax.

Synergies has prepared four case study examples for payroll tax:

- a small business employing four employees, that is below the existing \$750,000 payroll threshold;
- a small business employing 11 employees, that is marginally below the existing \$750,000 payroll tax threshold;
- a business employing 12 employees, that is marginally above the existing \$750,000 payroll tax threshold; and
- a business employing 100 employees, that is substantially above the existing \$750,000 payroll tax threshold.

Synergies has assumed that each employee is paid \$67,407.60 per annum, based on the average weekly earnings per person in Western Australia in November 2013.³⁹⁷

The case studies demonstrate that businesses that are currently below the \$750,000 exemption threshold will be brought into the tax base if either Option 1 or Option 2 are introduced. A business that is marginally above the existing exemption threshold will

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Synergies calculated this figure by first applying KPMG's estimates of the pre-reform average efficiency costs to 2012/13 collections of payroll tax (22 cents), transfer duty (31 cents) and land tax (6 cents) as sourced from page 2 of Overview of State Taxes and Royalties to calculate the pre-reform efficiency cost. Synergies then applied KPMG's post-reform estimates of average efficiency costs for payroll tax (13 cents) and land tax (0 cents) to the post-reform collections. Synergies took the difference between these two amounts as the efficiency benefit of introducing Option 2.

³⁹⁷ Australian Bureau of Statistics, 2014, Average Weekly Earnings, Australia, Nov 2013, Cat. No. 6302.0, accessed from:

http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6302.0Nov%202013?OpenDocument on 31 March 2014.

experience a large increase in their payroll tax liability if either Option 1 or Option 2 are introduced because of the removal of the exemption threshold, which outweighs the benefit from the lower tax rate. A business that is substantially above the exemption threshold will experience a significant reduction in their payroll tax liability if either Option 1 or Option 2 are introduced because the benefit from the rate reduction exceeds the cost of removing the exemption threshold.

Table 24 Examples of changes to payroll liabilities

	Payroll	Pre-reform	Option 1	Option 2
A small business employing 4 employees	\$269,630	\$0	\$5,137	\$5,137
A firm just below the 750,000 threshold with 11 employees	\$741,484	\$0	\$14,127	\$14,127
A firm just above the threshold with 12 employees	\$808,891	\$3,239	\$15,411	\$15,411
A large employer with 100 employees	\$6,740,760	\$329,492	\$128,427	\$128,427

Synergies has prepared three case study examples for transfer duty.

- Transfer duty liability on the average priced house in Western Australia of \$473,959.³⁹⁸
- Transfer duty on the value of the median priced house purchased by a first home buyer in Western Australia of \$444,000.³⁹⁹
- Transfer duty on the median priced house in Perth of \$535,000.⁴⁰⁰

The case studies demonstrate that most home buyers would experience significant reductions in their transfer duty liability under Option 1, with the exception of first home buyers, who would be brought back into the base. Transfer duty would not be levied under Option 2.

Table 25 Examples of changes to transfer duty

	Dutiable value	Pre-reform	Option 1	Option 2
The transfer duty on the average house price for WA	\$473,959	\$16,528	\$7,789	\$0
The transfer duty for a first home buyer WA	\$444,000	\$0	\$7,119	\$0
The transfer duty on the median house price in Perth	\$535,000	\$19,427	\$9,156	\$0

Synergies has prepared three case study examples for land tax liabilities.

- Land tax payable on land with an unimproved value of less than \$300,000.
- Land tax payable on the average land valuation of \$384,708.⁴⁰¹

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³⁹⁸ This is based upon data on the number and value of residential property sales (including vacant land) in Western Australia in 2012/13. The data was purchased by the Economic Regulation Authority from REIWA for the purposes of this Inquiry.

³⁹⁹ Median price for the month of February 2014. Department of Treasury, 2014, First Home Owner Grant Data, accessed from: http://www.treasury.wa.gov.au/cms/content.aspx?id=641 on 31 March 2014.

⁴⁰⁰ Median price for the calendar year ending December 2013. REIWA, 2014, Property Market Indicators, accessed from http://reiwa.com.au/RESEARCH/Pages/Market-indicators.aspx on 31 March 2014.

⁴⁰¹ For the December 2013 quarter. This is based on data on the total value of land in Western Australia and the number of valuation entities, which pertains to an individual or group of land parcels to which a value is attached on Landgate's Valuation System. This data was purchased by the Economic Regulation Authority from Landgate for the purposes of this Inquiry.

• Land tax payable on land with an unimproved value of \$1 million.

The case studies demonstrate that land owners that own land with an unimproved value of less than \$300,000 (the current exemption threshold) would be unaffected by the introduction of either Option 1 or Option 2. Land owners that own land with an unimproved value of greater than \$300,000 would benefit from the introduction of Option 1 (unless they are currently exempt from paying land tax, in which case they will be brought into the base). All land owners that own land with an unimproved value of land greater than \$300,000 would pay more land tax under Option 2.

Table 26 Examples of changes to land tax liabilities

	Unimproved value	Pre-reform	Option 1	Option 2
Land tax on land with unimproved value less than \$300,000	\$0 - \$300,000	\$0	\$0	\$0
Land tax on average land valuation in WA	\$384,708	\$85	\$20	\$101
Land tax on land with an unimproved value of \$1 million	\$1,000,000	\$700	\$164	\$838

6.7 Conclusion

A preliminary investigation indicates that the efficiency benefits of reforming state taxes are likely to be considerable. Broadening the bases and lowering rates will reduce the distortions to behaviour and have been estimated to have the potential to add \$460 million to \$580 million to the State economy. Reforming State taxes will also ensure that the State Government has access to a stable and growing source of revenue.

However, the ERA recognises that there are practical barriers to reforming state taxes, including the difficulties of convincing the business community and the general public of the need to forgo existing exemptions and concessions in State taxes for the broader public benefit of lower tax rates applied to broader bases.

Reforming State taxes will also do little to address the imbalance between the Western Australian and Federal Government in revenue raising capacities and expenditure obligations. Such reform can only be achieved through cooperation at a national level between the Federal Government and State and Territory Governments.

Nevertheless, the ERA considers that the two main tax reform options outlined in this chapter are worthy of more detailed consideration, including General Equilibrium analysis to refine the estimates of the efficiency benefits of the options. The ERA seeks public comment on the merits of the two tax reform options presented in this chapter. The ERA will consider these submissions in developing any recommendations made in its Final Report.

6.8 Recommendations

- 26. Consider options for reforming payroll tax, residential transfer duty and land tax:
 - a. broadening the base and lowering the rate of all three taxes to increase their efficiency; or
 - b. increasing reliance on efficient taxes (land tax and payroll tax) and reducing or abolishing the inefficient taxes (residential transfer duty).

7 Removing barriers to competition

In this chapter, the ERA considers five areas where there are barriers to competition: retail trading hours; the taxi industry; the potato market; Keystart Loans; and the domestic gas reservation policy. These restrictions on competition act as disincentives of the kind identified in the Hilmer framework for microeconomic reform⁴⁰² described in Chapter 2 of this Draft Report.

Such barriers to competition are now the exception rather than the norm. Many of the restrictions on competition were addressed through the National Competition Policy reforms of the 1990s. However, some of the issues considered in this chapter represent 'unfinished business' from the National Competition Policy reforms, specifically restrictions on retail trading hours; regulation of the taxi industry; and regulation of the market for potatoes.

The case for removing barriers to competition is well established and has been supported by many independent reviews. The ERA finds that there are no market failures that justify the current or, in some cases, any government intervention in the areas reviewed in this chapter.

To the contrary, government intervention distorts market signals between businesses and consumers and results in businesses being less responsive to consumer demand. Depending on the nature of the existing restrictions on competition in these areas, allowing businesses to respond directly to consumer choice, without interference from the Government, is expected to result in lower prices, increased supply and greater choice and variety.

Greater responsiveness to consumers will ultimately result in better commercial outcomes for the businesses that remain in the industries post-deregulation and for the new ones that can enter the industry because of the removal of artificial barriers to entry. This latter aspect is important because research indicates that it is new businesses that drive growth in employment. This reinforces the need to focus on improving incentives for businesses, particularly removing regulatory barriers to entry and letting the forces of competition drive innovation.

Despite the strong case for reform, barriers to competition have persisted because interest groups have the potential to experience initial losses in wealth and income as a result of reforms to these sectors. These interest groups have successfully lobbied successive State Government's to maintain the status quo or to face demands for compensation in exchange for reforms. The general public, who are the potential beneficiaries of reforms, have little incentive to lobby the Government because the benefits to each individual are small, even though collectively the benefits of reform are significant.

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Hilmer, F., 2014, Competition Policy from 1992 to 2014, Presentation to the Business Council of Australia on 13 February 2014, accessed from http://www.bca.com.au/docs/d9695dfb-9c05-49b5-b5a5-aeb96866c400/Fred_Hilmer_Competition_Policy_from_1992_to_2014_FINAL_21.3.2014.pdf on 25 March 2014.

Hilmer, F., 2014, Competition Policy from 1992 to 2014, Presentation to the Business Council of Australia on 13 February 2014, accessed from http://www.bca.com.au/docs/d9695dfb-9c05-49b5-b5a5-aeb96866c400/Fred_Hilmer_Competition_Policy_from_1992_to_2014_FINAL_21.3.2014.pdf on 25 March 2014.

In the remainder of this chapter, the ERA discusses, for each of the five subject areas:

- the nature of the restriction on competition (that is, how any legislation, regulations or Government programs operate to effect competition);
- whether there is any market failure that could provide justification for the restriction on competition;
- the cost and benefits of the restriction on competition; and
- recommendations for reform.

7.1 Retail trading hours

7.1.1 Introduction

Retail trading hours in Western Australia have been liberalised in recent years. However, Western Australia's retail trading hours are among the most restrictive in Australia. 404

Governments have restricted retail trading hours in the past for various reasons. These have included the observance of the Sabbath, to protect different types of retail business (for example, large or small retail businesses) and for social purposes such as ensuring that employees in the retail sector can have family time on weekends.⁴⁰⁵

The ERA considers that these arguments in favour of restricting retail trading hours do not have the same weight as they did in the past, particularly given the considerable changes to society and technology since restrictions on trading hours were first introduced. Furthermore, there is no market failure that justifies the restriction on competition: a fact that has been consistently supported by independent reviews of retail trading hours.

Rather than being of benefit, regulation of trading hours creates considerable inconvenience by preventing people from shopping when and where they choose. Such constraints present considerable difficulties to time-poor individuals and households, particularly with the rise of dual-income and single parent households.

People, for various reasons, want to shop at times and places that are currently unavailable. In practice, there is no better demonstration of this than the number of people lined up outside their local supermarket just before 11:00 am on a Sunday morning, waiting to do their grocery shopping. Many people find it convenient to do their grocery shopping on a Sunday, but many would like to be able to shop earlier to free up the remainder of their Sunday for other activities.

Regulation of retail trading hours disadvantages 'bricks and mortar' shops relative to online retailers, who are free to trade whenever they wish. The significant increase in online shopping in recent years has made the regulation of retail trading hours less relevant.

The ERA considers that consumer choice, rather than Government regulation, should determine which shops open and when. Retailers will respond to consumer demand by opening when it is profitable for them to do so and remaining closed when it will not. Deregulation of retail trading hours will not result in shops being open 24 hours a day, seven days a week.

Deregulation of retail trading hours will disadvantage some retailers, particularly small retailers, who have enjoyed a degree of protection from competition. However, such retailers have already adapted to substantial liberalisation of trading hours in Western Australia, and the structural adjustments that would arise from full deregulation are not anticipated to be as significant.

Reflecting these considerations, the ERA recommends that retail trading hours be deregulated in Western Australia with the exception of Christmas Day, ANZAC Day morning

⁴⁰⁴ Productivity Commission, Economic Structure and Performance of the Australian Retail Industry, Page 275.

⁴⁰⁵ National Competition Council (2001), Assessment of Governments' Progress in Implementing the National Competition Policy and Related Reforms, page 21.1.

and Good Friday. This is similar to the models that have been implemented in Victoria and Tasmania.

The ERA notes that the current Government has expressed its desire to extend or fully deregulate retail trading hours on a number of occasions. 406,407

In the remainder of this chapter the ERA:

- describes the manner in which retail trading hours are regulated in Western Australia:
- · considers the benefits and costs of the regulations on competition; and
- develops its recommendation for reforming retail trading hours.

7.1.2 Retail Trading Hours Act

Retail trading hours in Western Australia are regulated under the *Retail Trading Hours Act* 1987 (the **Act**). The Act specifies the hours that a shop can operate, based upon the goods the shop sells, its location and size.

The Act applies to the area of Western Australia south of the 26th parallel of South Latitude. The Act and its associated regulations establish the retail trading hours that a retail shop must adhere to on the basis of three criteria, being:

- the goods sold by the retail shop;
- the location of the retail shop; and
- the size of the retail shop.

Section 10 of the Act defines the four categories of regulated retail shops as being General Retail Shops, Small Retail Shops, Special Retail Shops, and Filling Stations (petrol stations).

The Act does not apply to restaurants, cafes, takeaway food shops, veterinary clinics or retail shops located in public passenger transport terminals or stations when public transport services are running.

The objectives of the Retail Trading Hours Bill 1987 (WA) were outlined in the second reading speeches to Parliament. They were to:

- establish a stable, equitable and viable retail environment;
- reflect the needs of contemporary lifestyles by catering to the demand of consumers on a seven day a week basis;
- recognise the interests and position of small businesses; and
- meet the expectations of the majority of retailers. 408,409

The legislation is not aimed at addressing a fundamental market failure in the retail sector. Legislation is not required to ensure that the retail sector is 'stable, equitable and viable'.

⁴⁰⁶ Western Australia, *Parliamentary Debates*, Legislative Assembly, 19 November 2013, 6147 (Paul Miles)

⁴⁰⁷ Western Australia, *Parliamentary Debates*, Legislative Council, 1 May 2012, 1730 (Hon Simon O'Brien)

⁴⁰⁸ Western Australia, *Parliamentary Debates*, Legislative Assembly, 26 May 1987, 1376 - 1377 (Peter Dowding)

⁴⁰⁹ Western Australia, Parliamentary Debates, Legislative Council, 1 December 1987, 6823 - 6824 (Hon J.M. Berinson)

This would occur even in the absence of regulation of retail trading hours, as is amply evident in jurisdictions that have deregulated retail trading hours. In the absence of such legislation, shops would respond to consumer demand and open when it is profitable to do so.

7.1.2.1 Small Retail Shops

Small retail shops are defined as those that are owned by between one and six eligible persons trading in partnership or by a body corporate with not more than six shareholders of whom are 'eligible persons'.⁴¹⁰ The Act provides detailed criteria that must be met for an owner to be considered an 'eligible person', including limiting the number of retail shops that an eligible person can own to three.⁴¹¹

Other defining features of small retail shops are that:

- they may not sell motor vehicles;
- the owners of the business must be personally and actively engaged in the retail shop; and
- not more than 18 people can work in the retail shop at any one time, including the owners.

Trading hours for small retail shops are unrestricted and they may operate at any time of the day, and on any day of the year.

Greengrocers, butchers, corner stores and many Independent Grocers of Australia (**IGA**) supermarkets are key examples of small retail shops.

7.1.2.2 Special Retail Shops

The Act identifies eleven categories of special retail shops:

- Art and Craft shop
- Souvenir shop
- Pharmacy
- Domestic Development shop
- Marine Craft shop
- Video shop
- Duty Free shop
- Motor Vehicle Spare Parts shop
- Sports Venue shop
- Newsagencies and bookshop
- Hotel Tourist shop

The items that may be sold in each category of shop are regulated and listed in the *Retail Trading Hours Regulations 1988.*

Special retail shops may open from 6am to 11:30pm every day of the year.

⁴¹⁰ Ownership of a small retail shop is limited to those people that are considered an "eligible person" as defined by the *Retail Trading Hours Act 1987*.

⁴¹¹ The complete definition of what constitutes a small retail shop is somewhat complex, consisting in a total of 46 sections or subsections of the Act. The majority of these criteria are concerned with the ownership structure that must be met for a shop to be considered a small retail shop.

Drafting appropriate and effective legislation regulate trading hours is a significant undertaking that can often result in unintended outcomes, generally due to unforseen loopholes, the inability to future-proof the legislation or the difficulty in crafting legislation that accurately encapsulates the desired framework.

In the case of retail trading hours, the regulations are written in a prescriptive format such that they list all items that may be sold in each category of specialist shop. Items not listed in the regulations may not be sold. This approach has resulted in a range of idiosyncratic outcomes that are not necessarily consistent with the objective of the Act. Anomalies that have arisen from the current legislation include:

- Marine Craft Shops may sell boating related books and video cassettes, but the
 regulations are silent on the sale of boating related DVDs or Blu-ray discs. This
 means that these latter products cannot be sold legally, although such restrictions
 are unlikely to be enforced in practice.
- Domestic Developments Shops may sell freestanding outdoor furniture and flatpack household furniture but not free standing household furniture.
- Video Shops may sell DVDs and video cassettes and other related products, but the regulations are silent on the sale of gaming consoles. Again, this means that these latter products cannot be sold legally.

It is likely that some of these anomalies are not enforced. However, because some are policed, the discretionary nature in which policing of the legislation is undertaken only serves to cause uncertainty in the market. Arbitrary decisions of this nature ultimately act to undermine the overall legitimacy and effectiveness of the retail trading hours legislation and can result in perverse outcomes, such as the example below, in which a Melbourne retailer was jailed for four days for selling billiards tables on Sundays.

Box 18 Unintended consequences of regulating retail trading hours

The regulation of retail trading hours can create loopholes and anomalies in what can and cannot be sold at set times of the day or week.

A Melbourne-based billiards table manufacturer and retailer, Mr George Grech, was incarcerated for four days in 1982 for failure to pay fines for illegally opening his billiards table store between 1pm and 5pm on Sundays.

Following his release from jail, Mr Grech identified a loophole in the legislation that would allow him to sell billiard tables on Sundays. As bookshops were permitted to trade on Sundays, Mr Grech registered his business as a bookshop and sold books for the price of a billiard table, and gave away a 'free' billiard table with each book purchased. Source: The Age, *Proposals are totally inadequate, say rebel*, Thursday 9 January 1986, p.10

A full list of the goods that can be sold in each category of special retail shop is listed in Appendix 5.

7.1.2.3 Filling Stations

Filling stations, more commonly known as petrol stations, are defined as any retail shop that sells motor fuel.

The hours during which a filling station may operate are unrestricted. However, there are restrictions on the range of non-petroleum goods that may be sold by filling stations outside the hours during which a general retail shop may operate.

The range of non-petroleum goods approved for sale by a filling station depends on the ownership structure of the filling station. Small filling stations include stations that are owned by up to six people who collectively operate no more than three filling stations and stations in which a maximum of ten people work at any one time. Small filling stations are allowed to sell a wider range of goods than larger filling stations.

A full list of the goods that can be sold in filling stations and small filling stations outside of the operating hours of a general retail shop can be found in Appendix 6.

7.1.2.4 General Retail Shops

Section 10(2) of the Act states that any retail shop that is not a small retail shop, a special retail shop or a filling station shall be regarded as a general retail shop.

Motor vehicle shops fall into the category of a general retail shop by way of Section 10(2) of the Act. However, motor vehicle shops are a unique subset of general retail shops and, as such, are subject to their own unique trading hours, as defined in the Act. Motor vehicle shops are permitted to open between 8am and 6pm during the week, with the exception of Wednesday when they are permitted to open until 9pm. Motor vehicle shops are also permitted to open on Saturdays between 8am and 1pm, but must not operate on Sundays and public holidays.

Of the four categories of shops, only general retail shops have their trading hours differentiated based on their location. General retail shops located in the Perth metropolitan area⁴¹² (**Perth**) are able to open between 8am and 9pm Monday to Friday, between 8am and 5pm on Saturday and from 11am until 5pm on Sundays and public holidays (with the exception of Christmas Day, Good Friday and ANZAC Day).

Technically, general retail shops outside of Perth are subject to more restrictive retail trading hours than those located within Perth. The trading hours for a general retail shop outside of Perth allow retailers to open between 8am and 6pm Monday to Friday, except for Thursday when they are able to open until 9pm and from 8am until 5pm on Saturday. However, they must be closed on Sundays and on each public holiday.

The Act allows local government authorities located outside of Perth the opportunity to apply to the Minister of Commerce to extend the trading hours for general retail shops in their jurisdictions. This option is not available for local authorities situated within Perth.⁴¹³

Twenty nine local government authorities have successfully applied to amend the retail trading hours that apply to general retail shops in their jurisdiction.⁴¹⁴

⁴¹² For the purposes of the Act the metropolitan area means the region described in the Planning and Development Act 2005, Schedule 3. Refer to Appendix 7.

⁴¹³ Metropolitan local governments and metropolitan shopping centres may apply for additional trading hours in support of special local events. However, the terms and frequency of such applications are limited.

⁴¹⁴ These local government authorities are: the City of Albany, Shire of Augusta – Margaret River, Shire of Boyup Brook, City of Bunbury, Shire of Busselton, Shire of Dandaragan, Shire of Dardanup, Shire of Denmark, Shire of Donnybrook – Balingup, Shire of Dundas, Shire of Gingin, Shire of Harvey, Shire of Irwin, City of Kalgoorlie – Boulder, Shire of Kulin, Shire of Leonora, City of Mandurah, Shire of Manjimup, Shire of Mingenew, Shire of Moora, Shire of Murray, Shire of Narembeen, Shire of Northam, Shire of Northhampton, Shire of Plantagenet, Rottnest Island, Shire of York.

7.1.3 Submissions

The majority of submitters that commented on the potential extension of retail trading hours were in favour of extending trading hours. However, there was a minority that opposed such action.

The key points raised in submissions that were in favour of extending trading hours were:

- Regulation stifles competition: Regulation prevents larger businesses from fully utilising their capital and protects smaller businesses from competition that would ultimately benefit customers in the form of downward pressure on prices, innovation, better service quality and increased choice.
- **Increased customer choice**: Extending trading hours increases customer choice and convenience. Greater choice decreases search costs for the customer because they spend less time looking for the goods they require and affords customers greater flexibility when structuring their non-shopping activities.
- Classifying shops based on size, goods sold and location creates inconsistencies and anomalies: Examples of this include domestic development shops being allowed to sell light bulbs but not light fittings, and petrol stations being allowed to sell pantyhose after 9pm on Thursdays but not underwear.
- Regulation adversely affects productivity in downstream markets: For example, the Master Builders Association of Western Australia stated that the restriction in trading hours has a significant effect on the productivity of tradespeople. Masters Home Improvement stores are not classified as domestic development stores and as such they are unable to open until 8am on weekdays. The 8am opening time can prevent tradespeople from starting work before 8am if they need to purchase supplies. Master Builders submitted that the Masters stores can have up to 50 people waiting in the car parks for the stores to open.

The key points raised in submissions opposing the extension of retail trading hours were as follows.

- Lack of economic benefits of extending trading hours: Submissions queried whether there are material economic benefits from extending trading hours, noting that there could be diminishing returns from longer trading hours. Submissions stated that many retailers do not make use of the trading hours that are currently available to them.
- Smaller retailers spend more money locally than major retailers: Submitters stated that smaller retailers spend a larger proportion of their expenditure locally, including purchasing more local products and hiring local service providers.
- Questionable competition benefits because of market consolidation: Submitters state that extending retail trading hours will lead to consolidation in the retail industry, which would ultimately result in fewer retail businesses and decreased competition.
- Protecting the economic and social interests of small communities: Submitters
 state that the economic and social interests of both businesses and consumers in
 areas outside of the Perth metropolitan area are best served by the current selfdetermination of trading hours (by the local community) rather than deregulation
 across the board, because of the role small businesses play in the community.

 Reduced vibrancy and balance of the community: Submitters contend that if shops can open for longer hours people will spend more time and money shopping and less time and money on other events and recreational activities, decreasing the viability of these activities which are considered essential for a vibrant, balanced community.

7.1.4 ERA assessment of the benefits and costs of deregulation

In this section, consideration is given to the costs and benefits of regulated retail trading hours for customers, retailers and employees in the retail industry.

7.1.4.1 Customers

Costs of regulation

Restrictions on choice and convenience

One of the main costs of restrictions on retail trading hours is that it limits the choice and convenience available to customers. Restrictions on trading hours affect when and where consumers can shop, and the range of goods they can purchase. Many individuals place a high value on the ability to choose when and where they can shop given other constraints placed on their time. Restricting the ability to choose can be particularly detrimental for families where parents have limited opportunities to shop during regulated hours.

Customer shopping patterns and preferences have changed as the social patterns, work patterns and demographics of Western Australians have evolved. These changes are driven by a range of factors and include the increasing number of dual income and single family households, the need to work outside of standard business hours and the trend to work longer hours. As consumers become increasingly time poor, convenience in terms of where and when they can shop becomes more highly valued and the costs of retail trading restrictions increase. As result of these changes, greater numbers of Western Australians require more flexibility in the hours during which they can go shopping.

The regulation of retail trading hours also affects customers that work a 'traditional' 9am – 5pm workday. These customers may also find retail trading hours inconvenient because the hours during which all retail shops may open, outside of the 9am – 5pm workday, may coincide with times when these customers would otherwise choose to undertake social and family activities.

Limiting the hours during which some retailers may operate increases the average time that customers spend travelling to and from shops (because the range of retailers that a customer can visit depends on the time of day and day of week). At times when general retail shops are prohibited from operating, customers are not only subject to less choice, they may also have to travel further (on average) to purchase the goods they desire, increasing both time and financial costs to customers.

For many people, shopping (grocery shopping in particular) is a necessary chore that must be regularly undertaken. However, the regulation of retail trading hours limits the extent to which customers are able to avoid scheduling shopping trips during the time which could be used for other activities that they value more highly.⁴¹⁵ Because trading hours are limited,

⁴¹⁵ Productivity Commission, Economic Structure and Performance of the Australian Retail Industry, Page 279.

customers are forced to arrange their life around doing the shopping, rather than fitting their shopping around their life, as might be the case in a deregulated market.

Many customers in Perth have benefited from the introduction of Sunday trading for general retail shops. Data provided by Coles as part of this Inquiry shows that Sunday trading now accounts for 9 per cent⁴¹⁶ and 7 per cent⁴¹⁷ of all transactions at their Subiaco and Victoria Park shops respectively, despite the Sunday trading window being about half of that allowed during weekdays.⁴¹⁸

The ability to go shopping on Sunday appears to have allowed a significant proportion of customers to shift their grocery shopping to times that do not conflict with more highly valued activities. However, the presence of regulated retail trading hours still limits the extent to which this can be done.

Evidence from jurisdictions that have extended retail trading hours further confirms that consumer behaviour changes following the extension of trading hours, and that when given the freedom to do so, consumers shift their shopping patterns to make use of the deregulated trading hours.⁴¹⁹

Data provided by Coles in its submission to the Discussion Paper demonstrates the extent to which retail trading hours in Western Australia restrict customer behaviour. Coles compared the number of transactions completed per hour across each day of the week⁴²⁰ for the Coles Subiaco supermarket and a Coles supermarket in Brisbane (New Farm) that is a similar distance from the CBD as the Subiaco shop, but is not subject to the same trading hours restrictions.⁴²¹ The distribution of transactions at the two shops is displayed below.

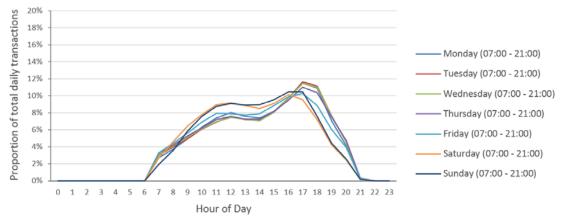


Figure 29 Purchasing Behaviour in New Farm, Brisbane, proportion of daily transactions

Source: Coles

 416 On average 10,942 transactions were completed each week in Subiaco, 1,470 of these were conducted on Sunday.

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⁴¹⁷ On average 28,792 transactions were completed each week in Victoria Park, 2,063 of these were conducted on Sunday.

⁴¹⁸ General retail shops may operate for seven hours on Sundays and 13 hours on weekdays.

⁴¹⁹ Productivity Commission, Economic Structure and Performance of the Australian Retail Industry, Page 295.

⁴²⁰ This data represents all transactions completed over the period between 28 May 2012 and 26 May 2013, inclusive.

⁴²¹ Data represents the number of transactions made during each hour of the day across each day of the week for the twelve month period beginning May 2012.

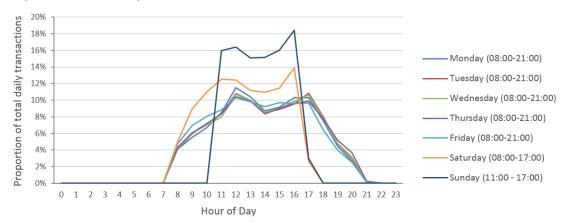


Figure 30 Purchasing Behaviour in Subiaco

Source: Coles

The distribution of demand for grocery services in the New Farm shop is broadly similar across every day of the week. However, there are material differences in the distribution of demand between weekdays and weekends at the Subiaco shop.

The data on customer behaviour during weekdays at the Subiaco shop, and across the entire week at the New Farm shop, shows a smooth increase in customer transactions in the morning and a smooth tapering of transactions into the evening. However, because the Subiaco shop is subject to restricted retail trading hours during the weekend, this natural flow is disrupted and customers are forced to shop in a shorter timeframe. The sharp rise in transactions upon opening and the steep drop in transactions upon closing demonstrates that there is significant demand at the Subiaco shop for retail shopping before 8am on Saturday and 10am on Sunday, and after 6pm on both Saturday and Sunday.

Restricted retail trading hours also affect the volume of transactions undertaken on each day of the week. That is, when retail trading hours are limited, fewer people choose to go shopping, as opposed to (on aggregate) simply condensing the hours in which they shop. Some customers will elect not to go shopping, while others will alter their behaviour to fit the existing environment, potentially at the expense of undertaking more highly valued activities.

It can be seen in the figure below that Saturday and Sunday are the two days of the week that represent the greatest proportion of weekly transactions at the New Farm store. However, at the Subiaco store, Saturday and Sunday are the two days that represent the lowest proportion of transactions across the week.

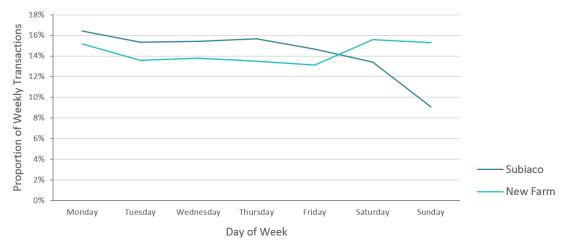


Figure 31 Proportion of Total Weekly Transactions: Subiaco and New Farm

Source: Coles

Reduced choice also increases customer search costs because they must spend more time looking for the goods they require, be it driving further to access a shop that is open, searching multiple shops for the goods required, or spending longer in shops that are open because the shops are congested. Alternatively, customers may simply forego some purchases that they would otherwise make. Finally, time costs rise due to extra journeys because of problems coordinating shopping with other activities, and due to greater congestion. 422

Greater congestion costs

Restricting retail trading hours means that customers have a smaller window of time during which they can shop. This results in congestion due to the number of customers shopping at peak periods.

This effect can be seen when comparing the trading profiles at the Coles supermarkets in Victoria Park (Western Australia) and Dandenong (Victoria). Both supermarkets completed a similar number of transactions⁴²³ in the 12 month period beginning in May 2012⁴²⁴: 1,497,159 in Victoria Park and 1,410,435 in Dandenong.

However, the distribution of these transactions and the peak number of transactions in each store are quite different, in part due to the different retail trading environments in place in Perth and Melbourne. The Dandenong shop operates 24 hours a day, seven days a week. In contrast, the Victoria Park shop is subject to the trading hours that apply to general retail shops in the Perth metropolitan area.

⁴²² Atkins (2011), Shop Trading Hours in Western Australia: A Research Report, University of Western Australia – Faculty of Law, p. 132.

⁴²³ A transaction represents the purchase of any basket of goods that generates a receipt. While transaction data does not provide details of goods sold, provided the average number of customers per transaction in Victoria Park and Dandenong are similar, which the ERA considers is likely, it does act as a good comparator for the number of customers in each shop.

⁴²⁴ The exact period of data collection is 28 May 2012 to 26 May 2013 inclusive.

⁴²⁵ With the exception of two and a half trading days each year when restrictions apply: Good Friday, Christmas Day and between 12:01am and 1pm on ANZAC Day.

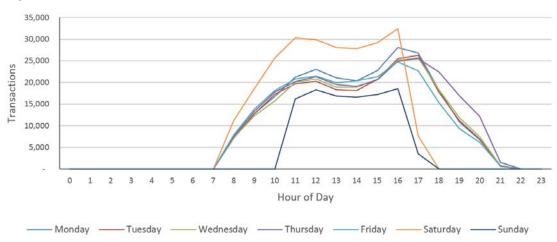
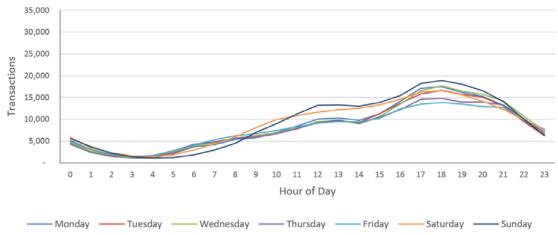


Figure 32 Number of Transactions: Victoria Park

Source: Coles





Source: Coles

The steep rises and falls in transactions at Victoria Park (compared to the smoother profile at the Dandenong shop) demonstrates that restricted trading hours are forcing customers to shop at the same times and that there is material customer demand for longer trading hours.

This in turn results in congestion in Victoria Park, as can be observed by comparing the number of transactions that occur at peak times in Victoria Park and Dandenong.

The peak number of transactions completed during one hour of the week (4pm - 4:59pm on Saturdays) at the Victoria Park shop is more than 50 per cent higher than the peak in the Dandenong shop. Across the entire twelve month period, Victoria Park completed more than 32,000 transactions at its peak, whereas the peak number of transactions in Dandenong was just under 19,000. When broken down on a daily basis, the Victoria Park shop completed an average 623 transactions during its peak hour, compared to 363 in Dandenong.

Across the average trading week, the Victoria Park shop had 40 hours (representing 45 per cent of its entire trading week), during which the number of transactions completed exceeded the single peak hour in Dandenong.

As a consequence, the customer congestion costs are significantly higher at the Victoria Park shop. These costs include greater congestion in car parks, greater difficulty navigating to and within shops and longer waiting times at checkouts or service desks. These combine to make shopping more time consuming and stressful, as well as making it more difficult for families or households to shop together.

Coles has been able to address these congestion issues at its Victoria Park store to some extent by maintaining a larger store, employing more staff and providing more parking spaces. However, this adds to both its capital and operating costs (as is discussed in further detail in the assessment of costs to retailers).

The higher costs that customers incur as a result of greater shop congestion will decrease the attractiveness of shopping when compared to other competing activities. As such, customers may forgo shopping that they would undertake in less congested environments for other activities.

Potentially higher prices

In its Inquiry into the economic structure and performance of the Australian retail industry, the Productivity Commission concluded that the theoretical and empirical evidence is mixed on whether the regulation of retail trading hours artificially inflates prices above those that would be observed in a deregulated market.⁴²⁷

The Productivity Commission identified theoretical reasons as to why retail prices could be expected to rise following the regulation of retail trading hours, as well as identifying reasons why retail prices could be expected to fall.

Prices could be expected to be higher in a regulated environment because by restricting the hours during which retailers are limited in the extent to which they can realise economies of scale⁴²⁸ and therefore weakens the degree to which prices can fall. Similarly, the regulation of retail trading hours stifles competition in the retail industry by protecting small retailers from competition from larger retailers. In competitive markets retailers compete with each other to attract customers. One way that retailers can do this is by having low prices. Retailers operating in markets in which competition is stifled have less competitive threat from other retailers for customers and, therefore have less incentive to lower their prices in order to attract customers.

On the other hand, the Productivity Commission noted that shorter retail trading hours reduce the variable costs incurred by a retailer, which may offset the reduced economies of scale. 429

The ERA investigated the possibility of undertaking a comparison of prices in deregulated jurisdictions with those in regulated jurisdictions to establish whether the deregulation of retail trading hours affects retail prices. However, the cost of purchasing or collecting a robust and representative sample of prices that would allow such comparison has proven to be prohibitively expensive.

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⁴²⁶ Productivity Commission (2011), Economic Structure and Performance of the Australian Retail Industry, p279

⁴²⁷ Productivity Commission (2011), Economic Structure and Performance of the Australian Retail Industry, p301

⁴²⁸ Economies of scale allow retailers to lower costs by increasing sales and being able to spread their fixed costs across a greater number of sales.

⁴²⁹ Productivity Commission (2011), Economic Structure and Performance of the Australian Retail Industry, p301

In the absence of such data, the ERA considered whether recent Australian price surveys would aid the analysis. The ERA identified three studies that have investigated grocery prices across Australia, the 2008 ACCC inquiry into grocery prices⁴³⁰ and price surveys undertaken by CHOICE in 2007⁴³¹ and 2009.⁴³² In each instance, the studies found that price differentials exist between across states and territories. The ACCC inquiry found that the major causes of price difference across Coles and Woolworths were due to freight costs, the costs of doing business (such as higher rents in urban areas) and the proximity of competitors.⁴³³ Retail trading hours were not identified as a possible cause of price differentials. In contrast, the CHOICE price surveys did not attempt to explain the drivers of the price differentials between locations or retailers.

While it is clear that price differentials exist between jurisdictions that regulate retail trading hours and those that do not, the extent to which the regulation affects prices is unclear. However, even in the absence of changes to prices, the extension of retail trading hours may still lower grocery costs to customers.

In circumstances where general retail shops offer lower prices than those offered by small or special shops, customers that shop when general retail shops are prohibited from opening will be faced with temporally higher prices. Such price changes are not captured in price surveys, because no retailers have changed their prices, 434 but customers face higher prices than they may otherwise have faced in a deregulated environment.

Therefore, the absence of evidence of price changes following the deregulation, or liberalisation of retail trading hours, does not preclude customers from enjoying lower retail costs following the deregulation of retail trading hours.

In any event, the ERA notes that higher prices following the liberalisation of retail trading hours can reflect an increase in consumer welfare. Consumer welfare is derived from a range of factors including price, quality, and convenience. In addition, consumer preferences can reflect other considerations such as brand recognition, country of origin and ethical/environmental standards. If consumer welfare were solely dependent on price, consumers would demand, (and retailers would stock), only the lowest priced goods. In reality, the range of goods offered by retailers reflects the range of factors that influence consumer welfare.

An example of this is the range of tinned tomatoes on offer in supermarkets. Each tin contains similar tomatoes and if customers only cared about price, supermarkets would only stock one brand of tinned tomatoes. The range of tinned tomatoes available reflects the fact that customer are willing to pay more for goods that fit their demand profile, be it Australian grown/made, environmentally friendly or driven by any other non-price factor.

Removing regulation of retail trading hours allows retailers to better meet customer demand. If customers demand higher priced goods and the removal of retail trading regulations allows retailers to profitably supply these goods, prices may increase but both customers and retailers will still be better off.

⁴³⁰ ACCC (2008), Report of the ACCC inquiry into the competitiveness of retail prices for standard groceries.

⁴³¹ CHOICE (2007), Supermarket price survey 2007, Choice Website: http://www.choice.com.au/reviews-and-tests/food-and-health/food-and-drink/supermarkets/supermarket-price-survey.aspx accessed 24 March 2014.

⁴³² CHOICE (2009), Supermarket price survey 2009, Choice Website: http://www.choice.com.au/reviews-and-tests/food-and-health/food-and-drink/supermarkets/supermarket-price-survey-2009.aspx accessed 24 March 2014.

⁴³³ ACCC (2008), Report of the ACCC inquiry into the competitiveness of retail prices for standard groceries, p.84.

⁴³⁴ This limits the value of price survey data.

Less product differentiation

The European Commission states that competitive markets encourage enterprise and efficiency, create a wider choice for consumers and help improve quality and reduce prices. Specifically, in order to attract more customers and expand market share, retailers must, in a competitive market, improve the quality of goods and services they sell, and/or lower their prices.

Removing the regulation of retail trading hours will allow general retail shops to compete more effectively with the other categories of retail shops. In competitive markets, retailers try to differentiate their products from those offered by their competitors in order to allow customers to select the product that offers them the right balance between price and quality. To deliver this choice, and offer better products, retailers need to be innovative in the way they operate. Innovation can occur in any number of ways including offering new payment methods, the integration of smartphone applications into the shopping experience, and updating shop layout and design.

Benefits of regulation

Facilitates greater social engagement

Opponents of deregulated trading hours have stated that extended trading hours (particularly Sunday trading) would have an adverse impact upon family and social activities such as sport, church, charity work, and other social events. Some people and organisations submitted to the ERA's Discussion Paper that extended retail trading hours will result in people spending more time and money shopping and less time and money on other events and recreational activities. This will reduce the viability of recreational activities, which these opponents to extending retail trading hours have stated are essential for a vibrant, balanced community.

In contrast, the ERA considers that the deregulation of retail trading hours is likely to have a positive rather than negative effect on participation in family and social events. Time-poor individuals are faced with decisions of how they spend their scarce spare time. Given restricted trading hours, grocery shopping may need to be prioritised over family and other preferred social activities given that it must be undertaken with some regularity (particularly for perishable products). Expanded retail trading hours will allow individuals more flexibility to structure their activities in a manner that reduces, or eliminates many of these trade-offs and allow people to organise their shopping activities around their family and social activities, rather than the other way around.

7.1.4.2 Retailers

Costs of regulation

Loss of sales

The restriction of retail trading hours not only prevents large retailers from competing with small retailers, it also restricts their ability to compete with online retailers and other indirect competitors.

The advent of internet shopping as a legitimate retail industry has established a considerable competitive challenge to the 'bricks and mortar' retail industry. There is now

⁴³⁵ European Commission, Why is competition policy important for consumers? http://ec.europa.eu/competition/consumers/why en.html accessed 27 February 2014.

very little that can be bought physically in person, which cannot be purchased online. Some goods are more suited to purchasing in person due to the need to verify suitability before purchase. Clothing and fruit and vegetables are obvious examples. However, the fact that there are markets for both of these sets of goods indicates that online retailers are devising ways to mitigate the risks associated with purchasing these items online. Restricting the hours during which physical retail stores can operate, restricts the ability of retailers to effectively compete with these online competitors.

Additionally, a large proportion of the retail industry relies on attracting discretionary spending. Retailers compete with a broad range of other business types competing for discretionary spending, including cinemas, cafes/restaurants and concerts/shows.

Restricting the hours during which retailers can operate limits their ability to effectively compete with these other avenues of discretionary spending and steers customers that would otherwise undertake greater retail shopping activity towards participating in other activities that they value less.

Excess capital capacity

More flexible trading hours will assist shop owners to better manage customer traffic because they will be able to operate at times that customers demand, rather than being restricted to regulated hours and forcing customers to shop at these times.

Shops, like other infrastructure, have a maximum capacity. A shop may only utilise its full capacity for a small proportion of the trading week (that is, at peak demand). Retail trading restrictions increase the level of demand at peak periods because they condense the window within which customers may shop. To account for these higher peak periods, retailers need to have larger stores and provide more checkouts.

Extended retail trading hours provide shop owners with the flexibility to better match their trading hours to customer demand. Matching opening times with customer demand allows retailers to reduce peak period demand by distributing customer demand across the hours in which they operate. This allows retailers to supply the same number of customers while using less capital (smaller shop size), lowering overall store costs and providing an opportunity for prices to fall.

The ability of retailers to more efficiently prioritise capital expenditure as a result of deregulated retail trading hours is demonstrated in Figure 32 and Figure 33 earlier in this chapter. These two figures illustrate the number of transactions that were completed in two Coles supermarkets in Perth (Victoria Park) and in Melbourne (Dandenong) during a 12 month period, beginning in May 2012. Both shops complete a comparable number of transactions each week, 436 but, there are clear differences in the manner in which transactions are distributed across the hours of each trading day.

The peak period of demand in the Victoria Park shop occurs on Saturday between 4pm and 4:59pm, during which 32,000 transactions were completed across the 12 month period. In contrast, the Dandenong shop has its peak hour of demand on Sunday between 6pm and 7pm, when it completed just below 19,000 transactions. That is, Victoria Park completed 70 per cent more transactions during its peak hour than Dandenong did during its peak hour. This implies that spending on premises and equipment in Victoria Park is likely to be significantly higher, and/or, that congestion in the Victoria Park store during peak times is higher than that in Dandenong. In either case, the costs of operating the Victoria Park are

⁴³⁶ Victoria Park: 1,497,159 and Dandenong: 1,410,435.

significantly higher, via higher investment costs, and/or due to the loss of customers that choose to undertake a different activity as a result of the levels of congestion.

Extending retail trading hours, will allow retailers to lower peak period demand by spreading customer traffic across a greater number of hours. The decrease in peak period demand will allow retailers to operate smaller premises or retain their shop size and reduce congestion, or a combination of the two. Reducing shop size lowers the cost of operation for retailers, whereas reducing congestion lowers the costs customers incur when shopping, therefore increasing demand. Either of these will lower the net cost of operation, and in a competitive market would be expected to put downward pressure of pricing.

Distorted business decisions

Regulations that restrict retail trading hours according to the number of employees working in a shop at any one time inhibits incentives for retailers to grow. Many small retail shops make use of their longer trading hours because it is profitable to do so. Confronted with the choice of growing (and no longer being able to operate during these extended trading hours) or remaining the same size (and continuing to benefit from extended trading hours), some small retail shop owners will choose not to grow.

This trade-off has the potential to stifle growth of small retail shops and has little apparent benefit to the Western Australian retail market, or the Western Australian economy in general.

A recent example that has been brought to the attention of the ERA is that of the Spudshed. The Spudshed is a vertically integrated independent retailer that now offers a full grocery range in addition to fresh produce, meat, fish, bakery and dairy. The Spudshed operates its own market gardens and poultry and dairy farms, allowing it to eliminate wholesalers from many of the goods it sells. This has allowed it to provide a competitive service.

The Spudshed has grown to the point that three of its retail shops are at, or near, the threshold of what constitutes a small retail shop. To combat this, the Spudshed has had to implement a number of practices to ensure it complies with legislation while limiting adverse effects on trade. These include:

- To retain classification as a small retail shop the Spudshed was required to divest ownership of one store to another party. The legislation dictates that no one person may own more than three small retail shops.⁴³⁸
- Limiting the number of employees that can enter the shop floor by requiring all employees to wear a specified bracelet. The number of bracelets are restricted to ensure compliance with the regulations dictating staff numbers.
- Recruiting only highly experienced and productive employees. This has implications for the employment opportunities of less experienced or able-bodied job seekers that may otherwise be employed.

The ERA is not aware of any framework that is used to determine the appropriate size of a small business for the purposes of the retail trading legislation in Western Australia. Rather, it appears to be an arbitrary definition. The fact that the distinction of what constitutes a small retail shop is artificial, is likely to have been a significant factor in the regular evolution

⁴³⁷ Shopping becomes less time consuming, less stressful and easier to undertake.

⁴³⁸ Retail Trading Hours Act 1987, Part III, s.10(3a)(a)(ii)

of the conditions that define a small retail shop.⁴³⁹ While this evolution is ultimately a positive development in the retail trading environment, it also has a great deal of unintended consequences. One such consequence is that by increasing the number of employees that a small business may employ at any one time, any business that finds itself marginally larger than the new limit will have strong incentives to grow in a distorted manner in order to meet the criteria and enjoy longer trading hours and all the associated benefits.

For example, a shop may continue to increase its floorsize and product offerings, but take on fewer staff to operate checkouts and provide service to customers, resulting in falling service levels. If the benefits of enjoying longer trading hours are greater than any costs associated with lower service levels, retailers will continue to operate in this manner.

This incentive to grow in this distorted manner has another unfortunate outcome in that retailers in this situation need their staff to operate more efficiently than they had previously. This has implications for the businesses hiring practices, the primary implication being that the business will be more reticent to hire less experienced or able-bodied job seekers because they are unlikely to operate as efficiently as employees with experience. Where a regulatory threshold for staff numbers is about to be breached, the business may be reticent to hire more of these types of employees at lower wages because of the implications of breaching the threshold. This situation also arises for shops that are already at the threshold for small retail shops.

Compliance costs

In the Productivity Commission's 2011 Inquiry into the economic structure and performance of the Australian retail industry, it was noted that regulations added costs to retailers that trade across multiple States and Territories. These costs include the need to understand, comply with and administer different sets of regulations. Woolworths submitted to that Inquiry that, nationally these costs amounted to \$3.4 million over the 2010 Christmas trading period alone. 441

The costs in Western Australia will not be of this magnitude. However, the unique framework that is in place in Western Australia means that any retailer trading across multiple States and Territories will incur costs in understanding and complying with Western Australian legislation. These costs will be especially high for those with a presence in regional Western Australia because the legislation allows local government authorities to determine the trading hours that are enforced in each jurisdiction. The result of this is that, as noted earlier, 31 different regimes are implemented across regional Western Australia. For the retailers that trade across some, or all, of these jurisdictions, the cost of complying with these 31 different frameworks is likely to be material.

⁴³⁹ Since 2007, the number of employees that may work in a small retail shop at any one time has increased from five to eighteen. The Consumer Protection Legislation Amendment Bill 2013, which has had its second reading in the Legislative Council, will, if passed, increase this again to twenty five.

⁴⁴⁰ Productivity Commission (2011), Inquiry into the Economic Structure and Performance of the Australian Retail Industry, p278.

⁴⁴¹ Woolworths Limited (2011), Re: Economic Structure of the Australian Retail Industry, Submission to Productivity Commission Inquiry into the Economic Structure and Performance of the Australian Retail Industry, p.10.

⁴⁴² That is the two default regimes outlined in the legislation (one for Perth metro and one for regional Western Australia) and the 29 regional jurisdictions that have chosen to set their own trading hours.

Benefits of regulation

Protecting small business

One of the major arguments put forward against extending retail trading hours is that lifting the protection from competition enjoyed by small retailers will result in small retailers losing market share, leading to significant hardship for small and sole trader businesses.

Submissions have stated that the benefits from extending retail trading hours are questionable because extending retail trading hours will lead to consolidation in the market, fewer retailers and decreased market competition. Submitters have also stated that smaller retailers are of greater benefit to the local community, because compared to larger retailers, small retailers spend a larger proportion of their expenditure locally.

The issue of protecting small businesses from competition raises a fundamental question about the policy rationale for protecting small retail businesses in the first place. Protection of small retail businesses suggests that they are inherently preferable to large retail businesses. However, other than the assertion that small businesses spend a greater proportion of their expenditure locally (addressed further below), it is not obvious why small retailers should be inherently preferable to larger retailers. The ERA also notes that regulations are not generally in place to provide preferential treatment of small businesses in other industry sectors.

There are also doubts as to whether restricting the hours that larger shops can open offers significant protection to small retailers. Small retailers face pressures from a range of factors – not just the possibility of unrestricted shopping hours. For instance, competitive pressures also arise from other small businesses and e-commerce.

The proposition that the extension of retail trading hours will result in the loss of market share for small retailers is not clear from the data. The regulation of retail trading hours differs significantly across Australia, yet the data indicates that small retail businesses make up a similar proportion of the retail industry across the country, regardless of the degree to which trading hours are regulated. In 2011, the Productivity Commission compared the proportion of the retail market that is made up by small businesses in each State and Territory with the degree to which each State or Territory regulates retail trading hours and found the following (the proportion of small retail businesses are in brackets):⁴⁴³

- Deregulated ACT (87.6 per cent) and Northern Territory (85.1 per cent)
- Partially deregulated Victoria (92.7 per cent) and Tasmania (93.0 per cent)
- Lightly regulated New South Wales (93.4 per cent)
- Regulated Queensland (91.1 per cent), Western Australia (89.6 per cent) and South Australia (92.2 per cent).

The Productivity Commission derived the proportions of small businesses operating in each State and Territory from the Australian Bureau of Statistics data set 8165.0 - Counts of Australian Businesses, including Entries and Exits. Small retail businesses are defined as businesses that employ 19 or fewer people or are non-employing. This is slightly higher than the 18 employee limit for classification as a small retail shop in Western Australia.

⁴⁴³ Productivity Commission (2011), Economic Structure and Performance of the Australian Retail Industry, p309.

However, the ERA is of the view that the additional employee in the ABS classification is unlikely to result in a material difference.

The Productivity Commission concluded that:

"consistently high small business participation rates of around 90 per cent in both regulated and deregulated states and territories suggests that trading hours have little influence over the level of market participation by small retail businesses. In Australia, deregulation of trading hours does not appear to have had a deleterious effect on the viability of small retail businesses."

This conclusion was echoed in the Productivity Commission's review of the impact of the National Competition Policy on rural and regional Australia. It stated that, while the deregulation of retail trading hours did expose some retailers to greater competition⁴⁴⁵ (particularly small independent retailers), the market for small retailers was by no means foreclosed:

"While it is clear that many small independent supermarkets and some specialist grocery shops are suffering from the increased competition from the national chains, there are also examples of others finding a niche and remaining profitable. Meanwhile, consumers are benefitting from lower prices' a larger range of goods and better service."

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The Productivity Commission's findings demonstrate that small retailers can compete with larger retailers in the absence of the protection afforded by retail trading regulations.

Competition, particularly in the grocery sector, is an issue that the Australian Competition and Consumer Commission (ACCC) has investigated on a number of occasions, including in an Inquiry into the competitiveness of retail prices for standard groceries in 2008. This Inquiry concluded that the grocery retailing market is 'workably competitive' but noted that there are a number of factors that limit the level of price competition.

The Inquiry also noted that "statements being made by industry commentators that...Coles and Woolworths, account for 80 per cent of retail sales were untrue". Ather, the ACCC found that Coles and Woolworths account for between 55 per cent and 60 per cent of customer expenditure on grocery items.

The ERA considers that the issue of consolidation in the retail industry and associated competition effects as a result of the extension of retail trading hours is somewhat overstated. The fact that small businesses appear to enjoy a consistent market share across all States and Territories regardless of the level of regulation in place suggests that the small businesses in deregulated markets retain their market share with competitive responses.

The ERA has not evaluated the claim that small businesses distribute more of their expenditure locally. However, the evidence above suggests that extending retail trading

446 Productivity Commission (1999), Impact of Competition Policy Reforms on Rural and Regional Australia, Report No 8, xxxvii

⁴⁴⁴ Productivity Commission (2011), Economic Structure and Performance of the Australian Retail Industry, p309.

⁴⁴⁵ Which was the aim of the National Competition Policy.

⁴⁴⁷ Australian Competition and Consumer Commission (2008), Report of the ACCC Inquiry into the Competitiveness of Retail Prices for Standard Groceries, p.45

⁴⁴⁸ Australian Competition and Consumer Commission (2008), Report of the ACCC Inquiry into the Competitiveness of Retail Prices for Standard Groceries, p.48

⁴⁴⁹ As part of the same inquiry, the ACCC concluded that Coles and Woolworths account for approximately 70 per cent of packaged groceries. Packaged groceries include dry, frozen and chilled groceries.

hours is unlikely to have a material effect on the proportion of small retail businesses operating in the retail market. Therefore, regardless of the accuracy of the claim, it is difficult to see how removing the regulation of retail trading hours would affect the proportion of retail revenue that is retained within Western Australia.

Having considered this analysis, the ERA's view is that the extension of retail trading hours reduces the competitiveness of some retailers but that the experiences of States and Territories that operate under deregulated or more liberal trading conditions than Western Australia show that deregulation is unlikely to result in widespread small business closures.⁴⁵⁰

Protecting economic and social interests of small communities

One organisation argued, in a confidential submission, that the economic and social interests of both businesses and consumers in regional Western Australia are best served by the current self-determination of trading hours by local governments. The submission provided two arguments in support of this.

Firstly, self-determination of retail trading hours is important for regional communities because it allows retail trading hours to be aligned with local needs. The ERA considers that deregulation of trading hours is not about dictating when shops should open, but rather about allowing shops to respond to consumer choice. Since regional consumers and the retailers that respond to their choices are themselves community members, the ERA takes the view that deregulating trading hours would work in the interests of self-determination for regional communities.

Secondly, the submission argues, small independent retailers have substantially less ability than their metropolitan counterparts to compete against national grocery chains and may be 'wiped out' in a less regulated environment. The ERA accepts that small retailers may have less ability to compete against larger retailers in regional areas than they do in the metropolitan area because of the smaller customer base. However, the ERA considers that the overriding objective of deregulating retail trading hours is to meet the needs of consumers. If consumers in regional areas decide that independent retailers are inherently better than large chain retailers, then they will continue to support independent retailers. Independent retailers should not require artificial protection through regulation of retail trading hours.

Economic benefits of restricted trading hours

Some submissions queried whether extending trading hours creates material economic benefits, noting that there could be diminishing returns from longer trading hours. Similarly, submissions also stated that many retailers do not make use of the trading hours that are currently available to them, the implication being that for these retailers, the extension of trading hours will generate no benefit.

The extension of retail trading hours does not imply that retailers will be required to open for longer hours, although some may choose to do so. Rather, the primary benefit of deregulation is that it allows retailers greater flexibility in matching supply of retail services with demand, by opening at the times that customers require. Trading hours are unlikely to change for many retailers simply because of the deregulation of retail trading hours.

Diminishing returns most certainly apply for retailers trading for longer hours. There is no doubt that, in general, there is a higher demand for retail services at 2pm on a Saturday

⁴⁵⁰ Atkins (2011), Shop Trading Hours in Western Australia: A Research Report, University of Western Australia – Faculty of Law, 156-157.

than there is at 5am on a Tuesday. However, the degree to which diminishing returns occur will differ significantly between retailers. Furthermore, the fact that revenue generated from operating at 5am on a Tuesday are likely to be less than when operating at 2pm on a Saturday, does not mean that it is unprofitable to open at both times because retailers are able to reduce their variable costs to reflect the expected revenue during certain time periods. Where they are capable of, at least, covering their variable costs it is rational to operate.⁴⁵¹

Similarly, some retailers may elect to operate at periods during which it is unprofitable to do so for reasons other than direct financial benefit. For example, some fast food restaurants operate for 24 hours a day, even though there are long periods of time where it is likely that the financial cost of doing so outweighs the direct financial benefit. However, doing so generates other non-financial benefits such as brand loyalty. In circumstances where these indirect benefits outweigh the costs of operation, it can be rational for businesses to operate at these times.

The hours during which it is profitable to trade will differ widely between retailers. For some, as submissions have noted, it is not profitable to trade during the entire period that is currently available to them, but for others it will be profitable to trade outside of the currently allowable times.

Retailers cannot remain profitable without customers. Accordingly, the periods during which it is profitable for retailers to operate are determined by customer demand. Preventing retailers from operating during periods during which is profitable, not only lowers the profitability of the retailer, but also prevents customers from having their demand met.

An extension to retail trading hours is unlikely to result in greater economic benefits for all retailers, but the ERA considers that there is likely to be a large proportion of the retail industry in Western Australia that will benefit from greater choice in determining their trading hours, and that the benefits from being able to do so have the potential to be considerable.

7.1.4.3 Retail employees

Costs of regulation

Less flexible trading hours

Opponents of deregulated trading hours have expressed concern regarding the effect extended trading hours will have on the working hours of those employed in the retail sector. The ERA notes that different people place different values on leisure at particular times. Consequently, people will tend to gravitate to working hours that suit their desired lifestyle, where possible. Vacancies that arise during extended trading hours will tend to be filled by those who most prefer to work during these hours.

It is reasonable to assume that extending trading hours may disadvantage some employees that are compelled to work during extended trading hours. However, these employees are likely to represent a small fraction of the entire retail workforce. The costs on employees that are generated from working extended hours, when considered in the context of the entire retail industry, are unlikely to be significant.

⁴⁵¹ Assuming that fixed costs are recovered during periods of high demand although any revenue that exceeds the variable cost of operating will also make a contribution to fixed costs.

Benefits of regulation

Synchronised leisure time

The coordination of leisure time across families, or communities has been stated to generate positive externalities and spill-over benefits that arise from resting or enjoying free time collectively. Opponents of the deregulation of retail trading hours state that the regulation of retail trading hours allows for greater synchronicity of leisure time across families and communities.

The ERA considers that the coordination of leisure time across families and communities is likely to be beneficial, but the societal benefit currently enjoyed as a result of regulated retail trading hours in Western Australia is unlikely to be material. This is because the size of the benefits depend on the number people who will be able to better coordinate their leisure time. However, the ERA is unaware of any evidence that demonstrates the societal benefit derived from greater synchronicity of leisure time as a result of the regulation of retail trading hours.

In this case, the benefits derived from being able to coordinate leisure time grows in relation to the number of potential people with which one can coordinate their spare time. As the number of people that would benefit from the retention of retail trading regulation is small, the benefits are also small.

To clarify this point, the retention of the existing regulation will, in practice, only benefit employees of general retail stores. Small retail shops and filling stations are already subject to deregulated retail trading hours and special retail shops are entitled to open between 6am and 11:30 pm every day of the year. It is unlikely that many special retail shops would opt to open during hours outside this window if given the opportunity.

Having isolated the benefits to employees of general retail shops, the benefits are further limited to employees that, in the absence of regulation, would work during times that fall outside the current window of operation. In practice, this represents a fraction of the employed population in Western Australia and the benefits of coordinating of leisure time as a result of retail trading legislation is limited to this pool of people. For those that do not have family or friends in this group of people, the benefits will be nil.

In addition to this, the argument assumes that there is a universal desire for leisure time at times that general retail shops are prevented from opening.

As a general principle, the ERA considers that the benefits from coordination of leisure time will be maximised by allowing the entire community greater flexibility over their shopping visits, rather than attempting to benefit the small proportion of general retail staff whose regulated work hours may conflict with the leisure time of their friends or family.

Accordingly, the ERA considers that the regulation of retail trading hours for the benefit of coordinating leisure time across families and the community is unlikely to generate any material benefit to Western Australia.

7.1.5 ERA conclusions

The regulation of retail trading hours can only be justified if it corrects a market failure that would occur in the absence of regulation. For example, if regulation demonstrably protects the community from some serious and clearly perceived harm, or it provides a universally enjoyed benefit.

The analysis conducted in this chapter demonstrates that the regulation of retail trading hours imposes considerable costs by preventing people from shopping when and where it is most convenient to them. Such constraints present considerable difficulties to time-poor individuals and households, particularly with the changing structure of Western Australian households that has resulted from an increase of women in the workforce, and the growth of both dual-income households and single parent households.

People, for various reasons, want to shop at times and places that are currently unavailable to them. The ERA is of the view that customers are better equipped than the Government to determine when and where they want to shop. As such, consumer choice, rather than Government regulation, should determine which shops open and when. Retailers will respond to consumer demand by opening when it is profitable for them to do so and remaining closed when it is not. Deregulation of retail trading hours will not result in shops being open 24 hours a day, seven days a week. When deciding its operating hours, a retail shop will weigh up consumer preferences, staff preferences, opening costs and social norms and conventions. 452

Lifting the barriers to competition will ultimately be damaging to the retailers that are least capable of meeting customer demand and reflecting customer tastes and preferences (that is, the most inefficient and inflexible retailers). However, these retailers will be replaced by businesses that can and do cater to customer tastes and preferences, and will create a more competitive and vibrant retail environment.

The ERA concludes that there is no compelling economic reason that retail trading hours should not be deregulated in Western Australia.

However, the ERA also recognises the cultural significance of a small number of public holidays throughout the year. In this regard, the ERA recommends that retail trading hours in Western Australia be fully deregulated, with the exception of Christmas Day, Good Friday and the morning of ANZAC day, during which the majority of retailers are required to close.

The ERA recognises that there is a need for some goods to be available on every day of the year (for example, milk and petrol). Accordingly, the ERA recommends that small retail businesses (with a maximum of 10 employees working at any one time) and filling stations should be allowed to operate in a completely unregulated retail trading environment. The provision for these retailers to operate for an additional 2.5 days a year will give them a small competitive advantage over other retailers that are not. However, the ERA considers that these benefits will be immaterial over the entire trading year, and that this is unlikely to influence market dynamics in any meaningful manner.

7.1.6 Recommendations

- 27. Amend the *Retail Trading Hours Act 1987* such that retail trading hours in Western Australia are fully deregulated, with the exception of:
 - a. Christmas Day (12:00am 11:59pm);
 - b. Good Friday (12:00am 11:59pm); and
 - c. the morning of ANZAC Day (12:00am 12pm),

during which time only retailers that employ ten (or fewer) staff may open.

⁴⁵² Productivity Commission, Economic Structure and Performance of the Australian Retail Industry, Page 282.

7.2 Taxi industry

7.2.1 Introduction

The taxi industry in Western Australia is highly regulated. Regulations administered by the Department of Transport determine: the number of taxis licensed to operate in Western Australia; the maximum price that may be charged for taxi services; and the quality and market conduct standards that must be met by taxi operators.

Deregulating the taxi industry represents a significant challenge, not just in Western Australia, but in other parts of Australia and internationally as well. The primary challenge is that the number of taxi licence plates (which are needed to operate a taxi) are limited by Government regulation, which has resulted in these plates becoming highly valuable assets that are capable of generating an income for their owner, who may be otherwise unaffiliated with the taxi industry, or who may also be a taxi driver (in the form of lease fees). Removing restrictions on the number of taxi licence plates will reduce the wealth and income of owners of taxi licence plates, and these individuals may expect compensation for their loss.

Nevertheless, the ERA considers that there is a strong case for reforming the taxi industry. The existing regulatory framework applied to the taxi industry has created a number of problems for taxi passengers. Adjusting the regulations could result in significant reductions in taxi fares, greater availability of taxis, more reliable and timely services, and greater product differentiation amongst taxi services, to better meet the needs of taxi passengers.

In the Discussion Paper, the ERA identified that significant issues exist in the Western Australian taxi market and sought submissions from interested parties. The ERA received two submissions in response: one from the Department of Transport and the other from the Australian Taxi Federation. Many of the same issues were raised in both submissions. Key issues raised included:

- driver safety: the periods during which drivers are most concerned about their safety
 often coincide with periods when supply does not adequately match demand (for
 example, weekend evenings). These safety concerns often act to limit the supply
 of taxis at these periods of high demand. In the absence of actions that address
 these safety concerns, supply will continue to underserve demand, even in the
 presence of unrestricted taxi supply;
- managing credit risk: dispatch networks receive fixed returns for their services and therefore have little, to no, incentive to help reduce the costs incurred by drivers from fare evasion:
- incentives to differentiate: the taxi market has few incentives to expand taxi service offerings or offer product differentiation;
- fare refusal: minimum fares of \$10 should be introduced to encourage drivers to accept short fares; and
- barriers to competition: barriers exist that prevent the full integration of independent taxi booking applications into the taxi market.

In addition, the Department of Transport submitted that the Inquiry should not consider the taxi market in isolation and should instead analyse the regulatory environment for the broader market of "on-demand transport" services (those being both taxis and

omnibuses⁴⁵³). The Department of Transport submitted that any reforms should consider a regulatory approach that leverages emerging technologies such as smartphone applications that allow passengers to book on-demand transport, rather than taking a taxicentric approach to the Inquiry.

In the remainder of this chapter the ERA:

- describes the manner in which the taxi industry is regulated;
- examines whether the regulations are needed to address a market failure;
- considers the benefits and costs of the regulations on competition; and
- considers whether any market failures can be addressed in another way that is less restrictive on competition.

7.2.2 Regulation of the taxi industry in Western Australia

The regulation of taxis in Western Australia is differentiated by location, with taxis in the Perth metropolitan area (**Perth**) and taxis outside the Perth metropolitan area (**Regional Western Australia**) being subject to separate legislation.

In Perth, taxis are regulated by the *Taxi Act 1994* and *Taxi Regulations 1995*. In Regional Western Australia, taxis are regulated by the *Transport Co-ordination Act 1966, Transport (Country taxi-car) Regulations 1982* and the *Country Taxi-cars (Fares and Charges) Regulations 1991*. Both frameworks are administered by the Department of Transport.

The regulatory frameworks applied to taxis in Perth and Regional Western Australia are broadly similar in nature. The ERA has focussed its attention on the regulation of taxis in Perth, given this is where the vast majority of taxi activity occurs. However, the arguments made in this chapter should hold for both regions.

The regulation of taxi services can be separated into four separate aspects: quantity regulation, price regulation, quality regulation and market conduct regulation. All four of these aspects of regulation are utilised in Western Australia. Each aspect of regulation creates barriers to entering the market and therefore, restricts competition.

An analysis of each of the four aspects of taxi industry regulation, their application in the Western Australian taxi market, and their impact on competition, are discussed below.

7.2.2.1 Quantity regulation

The market for taxis can either be an open entry market or a restricted entry market.

The supply of taxi plates is not restricted in an open entry market, beyond basic thresholds set by quality and market conduct regulation.

Restricted entry markets (such as the one operating in Western Australia) involve the government directly intervening to limit the number of owned and Government-leased taxi vehicles allowed to operate in the taxi market. The limit is enforced by restricting the number

⁴⁵³ The Department of Transport website defines an omnibus as a passenger vehicle operating for reward that is not a taxi. This can include shuttle services, tour and charter vehicles, winery tours and private charters.

⁴⁵⁴ OECD (2007), *Taxi Services: Competition and Regulation*, Policy Roundtable, pp. 19-21.

of taxi licence plates available. Taxi plates give the owner of the plate, or their agent, the right to operate a taxi. These taxi plates can be freely bought and sold, subject to approval by the Department of Transport.

Additional taxi plates are either not issued or are only issued periodically (either on an ad hoc basis or according to a predetermined demand formula).

The number of taxi plates issued in Western Australia each year is at the discretion of the Transport Minister, who takes advice on this matter from the Department of Transport and the Taxi Industry Board.⁴⁵⁶

The ERA understands that the current Government's view is that taxi plates in Perth should not be sold privately and that any increase in supply should be in the form of Government leased plates. Section 16(3) of *Taxi Act (1994*) and Section 4A of the *Taxi Regulations 1995* restricts the number of Government leased conventional taxi plates that can be issued to 45 per cent of the total market of conventional taxi plates. No such restriction is applied to peak period or area restricted taxi plates. 457

The practical outcome of this is that the number of taxi licence plates is artificially restricted, resulting in there being fewer taxis operating in Perth than there would be in the absence of this restriction.

In December 2013, there were 2,087 non-multipurpose taxis operating in Perth, which undertook a total of 13,007,268 trips. 458

There are four categories of taxi plates available in Perth. These include:

- **Conventional:** Conventional taxis are standard taxis that operate without restrictions, such as those applied to peak-period, multi-purpose or restricted-area taxis. Conventional taxis account for more than three quarters of all taxis in Perth, contributing 1,602 of the 2,128 non-multipurpose taxi plates operating in Perth.
- Peak Period: Peak period taxis are subject to conditions restricting the hours during which they may operate. These taxis are generally limited to operating on Friday and Saturday evenings between 5pm and 6am. Four hundred peak period taxi plates are on issue in Perth. 459
- Area Restricted: Restricted area taxis may operate in limited areas. Area restricted taxis may accept fares to anywhere in the metropolitan area, but must return immediately to their restricted-area after completing the fare. The four restricted areas are: Armadale, Kalamunda/Mundaring/Swan, Rockingham/Kwinana and Wanneroo. Seventy three area restricted taxis operate in Perth. 460
- **Multipurpose**: Multi-Purpose Taxis (**MPT**) provide a taxi service for people who travel in wheelchairs or scooters. The MPT fleet is currently coordinated by both

⁴⁵⁵ It is not mandatory for owners of taxi plates to operate a taxi themselves. The legislation allows plate owners to lease their taxi plates to other parties, provided they meet the requirements to operate a taxi.

⁴⁵⁶ The Taxi Industry Board (TIB) is a statutory body with an objective to provide a considered and singular view for consideration by the Minister for Transport, taking into account the views of both industry stakeholders and taxi users

⁴⁵⁷ A discussion of the conditions applied to each category of taxi plate is discussed later in this section.

⁴⁵⁸ Data provided on request by the Department of Transport. Taxi numbers are as at December 2013.

⁴⁵⁹ Data provided on request by the Department of Transport.

⁴⁶⁰ Data provided on request by the Department of Transport.

Black and White and Swan Taxis, who have a contract with the Department of Transport to manage the service.

In light of the social, rather than commercial, objectives of multi-purpose taxis, the ERA has not given multipurpose taxis further consideration in this Inquiry,

In recent years, the Department of Transport has stopped issuing taxi plates for private ownership, and has instead begun leasing taxi plates directly to drivers. Data provided by the Department of Transport shows that since January 2011, the number of privately owned taxi plates in operation has fallen by one. In contrast, the number of operational government leased taxi plates has risen by 312.⁴⁶¹

The Department of Transport sets the maximum prices at which privately owned taxi plates may be leased at \$355 per week (excluding GST). Conventional taxi plates that are leased directly from the Department of Transport are leased for \$200 a week for vans and \$250 a week for sedans. Taxi plates attached to a taxi vehicle may be sub-leased for shorter shift periods. These prices are also regulated.

The ERA could not identify a market failure in the market for taxi services that justifies the imposition of restrictions on the number of taxis that can operate.

To the contrary, restrictions on the quantity of taxis impose unnecessary costs, including taxi passengers purchasing fewer taxi services at higher prices and experiencing longer waiting times than would occur in a market without quantity restrictions.

The primary beneficiaries of the restriction on the number of taxi plates are the plate owners. The restriction on taxi plates creates a scarcity value that provides plate owners with the opportunity to generate revenue by leasing their plates to drivers. This is reflected in the cost of leasing taxi plates. In Perth, maximum lease rates are \$355 per week (for a privately owned conventional taxi plate). In Sydney, it is estimated to be \$542 per week⁴⁶⁴ and the Victorian Taxi Inquiry estimated lease rates to be around \$576 per week.⁴⁶⁵

7.2.2.2 Price regulation

In Perth, the Department of Transport sets the maximum prices for three different time periods, Monday to Friday between 6am and 6pm; Monday to Friday between 6pm and 6am; Friday 6pm to Monday 6am. In addition to this, a separate price schedule is applied whenever five or more passengers are carried.⁴⁶⁶

Fares typically consist of a fixed charge for hiring the taxi (known as the flagfall) and two variable charges. The two variable charges are based on kilometres travelled and the length of time that the taxi is idle during the trip (known as the detention charge).

⁴⁶¹ The revenue generated by the Department of Transport from leasing taxi plates is placed into the Taxi Industry Development Account which may grant, with the approval and direction of the Minister of Transport, funding for promotional, research and development projects intended and designed to benefit the taxi industry.

⁴⁶² Unless otherwise stated, all dollar values are exclusive of GST.

⁴⁶³ Government lease conventional plates for a period of eight years.

⁴⁶⁴ Independent Pricing and Regulatory Tribunal of New South Wales (2013), *2013 Review of Taxi Fares in NSW*, Draft Report, p.14.

⁴⁶⁵ Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First – Service, Safety, Choice p.58

⁴⁶⁶ Regulated surcharges are also applied in certain circumstances including: Fares from the Airport; Fares on Christmas Day and New Year's Eve; and the 'ultra peak' period between midnight and 5am on Friday and Saturday nights.

Additional one-off surcharges exist for hiring taxis in periods of unique demand like New Year's Eve and Christmas Day.

The Department of Transport sets fares in Perth by using a cost model that estimates the costs of operating a taxi in Perth. The cost of leasing a taxi plate is included as a cost component in the model. The fare setting model is based on:⁴⁶⁷

- typical taxi operating costs in several Australian jurisdictions;
- the results of cost surveys completed by taxi operators and drivers in Perth; and
- comparisons with models and cost weightings used in other Australian jurisdictions.

Fares are updated annually according to changes to an industry-specific cost index.

Price regulation is necessary to address the lack of competition in taxi markets with restricted entry. However, this lack of competition is largely caused by quantity regulation and if these were removed the reliance on price regulation would be expected to diminish.

Price regulations in the taxi industry are generally applied by setting a maximum fare that cannot be exceeded. Caps on taxi prices limit the ability of plate owners (via drivers) to extract revenue that they would otherwise be able to extract from customers. This is of particular concern in markets with supply restrictions because the market power that taxi plate owners derive as a result of supply restrictions would be expected to, in the absence of price regulation, result in taxi fares being set well in excess of the cost of providing taxi services

Generally, the aim when regulating prices should be to replicate prices that would be expected in a competitive market. In practice, regulated taxi fares in markets with quantity restrictions often include an allocation for taxi lease costs, which would not exist in a competitive market. This is the case for regulated fares in Perth.

There is less need for price regulation in an open-entry market because taxis do not have the same degree of market power that allows them to influence prices. However, even in the most competitive taxi markets, opportunities to price gouge can arise. The potentially high search costs in locating another taxi, particularly during periods of high demand or obvious passenger vulnerability, substantially reduces consumers' ability to negotiate fares. This provides drivers with the temporary market power that allows them to price gouge. Market failure of this nature can be addressed by limiting drivers' ability to engage in opportunistic pricing without restricting their ability to change fares in response to genuine cost change.

Opportunistic pricing is dependent on being able to make immediate price changes. Regulation that prevents rapid price changes by requiring, for example, price changes to be notified to the regulator forty eight hours in advance of coming into effect prevents such behaviour from occurring. Such requirement does not limit the ability of genuine cost changes to be reflected in pricing because such changes generally occur over a much longer timeframe. The frameworks implemented in New Zealand and Sweden (both countries that allow unrestricted entry) demonstrate this feature.

In New Zealand, prices are able to fluctuate freely, but operators are required to notify the regulator of their prices before implementation and strict requirements are imposed for

⁴⁶⁷ PricewaterhouseCoopers (2008), Department for Planning and Infrastructure: Recommendation report – taxi fare increase for 2008/09 Final Report.

⁴⁶⁸ ACCC (2009), Statement of regulatory approach to assessing price notifications, p.13

⁴⁶⁹ Productivity Commission (1999), Regulation of the Taxi Industry: Commission Research Paper, p.6

making price information available to passengers.⁴⁷⁰ In Sweden, operators are also subject to strict regulation that dictates how prices are displayed to passengers.⁴⁷¹

Removing quantity restrictions would not entirely obviate the need for price regulation. As such, the period following any market reform involves a period of market adjustment and uncertainty. Robust competition will not occur immediately following reform because the market will undergo a period of rebalancing. Until the competitive dynamics of the newly reformed market have fully developed, maximum price regulation is likely to continue to be necessary.

Only once robust and sustained price competition has been observed can price regulation begin to be loosened, but not removed completely.

As such, light-handed price regulations (such as requirements for taxis operators to publish and prominently display their prices, and to use a taxi meter to remove driver manipulation of the taxi fare) are necessary to address this issue.

7.2.2.3 Quality Regulation

The quality of taxi services in Western Australia is regulated in two main ways: the standard of vehicles that can be used, and the standards that drivers must meet. The primary purpose of quality regulation is to ensure the safety of passengers.

Vehicles used as taxis in Perth must be less than five years old when they enter the metropolitan taxi fleet and have a maximum age of eight years for conventional taxis and ten years for area restricted and peak period taxis.

There are four categories of vehicles: 'Sedan/Station wagon, 'People Mover', 'Minibus' and 'purpose-built taxis.' 472 Each category has its own minimum and maximum capacity, specific access requirements (number of doors) and minimum requirements for wheelbase, luggage storage and taxi equipment (meter, security camera and signage). All vehicles are required to undergo annual safety, cleanliness and comfort inspections.

Taxi drivers in Perth must successfully complete the Taxi Aptitude Test and the Taxi Driver Training Course and pass the Taxi Driver Registration Test. Taxi drivers must also provide their National Police certificate and Traffic Infringements report and undergo a medical assessment. Drivers must also undertake approximately four hours of professional development training every two years.

The ERA considers that basic quality standards for taxi vehicles and drivers are necessary to address a market failure in the form of an information asymmetry that would occur in their absence. Passengers are unable to verify the safety and quality of a taxi service before entering a taxi, by which point it may be too late (for example, if an accident occurs because of sub-standard vehicle quality or driving). Quality regulations help to address the information asymmetry by providing passengers with certainty about the minimum safety and quality levels of the service that will be provided.

Removal of quality regulation is likely to lead to a significant reduction in confidence in, and demand for, taxi services because customers are unable to verify the safety or quality of

⁴⁷⁰ Office of Fair Trading, Impact of taxi market regulation – and international comparison: Annex J, p.61

⁴⁷¹ OECD (2007), (De)Regulation of the Taxi Industry, p.45

⁴⁷² Purpose built taxis have been recently introduced and are subject to a trial undertaken by the Department of Transport.

the service before use. In addition, standards of quality and safety observed by the industry may fall in the absence of regulation.

Quality regulation can potentially have material anti-competitive impacts if quality standards are set at levels that are disproportionately high. However, practical experience demonstrates that quality regulation does not have a material effect on the efficiency and competitiveness of the taxi industry.⁴⁷³

7.2.2.4 Market conduct regulation

Market conduct regulations establish the manner in which taxi drivers operating in the regulated area must behave. Market conduct regulation is a form of quality regulation.

Market conduct regulations applied in Perth include the following requirements.

- Fare acceptance: Taxi drivers are required to pick up any passenger that requires service (the "cab rank principle"). There are some exceptions related to driver safety, passenger behaviour and concerns about passengers refusing to pay the fare on completion of the trip.
- Most Economical Route: Taxi drivers are to take the most economical route possible, unless otherwise requested.
- Mandatory Dispatch Affiliation: Taxis are required to be affiliated with a radio dispatch network. A taxi dispatch service, sometimes referred to as a taxi company, takes bookings from customers and delegates to taxi drivers. For this service, drivers pay a weekly taxi dispatch membership fee. Affiliation with a dispatch service does not preclude drivers from accepting passengers from the street, taxi ranks or making private arrangements with customers.

The ERA considers that the requirement to pick up any passenger requiring a taxi service is necessary to meet a social objective. It recognises that taxi services, while not an essential service, can still be a critically important service in some circumstances, and provide passengers with a degree of certainty that they will be able to get to their intended destination. The requirement helps to reduce discrimination based upon age, gender, race, disability or location (including trip length).

The ERA considers that the requirement for taxi drivers to take the most economical route possible addresses an information asymmetry in situations where the passenger has no knowledge of the area and relies on the taxi driver to navigate the route to the desired destination. This helps to improve confidence in the taxi industry.

In assessing whether mandatory affiliation with dispatch networks is justified, the ERA considers that any assessment should be based on whether mandatory affiliation is the only means for achieving the desired objectives.

The Victorian Taxi Inquiry noted that the stated rationale for mandatory dispatch affiliation is generally considered to be that it provides for the safety of the driver and that it provides passengers with universal access.⁴⁷⁴ In both instances, the Victorian Taxi Inquiry concluded that neither objective justified mandatory affiliation.

⁴⁷³ OECD (2007), *Taxi Services: Competition and Regulation*, Policy Roundtable.

⁴⁷⁴ Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First - Service, Safety, Choice, p.248

Maintaining a direct link with the driver is desirable from a safety perspective. However, the development of mobile communication technology means that dispatch networks are not the only, or necessarily the most efficient, providers of these services. ⁴⁷⁵ Security companies already provide duress alarm systems for a range of situations and are likely to enjoy a great deal of expertise in the provision of such systems. In the event that affiliation becomes voluntary, non-affiliated taxis have alternative sources from which to address their security needs.

The ERA expects that opening up the market for taxi driver duress alarm systems and GPS tracking to competition, subject to regulated standards, would result in better outcomes for drivers.

Abelson suggests that universal access represents a situation in that all members of a community have similar levels of access to taxi services. ⁴⁷⁶ The Victorian Inquiry noted that it is difficult to validate the case for universal access and stated that the objective appeared to have been established in a time before the proliferation of mobile phones and mobile internet access. ⁴⁷⁷

In addition to this, the ERA understands that dispatch networks in Western Australia do not guarantee service, so the view that mandatory affiliation with a dispatch network is capable of achieving universal access in the first place is optimistic at best.⁴⁷⁸

There are practical considerations that may prevent drivers from choosing not to affiliate with a dispatch network. These are primarily rooted in the cost of meeting the regulatory requirements placed on dispatch networks by the Department of Transport.

The key obligation raised in discussions with the Department is the need for dispatch networks to collect data that assists with the investigation of complaints, this primarily includes vehicle GPS and operational data, such as taximeter activity.

Should mandatory affiliation be removed, taxi drivers that elect not to affiliate with a dispatch network would be obligated to collect this data themselves. It is not clear whether this would represent a material barrier to non-affiliation.

In the event that costs do prove to be prohibitive for non-affiliation, the ERA does not consider it to be sufficient grounds to retain mandatory affiliation on the basis that costs are dynamic (particularly in technologically based services) and retaining mandatory affiliation would preclude taxi drivers from choosing to end affiliation in the future, should it become cost effective.

Accordingly, the ERA considers that there is no basis for the justification of mandatory affiliation and in the absence of such justification, the market would be best served by removing regulation and allowing drivers the choice of determining what is in their best interests.

Journal of

⁴⁷⁵ Victoria Taxi Industry Inquiry (2012), *Draft Report: Customers First – Service, Safety, Choice*, p.248

⁴⁷⁶ Abelson (2010), The High Cost of Taxi Regulation, with Special Reference to Sydney, Agenda: A Policy Analysis and Reform, Volume 17, Number 2, 2010

⁴⁷⁷ Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First - Service, Safety, Choice, p.248

⁴⁷⁸ Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First - Service, Safety, Choice, p.248

7.2.3 Costs and benefits of regulating taxi supply

Based upon a preliminary assessment of the four types of regulation applied to the Western Australian taxi industry, the ERA has concluded that the main anti-competitive effects arise from quantity restrictions. The ERA was unable to identify a market failure in the taxi industry that justifies the need for imposing regulatory limits on taxi numbers.

The ERA considers that regulations for price, quality and market conduct are likely to be in the public interest (with the exception of the requirement on all taxis to affiliate with a taxi dispatch network), although the extent to which price regulation is required will be influenced by the extent to which the supply of taxis is regulated.

Reflecting these conclusions, the following assessment of the benefits and costs that arise from the regulation of the supply of taxis in Perth, relative to the costs and benefits of a deregulated market primarily focuses on the effects of quantity restrictions on taxi plate owners, taxi passengers, taxi drivers, and network dispatch operators.

7.2.3.1 Taxi plate owners

Benefits

Owners of taxi plates in Western Australia derive considerable financial benefits from the quantity restrictions on the number of taxi plates. These benefits are derived from:

- the scarcity value of the taxi licence plate (which is reflected in the value of the plate as an asset); and
- income from leasing the taxi plate to taxi drivers (or by plate owners earning this income directly by driving the taxi themselves).

Financial value of taxi plates

A taxi plate is needed to operate a taxi in Western Australia. The number of taxi plates on issue is restricted by the Department of Transport. The scarcity of taxi plates means that the value of taxi plates is maintained at an artificially high level. In the absence of supply restrictions, a taxi driver would be able to acquire their own taxi plates for a negligible value. As a result, the market for leasing taxi plates would disappear and the value of taxi plates would fall to around the same price as the price of acquiring a plate directly from the Department of Transport.

Some owners of taxi plates will have benefited from the appreciation of the value of taxi plates that they own. Between 1982 and 2012, the value of a conventional taxi plate increased from approximately \$75,000⁴⁷⁹ to around \$300,000 in 2012 terms.⁴⁸⁰

The value of taxi licence plates depends on the expected future stream of revenue that the owner of the plate will receive over the life of the plate. The current price for purchasing a taxi plate of around \$300,000 signals that the current regulated lease rates provide significant profits to plate holders.

The graph below compares the value of conventional taxi plates in Perth with that of the All Ordinaries Index for the period between 1982 and 2012. The All Ordinaries Index is recognised as the investible benchmark for the Australian equity market. For comparability purposes, both assets have been indexed at 100 in 1982. The graph demonstrates that as

⁴⁷⁹ This equates to \$25,000 in 1982 terms.

⁴⁸⁰ Data sourced from the Department of Transport. The exact value of taxi plates sold in 2012 was \$291,401.

an investment over this period, the returns from taxi plate licences has outperformed that of the All Ordinaries Index.

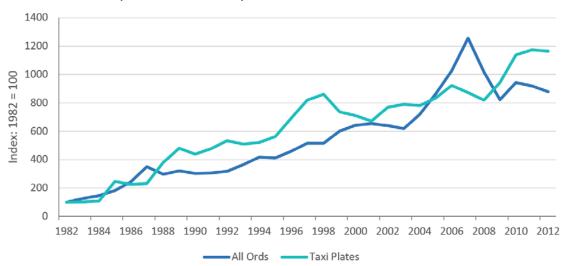


Figure 34 Comparison of the value of Perth metropolitan taxi plates and the Australian Share Market (All Ordinaries Index)

Sources: Department of Transport and 2003 Report on the Review of the Taxi Industry Regulatory Structure in the Perth Metropolitan Area⁴⁸¹

Lease income

A taxi plate owner can generate an income stream from the taxi plate by leasing the taxi plate (and hence, the right to operate a taxi) to a taxi driver. This cost of leasing the taxi plate incurred by taxi drivers is passed on to passengers via taxi fares.

The amount that a privately owned taxi plate can be leased for has been capped at \$355 per week (excluding GST). Therefore, the profits that plate holders can earn in Perth are tempered by the regulated maximum rates at which plate owners can lease their plates.

Lease fees for taxi plates account for 16 per cent of the maximum regulated taxi fares determined by the Department of Transport. This means that 16 per cent of all taxi fares goes to taxi plate holders in the form of plate lease costs. 482

The total value of annual lease fees collected by taxi plate owners in Perth is calculated below.

Lease rates are dependent on who the taxi plates are being leased from, Government plates are less expensive than privately owned plates.

Lease rates for peak period plates are set on a shift basis, with the maximum fee for Friday and Saturday nights (combined) is \$71.50. For any other shift the maximum lease rate is

⁴⁸¹ The ERA has been unable to source plate prices for the period between 1982 and 1991 directly from the Department of Transport. As such figures have been sourced from the June 2003 Report on Review of the Taxi Industry Regulatory Structure in the Perth Metropolitan Area (Figure 1) and with the exception of the \$25,000 value for 1982, which is directly referenced in the report, the values for the years 1983 to 1991 should only be considered indicative.

⁴⁸² PricewaterhouseCoopers (2011), *Re: Update of the 2011 taxi fare increase*, Document posted on DoT website (Taxi and charter vehicles/Taxi and charter publications/General taxi industry publications).

\$35.75 respectively (both figures are GST inclusive). This amounts to a combined weekly lease fee of \$107.25 (\$96.53 exclusive of GST).

For area restricted plates, the maximum is \$355 per week, although the ERA considers given the differential between Government lease rates for conventional taxis (\$250 per week) and that for area restricted taxis (\$100 per week) that the market rate for leasing an area restricted taxi is unlikely to reach \$355 per week. Using the relativities of the two Government lease rates as a proxy for differential between the market lease rates, the ERA estimates the market rate for area restricted plates as being \$142 per week. 483

Assuming that each plate is leased out at its regulated maximum rate, 484 the total annual benefit to taxi plate holders is \$27.7 million. 485

Table 27 Expected aggregate plate owner revenue

Plate owner benefit Conventions	Government			Private		
	Conventional	Peak Period	Area Restricted	Conventional	Peak Period	Area Restricted
Plate Numbers	618	390	58	984	22	15
Annual Lease Fee	\$250	\$50	\$100	\$355	\$97	\$142
Annual Revenue	\$8,034,000	\$1,014,000	\$301,600	\$18,164,640	\$110,424	\$110,760

Source: Department of Transport (as at December 2013)

However, because the Government is the effective owner of many of these plates, the benefit to private plate owners accounts for \$18.4 million per year. The remaining \$9.3 million accrues to the Government.

Costs

The ERA did not identify any material cost to taxi plate owners arising from the existing quantity restrictions in the taxi industry.

To the contrary, owners of taxi licence plates would be adversely affected by the removal of quantity restrictions on taxi plates.

7.2.3.2 Taxi drivers

Benefits

Studies assessing the impact of deregulation on driver income, including studies conducted by the OECD and the Victorian Taxi Inquiry did not find evidence that the incomes of existing taxi drivers⁴⁸⁶ are higher in markets with restrictive entry conditions than in open entry markets.^{487,488} The OECD found that the profits associated with plate scarcity appear to be appropriated solely by plate owners.⁴⁸⁹

The income earned by taxi drivers is reflected in their scarcity value. The barriers to entry for taxi drivers are relatively low. As noted earlier, taxi drivers in Perth are required to

⁴⁸³ The Government lease rate for area restricted taxi plate is 40 per cent of the lease rate for a conventional taxi.

⁴⁸⁴ With the exception of area restricted plates.

⁴⁸⁵ Peak period plates have been assumed to be leased for Friday/Saturday night and one other shift.

⁴⁸⁶ Unless explicitly stated, any reference to 'drivers' refers to existing taxi drivers.

⁴⁸⁷ OECD (2007), Taxi Services: Competition and Regulation, Policy Roundtable, p.8.

⁴⁸⁸ Victoria Taxi Industry Inquiry (2012), Final Report: Customers First – Service, Safety, Choice p. 173

⁴⁸⁹ OECD (2007), Taxi Services: Competition and Regulation, Policy Roundtable, p.8.

provide a National Police Certificate and Traffic Infringement reports, undergo a medical exam, complete a five day driver training course and pass a driver registration test.

Box 19 Taxi driver income in Victoria and New South Wales

The ERA has not been able to source reliable data on taxi driver income in Western Australia.

However, a number of inquiries into the taxi industry in other States have sought to estimate the incomes of taxi drivers.

In Victoria, the Essential Services Commission (ESC) has the responsibility for determining the maximum charges for services provided by taxis. The ESC is currently undertaking a review of taxi fares in Victoria, having previously undertaken reviews in 2005 and 2008.

In the 2008 review, the ESC noted that they have no official statistics relating to driver income, but on the basis of a driver survey that was conducted on their behalf by PricewaterhouseCoopers, estimated that in 2007, drivers earned on average approximately \$13.20 an hour, excluding income derived from tips.¹

In 2012, a Taxi Industry Inquiry was set up in Victoria to review the Victorian taxi and hire car industry. While noting that it is difficult to get data that is representative of all drivers, the Inquiry noted in its Draft Report that it had gathered data from various sources that consistently indicated that drivers earned between \$12 and \$14 an hour, excluding GST but not tips.2 The Inquiry concluded in the Final Report that the average return for a Melbourne based driver is \$13 per hour.3

In New South Wales, the Independent Pricing and Regulatory Tribunal (IPART) is responsible for recommending maximum fares for taxis across New South Wales. IPART is currently undertaking a review of fares. In its draft report, IPART stated that a driver survey it conducted in 2011 suggested that taxi drivers earned an hourly rate of between \$10 per hour for weekday shifts and \$12 per hour for weekend shifts. These values have been challenged by Deloitte Access Economics, working on behalf of the NSW Taxi Council. Deloitte asserts that NSW drivers earn \$18.20 an hour in metro areas and \$19.05 an hour in non-metro areas.5

While there appears to be some debate regarding the exact level of driver incomes, the hourly rates in Sydney and Melbourne appear to range between \$12 and \$19 per hour. This range is broadly comparable to the full-time minimum wage for adults of \$16.37, as detailed on the website for the Fair Work Ombudsman.

- ¹ Essential Services Commission 2008, *Taxi Fare Review 2007-08: Final Report*, August, p.48
- Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First Service, Safety, Choice p. 92
 Victoria Taxi Industry Inquiry (2012), Final Report: Customers First Service, Safety, Choice p. 42
- ⁴ Independent Pricing and Regulatory Tribunal of New South Wales, Review of maximum taxi fares and review of annual Sydney taxis licences from July 2014 - Draft Report, p.11.
- ⁵ Deloitte Access Economics, The economic and social contribution of the NSW taxi industry, p.35

Because the barriers to becoming a taxi driver are low, there are more qualified taxi drivers than there are taxis. Prospective drivers effectively compete with each other to guarantee a seat driving a taxi. In doing this, drivers will agree to work as a taxi driver up until the point that they are better off undertaking different employment. Because the barriers to becoming a taxi driver are low, the income earned by taxi drivers is comparable to the income earned from engaging in other occupations with low barriers to entry.

In general, taxi drivers appear to earn relatively low incomes, capturing few of the profits earned in the market. Instead, drivers appear to act as intermediaries in the flow of net revenue from passengers to plate holders. A similar situation would exist in the absence of quantity restrictions, except drivers would not be competing with each other for the right to lease taxi plates. Instead, drivers would be expected to have their own taxi plate and compete against each other for passengers. In both markets, the level of competition between drivers is similar, so the extent to which they compete their prices (income) down would be comparable in both instances.

The unique structure of the Perth taxi market results in a slightly different outcome to that described above. The majority of taxi drivers lease their plates from private owners and, because taxi fares are set based on the cost of leasing a conventional taxi plate from a private owner at the regulated maximum rate, the market works as described above for drivers who lease their plates privately. Drivers who lease their taxi plates from the Government are subject to lower plate lease costs than those for privately owned plates. This lowers their costs, relative to privately leased plates allowing them to capture the differential between the lease rates for themselves and earn a greater income than drivers leasing plates privately.⁴⁹⁰

The regulated maximum rate that a privately held conventional taxi plate can be leased at is \$355 per week. Leasing the same taxi plate from the Government costs just \$200 per week for drivers of a van and \$250 for drivers of a sedan. This provides drivers leasing their taxi plate from the Government with a cost advantage of between \$155 and \$105 per week.

With the exception of the lease costs, privately leased and Government leased taxi plates (of the same classification) are subject to the same operational conditions. As such, aggregate revenues would be expected to be comparable, irrespective of plate ownership.

As at February 2014, the Government was leasing 618 conventional taxi plates. Assuming that Government plate holders generate the same revenue as drivers operating a taxi with a private plate, Government plate holders earn an additional \$105 per week in net revenue. Across all 618 plate holders, this amounts to \$3,363,360 of additional net revenue per annum.

For peak period plates the Government lease rate of \$50 per week (sedan). For private plates the regulated maximum lease fee for Friday and Saturday night is \$64.35, for any other shift the regulated maximum is \$32.18.⁴⁹² Based on the assumption that peak period plates operate during the two compulsory Friday/Saturday night and one other shift,⁴⁹³ there is a difference of \$46.53 between the cost of leasing privately and the cost of leasing from the Government.

The maximum price at which an area restricted taxi plate can be leased is the same as for a conventional taxi plate, \$355 per week. However, ERA considers that given the geographical limitations applied to area restricted plates, it is unlikely that they will be leased at the same price as conventional taxis.

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⁴⁹⁰ Provided the regulated taxi fares are cost reflective, the income earned by drivers leasing privately owned plates would be expect to be comparable to driver income levels in a fully competitive market.

⁴⁹¹ For simplicity and conservatism, it has been assumed that all plates are assigned to sedans.

⁴⁹² The regulated fees for these two shifts include GST, these figures are GST exclusive.

⁴⁹³ It is compulsory for peak period taxis to operate on Friday and Saturday nights. The remaining peak periods are optional. These include Sunday evening, and 4am to 9am Monday to Friday.

For the purposes of this calculation, the differential between the cost of leasing Government from conventional and area restricted plates has been used as a proxy for the differential at which area restricted plates would be leased on the private market. An area restricted taxi plate can be leased from the Government for 40 per cent of the cost of a conventional taxi (sedan). Accordingly, it is assumed that the market rate for area restricted plates is \$142. This provides drivers leasing Government plates with a cost advantage of \$42 per week.

Table 28 Benefit to taxi drivers of leasing Government taxi plates

Driver Benefit	Conventional	Peak Period	Area Restricted
Government owned	618	390	58
Weekly cost differential with privately leased plates	\$105	\$47	\$42
Annual benefit to drivers	\$3,374,280	\$943,527	\$126,672
Total	\$4,444,479		

Source: Department of Transport

In total, supply restrictions generate benefits of approximately \$4.4 million per year to taxi drivers who lease government plates.

Costs

The ERA did not identify any material costs to existing taxi drivers from restrictions on the quantity of taxis. However, people who are unable to gain employment as taxi drivers because of the restriction on the supply of taxi plates incur a significant cost by being unable to earn an income that they otherwise would in a market without supply restrictions.

For existing drivers that do not generate a significant proportion of their clientele from dispatch networks, the requirement that all drivers affiliate with a dispatch network is likely to be a net cost.

Similarly, the removal of this requirement is expected to increase competition in the market because dispatch networks will have the incentive to attract drivers that would not otherwise choose to affiliate with them on their current terms.

7.2.3.3 Taxi passengers

Benefits

The ERA has undertaken a comprehensive literature review of the effects of taxi market regulations, including previous examinations of the Western Australian market and other national and international studies. The general consensus across the literature is that supply restrictions do not generate any material benefit for passengers.

Costs

Price and quantity of taxi services consumed

In theory, removing quantity restrictions on taxis should result in greater competition and lower fares. Lower fares should in turn result in a greater quantity of taxi services being demanded.

⁴⁹⁴ \$100 a week for area restricted and \$250 for conventional (sedan).

International experience indicates removing quantity restrictions (while liberalising price regulation) generally results in reductions in taxi fares, but this is not always the case. The OECD suggested that in some cases, static or increasing prices after reform may reflect regulated prices being set artificially low in the pre-reform environment.⁴⁹⁵

The ERA considers that the ultimate effect on fares of deregulating the taxi industry will depend upon a number of factors, including:

- the form of regulation of the taxi industry prior to deregulation and the form of regulation of the taxi industry post deregulation;
- the number of new taxis entering the market in response to the removal of quantity restrictions;
- factors specific to the geographic region being examined (for example, competition effects are likely to be greater in large cities than in small country towns);
- whether deregulation results in improvements in the quality and variety of taxi services rather than simply lower taxi fares; and
- any other changes that occurred at the same time as the reform (for example, introduction of unrelated taxes).

The Victorian Taxi Inquiry noted that experiences in other jurisdictions suggest that the relaxation of licence controls does not invariably result in lower fares when fare controls are relaxed or removed. The expected benefits from removing supply restrictions and relaxing fare controls will not have the desired effect if other barriers to entry still remain. The experiences of reform in New Zealand, Netherlands and Singapore demonstrate this point. Page 1979

- Following deregulation in 1989, taxi fares in the larger cities of New Zealand fell by between 15 and 20 per cent in real terms.⁴⁹⁸ The relaxation of fare controls have allowed some innovation and price differentiation to emerge.⁴⁹⁹
- The taxi market in the Netherlands was reformed between 2000 and 2002. Fares
 went from being fixed to being subject to a maximum fare. Prices rose in the year
 immediately following reform, then remained relatively constant (in real terms).⁵⁰⁰
- Singapore undertook the unique approach of deregulating taxi fares before deregulating taxi supply. Fares were deregulated in 1998 in a similar manner to that undertaken in New Zealand and taxi supply was deregulated in 2003. However, Singapore implements a minimum fleet size requirement (currently set at 400 taxis) and a private and commercial vehicle permit system that indirectly limits the number of taxi plates. At the time of the Victorian Inquiry, Singaporean vehicle permits were selling for S\$56,000 (approximately A\$47,600⁵⁰¹).

With respect to the Dutch taxi market, passengers in the pre-booked market are limited in their ability to choose their taxi provider. In most cases, taxis are booked through a central dispatch centre that groups together different operators. As such, the dispatcher is unable

⁴⁹⁵ OECD (2007), *Taxi Services: Competition and Regulation*, Policy Roundtable.

⁴⁹⁶ Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First – Service, Safety, Choice p.164

⁴⁹⁷ Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First – Service, Safety, Choice p.164

⁴⁹⁸ Gaunt (1998), A finance analysis of taxicab industry regulation, p.253

⁴⁹⁹ Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First – Service, Safety, Choice p.164

⁵⁰⁰ OECD (2007), (De)Regulation of the Taxi Industry, p.78.

⁵⁰¹ Calculated using the average exchange rate over the previous twelve months.

⁵⁰² Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First - Service, Safety, Choice, p.164

to inform the passenger of the cost of the fare because it depends on which taxi accepts the job.⁵⁰³ This limits the extent to which passengers can direct their patronage to any preferred taxi operator and therefore limits the extent to which taxi operators benefit from price competition.

In Singapore, indirect barriers to entry limit the extent to which competition can develop. The Victorian Inquiry noted that the largest taxi network in Singapore responded to increases in demand of its services by revising its fare structure, which was expected to result in higher fares and reduce demand, rather than purchase additional commercial vehicle permits (at a cost of around A\$47,000) that would allow it to increase its supply.⁵⁰⁴

The Victorian Inquiry concluded that the regulation of fares needs to be considered in the context of the market as a whole and that this is likely to include some control on fare levels, publication of fare information, consistency in fare structure and pre-registration of fares.⁵⁰⁵

The experience in New Zealand demonstrates that, provided no residual barriers to entry or competition exist, such as those exhibited in the Netherlands and Singapore, following the removal of taxi supply restrictions, deregulation can result in robust competition that includes increased supply and lower fares.

The Department of Transport noted in its submission that driver concerns about safety and security of fare payment, particularly during periods when passengers are more likely to be intoxicated, could prevent supply from meeting demand, even in a market that has removed supply restrictions. This is a legitimate concern that could prevent full and robust competition from developing in the taxi market across Western Australia.

The ERA considers that smartphone applications that are used to book taxis can mitigate this risk. One of the key issues currently is that passengers have a great degree of anonymity when using taxis. Taxis are required to have cameras installed in their taxis and in the event that an offender can be identified, it aids any prosecution. However, such information offers little help in identifying offenders in the first place. Because smartphone applications can require users to pre-register before use, passenger anonymity can be eliminated and drastically reduce the incidence of safety related issues.

Similarly, smartphone applications are capable of providing the functionality for passengers to pay for their taxi fare using a preloaded credit card, or PayPal. This allows drivers to address concerns about passengers refusing to pay the fare at the end of the trip.

As the use of taxi booking applications grows, taxi drivers will increasingly be capable of insisting that passengers' book and pay for taxis via a smartphone, without affecting demand for their services. By doing so drivers are capable of mitigating the risks posed by passenger anonymity and non-payment of fares to the degree that they are unlikely to pose a material risk.

The capability for smartphone applications to provide these services already exists, although they may not be available in the Perth market. However, if sufficient latent demand exists because of these risks, which could be addressed by an existing smartphone application adding functionality to their service, it would be mutually beneficial for the application developer and taxi drivers to ensure that this is addressed.

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⁵⁰³ Law Commission, Reforming the Law of Taxi and private Hire Services: A Consultation Paper, p.114

⁵⁰⁴ Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First - Service, Safety, Choice, p.164

⁵⁰⁵ Victoria Taxi Industry Inquiry (2012), Draft Report: Customers First - Service, Safety, Choice, p.165

As such, the ERA does not consider there to be residual barriers in the market that would stifle market entry and it is expected that the removal of quantity restrictions will produce outcomes of a similar nature to those experienced in New Zealand, that is, increased supply and lower fares.

Increasing driver safety and decreasing the incidence of unpaid fares are not the only areas in which smartphone applications have the capacity to improve taxi markets. However, the extent to which smartphone applications are able to improve the market is limited by market competition. Operators in highly competitive, open entry, markets have stronger incentives to innovate their services, as a way of attracting passengers, than operators in less competitive, restricted entry, markets. As a result, the benefits that can be gained from the ever expanding capability of smartphone applications (as discussed below in Box 20) are likely to be enjoyed to a much greater extent by passengers in competitive markets.

Box 20 Smartphone applications

Emerging smartphone technology will allow more robust competition in the taxi market. In addition to being able to address the safety concerns of drivers, smartphone applications have the ability to generate significant benefits to drivers and passengers.

The rapid development of smartphone technology has allowed smartphones to effectively become portable taxi ranks and have the potential to make physical taxi ranks largely redundant in the near future. The proliferation of smartphone applications are also expected to have a similar effect on the hail market. This is because smartphones allow customers to see the taxis in the area and hail any taxi nearby, without having to rely on physically catching the attention of a taxi driver or congregating at a taxi rank, both of which will drastically reduce waiting times.

The potential benefits that could be derived from the ability to book taxis via smartphones include:

- facilitating fare prepayment to reduce fare evasion;
- allowing taxi drivers to identify passengers from applications, thus reducing the likelihood of abuse or vehicle damage and providing a greater likelihood of punishment or reimbursement:
- allowing passengers to calculate the fare before hire (removing price information asymmetry);
- allowing passengers to identify and monitor the location of nearby taxis (reducing uncertainty about waiting times); and
- allowing passengers to hire taxis based on previous ratings, which rewards good taxi drivers.

Each of these aspects lowers the barriers to efficient competition and, as the number of taxi bookings made via smartphone applications grows, market competition will intensify and generate benefits to both passengers and those operators that most effectively adapt to customer demand.

The extent to which fares could fall and the benefit that would result from it is discussed below.

The benefits to passengers can be separated into two categories. Firstly, the benefits to existing passengers from the resulting fare reduction. That is, passengers that are willing to pay the existing fares, will benefit from lower prices.

Secondly, lower fares will make taxi services more attractive to passengers that previously would have been put off using taxi services, and lower prices will result in even greater demand for taxi services.

The extent to which existing taxi passengers will benefit from lower prices can be calculated in two ways: by estimating the total cost of leasing taxi plates in Perth⁵⁰⁶ or by estimating the amount that taxi fares will be expected to fall, on average, and multiplying this by the number of taxi trips that are undertaken.

The total cost (to drivers) of leasing taxi plates in Perth has already been estimated to be \$27.7 million per annum.

The second approach requires the ERA to estimate the average taxi fare in Perth.

The Department of Transport conducted a survey of taxi drivers in 2013 and as part of this survey collected data on average fares, over different periods of the week. The table below illustrates the results of the survey, along with the proportion of taxi rides that are undertaken during each period of the week.

Table 29 Average fares in the Perth Metropolitan Area (2013)

	Weekday Day	Weekend Day	Monday – Thursday and Sunday Evening	Friday Evening	Saturday Evening ⁵⁰⁷
Average Fare	\$21.45	\$22.05	\$23.30	\$24.02	\$25.18
Proportion of fares completed during time period	36%	10%	25%	13%	16%

Source: Department of Transport

The ERA weighted these fares using data provided by the Department of Transport, detailing the volume of taxi trips completed at each hour of the day for each day of the year to estimate an average fare of \$22.92.

PricewaterhouseCoopers was commissioned by the Department of Transport in 2008 to establish a model for setting taxi fares in Perth. The model, discussed in Box 21, estimated

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⁵⁰⁶ In a deregulated market, these costs will no longer have to be recovered. As a result, prices would be expected to fall by this amount.

⁵⁰⁷ The average fare information did not explicitly refer to Sunday morning or Sunday Evening. Sunday morning (12:01am-5:59am) has been included among the data for Saturday evening. The demand profile for Sunday evening is comparable to those found on weekday evenings, as such fares undertaken on Sunday evening have been included in the Monday – Thursday data.

that taxi plate lease fees amounted to approximately 16 per cent of the total cost of operating a taxi.

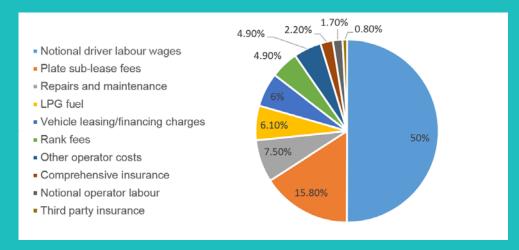
The ERA expects that by removing the restrictions on the supply of taxi plates in Perth, the market for leasing taxi plates will no longer exist because drivers will be able to acquire their own at a negligible cost. Accordingly, the cost of leasing a taxi plate will no longer need to be recovered and taxi fares would be expected to fall by approximately 16 per cent. This would see the average fare fall by \$3.62 from \$22.92 to \$19.30.

Box 21 Components of taxi fares in the Perth Metropolitan Area

In 2008, PricewaterhouseCoopers was commissioned to review the effectiveness of the model that was being used at the time to adjust fares for Perth Metropolitan Taxis.

The result of this process was the construction of an industry-specific cost index model that reflects the cost incurred by taxi drivers operating in Perth. The model was designed such that it could be adjusted to ensure that future fare increases are in line with the movement in the principal costs of a taxi business in Perth.

The most recent publically available update of the model was published in 2011.¹ The model outlined each of the major cost components incurred when operating a taxi. The figure below details each cost component and the proportion of total cost for which they account. For ease of reading, the legend lists each cost component from largest to smallest.



¹ PricewaterhouseCoopers, *Re: Update of the 2011 taxi fare increase*, Report for the Passenger Services Business Unit of the Western Australia Department of Transport, 22 August 2011. Published on the Department of Transport website.

Data provided by the Department of Transport demonstrate that a total of 13,007,268 taxi trips were undertaken in Perth in 2013.

Multiplying the expected fall in the average taxi fare by the number of taxi trips completed in 2013 calculates the total passenger benefit of a 16 per cent drop in prices as \$47 million per year.

⁵⁰⁸ 15.8 per cent.

This is significantly larger than the combined \$32.1 million per annum in income that taxi plate owners and taxi drivers are expected to lose (and passengers benefit) as a result of the removal of supply restrictions. In the absence of taxi drivers or dispatch networks also incurring significant losses as a result of supply deregulation, which the ERA considers unlikely, these two calculations would be expected to result in similar numbers.

The ERA considers that the \$32.1 million is likely to be the more accurate measure because the data it is based on is considered to be more robust than that from which the figure of \$47 million is derived. The data used to calculate these two figures are as follows:

- **\$32.1 million**: The total number of each category of taxi, the regulated maximum lease fee for each category of taxi and the price differential between Government leased taxi plates and privately leased taxi plates.
- **\$47 million**: Average fare estimates over different periods of the week from a driver survey, proportion of total taxi trips undertaken over different periods of the week and the estimate that taxi plate lease fees account for 16 per cent of the total cost of operating a taxi.

The data used in the first calculation is easily observed and monitored, whereas the data for the second calculation is subject to a greater degree of bias and uncertainty (driver survey estimates of average fares) and measurement error (cost model estimates of the proportion of total costs contributed by lease fees).

Having derived the benefit that would accrue to existing passengers from the removal of supply restrictions as amounting to \$32.1 million per annum, the next step is to calculate the additional benefit that is derived by passengers as a result of the additional demand generated by lower prices. To do this the ERA must establish the extent to which demand would increase in response to a fall in taxi fares. This is achieved with the use of price elasticities of demand.

The differences between the two estimates above call into question the accuracy of assuming that taxi fares would decrease by 16 per cent following the removal of supply restrictions as the fare setting cost model would suggest. As such, a conservative estimate of 10 per cent has been used instead.⁵¹⁰

Estimates of price elasticity of demand for taxi services are not undertaken regularly and the ERA is not aware of any such estimates that relates to the Perth area. As such, estimates from other Australian jurisdictions have been used instead. Information on price elasticities of demand for taxis in Australia were limited to two sources:

 In 2003, Booz Allen Hamilton prepared a report appraising taxi fare structures for the Independent Pricing and Regulatory Tribunal of New South Wales (IPART). Based on information from Canberra and Brisbane and other international studies, Booz Allen Hamilton concluded that elasticities are most likely to be in the range of -0.3 and -0.8 and that elasticities are likely to differ substantially by market segment, particularly business travel and other travel.⁵¹¹

⁵⁰⁹ The sections discussing the benefits to taxi plate owners and taxi drivers estimate that the combine benefit for these two groups amounts to \$32.1 million per annum. Because these are collected from passengers via higher fares, they amount to a cost to passengers of the same magnitude.

⁵¹⁰ Assuming the remaining data used to estimate the figure of \$47 million is accurate, a 10% reduction in fares would result in passenger benefit of \$29 million per annum.

⁵¹¹ Booz Allen Hamilton (2003), Appraisal of Taxi Fare Structure Issues, Prepared for IPART.

 Price elasticities of demand for taxis in Melbourne were estimated as part of the Victorian Taxi Inquiry in 2012.⁵¹² This study concluded that a 10 per cent increase in taxi fares would reduce demand for taxis by 10.4 per cent, implying a price elasticity of demand of -1.04.

While noting that the Booz Allen Hamilton conclusion was based on domestic and international estimates of the elasticity of demand for taxis, the estimated range was provided in the context of estimating elasticity of demand for taxis in Sydney. The ERA considers that customer behaviour in Perth is likely to be broadly comparable with passenger behaviour in Melbourne and Sydney. Because of uncertainty around the exact price elasticity of demand and the extent to which Perth behaviour compares to that in Sydney and Melbourne, the ERA has undertaken a sensitivity analysis, using the elasticity of -1.04 estimated in the Victorian Taxi Inquiry as the upper bound and -0.4 as the lower bound. ⁵¹³

Using the upper and lower bounds of the price elasticities of demand (-0.4 and -1.04), a 10 per cent reduction in prices would correspond to an increase in demand of between 4 per cent and 10.4 per cent. This amounts to between 520,290 and 1,352,755 additional taxi trips that do not occur in Perth due to the presence of supply regulation (based upon the 13,007,268 trips taken in Perth during 2013).

As has been estimated, should regulation inflate fares by 10 per cent, demand for taxi services (compared to a deregulated market) would be expected to fall by between 4 per cent and 10.4 per cent. These are additional costs that would be incurred as a result of the increase in fares and associated decrease in demand. The value of these costs are calculated as being between \$596,261 and \$1.55 million per annum.⁵¹⁴

Accordingly, the total cost to passengers of higher fares resulting from supply regulation is expected to be in the region of between \$32.7 million and \$33.7 million per year.

Higher fares are not the only cost passengers incur as a result of regulating the supply of taxis. Supply restrictions will also increase passenger waiting times and discourage service innovation and differentiation.

Longer waiting times

Quantity restriction on the number of taxis results in longer passenger waiting times. This is because the number of taxis cannot meet the level of demand, which causes a backlog of passengers waiting for taxi services.

The OECD has found that deregulating the quantity of taxis means that customer waiting times tend to fall substantially.⁵¹⁵

In the United Kingdom, the Office of Fair Trading observed that 27 per cent of passengers in Sheffield had a waiting time at taxi ranks of more than five minutes before supply restrictions were lifted in 1998. By 2003 the proportion of passengers waiting more than

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⁵¹² Victoria Taxi Industry Inquiry (2012), Final Report: Customers First – Service, Safety, Choice, p.260

⁵¹³ The ERA has placed more weight on the Victorian elasticity than the Booz Allen Hamilton elasticities because the recent nature of the Victorian report.

⁵¹⁴ This is based on a linear demand curve, a fall in price of 15 per cent, an increase in quantity of between 6 per cent and 15.6 per cent and a calculation of (change in quantity)*(change in fares)*(0.5).

⁵¹⁵ OECD (2007), *Taxi Services: Competition and Regulation*, Policy Roundtable, p. 8.

five minutes had fallen to nine per cent.⁵¹⁶ A similar result was observed in Cambridge,⁵¹⁷ where the proportion of passengers waiting more than five minutes at a taxi rank fell from 20 per cent in 1999 to just six per cent in 2003.⁵¹⁸

The removal of supply restrictions in Ireland in 2000 resulted in significant reductions in taxi waiting times. In 1997, before deregulation, 41.7 per cent of passengers had waiting times of more than 10 minutes for a taxi. By 2008 this had decreased to 14.3 per cent. Similarly, the proportion of passengers waiting more than five minutes decreased from 77 per cent in 1997 to 49.7 per cent in 2008.⁵¹⁹ Overall, average waiting times fell by 46 per cent between 1997 and 2008.⁵²⁰

In a report for the Irish Commission for Taxi Regulation in 2009, Goodbody Economic Consultants calculated the benefit to passengers in Dublin of shorter waiting times was €313 million (approx. A\$466 million) during the period between deregulation in 2000 and 2008.⁵²¹

Having discussed the benefits to passengers in other jurisdictions from shorter waiting times following regulation, we are able to estimate the costs that passengers incur in Perth as a result of the regulation.

The exact costs that passengers incur as a result of longer waiting times in Perth are difficult to quantify because the degree to which waiting times would fall in a deregulated market are unclear. However, the ERA estimates that for every additional 60 seconds of waiting time that regulation causes, the annual cost to Perth passengers is between \$6.5 million and \$7.4 million.

If in 2013, every taxi passenger in Perth saved, on average, one minute of waiting time, a total of 13,007,268 minutes (216,788 hours) would have been saved. Multiplying these saved hours by the weighted average value of time for taxi passengers in Australia (between \$30 and \$34 per hour) and the cost of every additional minute of waiting time amounts to between \$6.5 million and \$7.4 million.

Abelson established the following method for calculating the weighted average value of time for taxi passengers in Australia:⁵²²

"Waiting time is usually related to income. The average weekly income in 2008 was \$1145 (ABS 6302.0). This equals \$30.5 an hour for a 37.5 hour week. In-vehicle leisure time is usually valued at 33 per cent of hourly wage, but waiting time is valued at up to twice this amount (UK Department for Transport 2010). This suggests that non-working waiting time for taxis would be valued at \$20 per hour per passenger. However, working time is usually valued at the wage rate. For business users of taxis this may be above the national average wage rate, so we allow \$40 an hour. Allowing for two-thirds leisure and one-third business users, the weighted average could be $(0.67 \times \$20) + (0.33 \times \$40) = \$27$ per hour."

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 $^{^{516}}$ Office of Fair Trading (2003), *The regulation of licensed taxi and PHV services in the UK*, p.31

⁵¹⁷ The results of the results in Cambridge should be considered with some caution because the 2003 results were collected outside of University term time and considerably lower number of journeys were observed.

⁵¹⁸ Office of Fair Trading (2003), *The regulation of licensed taxi and PHV services in the UK*, p.31

⁵¹⁹ Goodbody Economic Consultants (2009), Economic Review of the Small Public Service Vehicle Industry, p.49.

⁵²⁰ Goodbody Economic Consultants (2009), *Economic Review of the Small Public Service Vehicle Industry*, p.93.

⁵²¹ Goodbody Economic Consultants (2009), Economic Review of the Small Public Service Vehicle Industry, p.94.

⁵²² Abelson (2010), The High Cost of Taxi Regulation, with Special Reference to Sydney, Agenda: A Journal of Policy Analysis and Reform, Volume 17, Number 2, 2010

The most recent update of the ABS average weekly income data set used by Abelson shows that income average income has risen to \$1,437.⁵²³ This breaks down to an hourly wage of \$38.3 and a cost for non-working passengers of \$25.7 an hour. Inflating the cost to business users by the same proportion as non-business users (28 per cent) increases it to \$51 an hour and results in a weighted average cost of \$34 per hour. This is comparable to the \$30 per hour value of time used by the Independent Pricing and Regulatory Tribunal of New South Wales (**IPART**) in its review of taxi pricing in Sydney.⁵²⁴

If every taxi trip undertaken in 2013 incurred an average one additional minute of waiting time, the total time cost to Perth passengers would have amounted to 216,787 hours⁵²⁵ across the entire year. Multiplying this by IPART's average value of time of \$30 per hour gives a cost of \$6.5 million for every minute that regulation inflated passenger waiting times The Abelson figure of \$34 per hour gives a cost of \$7.4 million per minute.

These figures are likely to be a conservative estimate of the costs to passengers because they assume that each of the 13 million taxi rides carries just one passenger. In reality the average number of passengers will be higher. 526

Less reliable services

Lack of competition in the taxi industry (arising from quantity restrictions) results in taxi passengers having to accept a degree of unreliability in taxi services. This is because the consequences for a driver of not completing a pre-booked fare are small due to high demand for taxi services. Therefore, drivers have little incentive to not abandon a pre-booked fare if a higher paying fare arises.

Lack of reliability can have significant implications for taxi passengers if they have prebooked a taxi in the expectation that it will arrive at a particular time and it does not arrive (for example, if a passenger needs to get to the airport by a particular time).

Removing quantity restrictions should make taxi services more reliable by improving competition. The OECD notes that very large increases in taxi supply have been experienced in places where taxi numbers have been heavily restricted and those restrictions have subsequently been removed. The OECD cites the experience in major cities in New Zealand and Ireland, where taxi numbers more than tripled following the adoption of open entry policies and that these higher levels have generally been sustained over the medium term. ⁵²⁷

Figure 35 shows that the reliability of taxi services is an issue in Perth and that the proportion of pre-booked jobs that are not completed⁵²⁸ increases significantly in periods of peak demand. The proportion of jobs not covered at peak periods is cyclical, with a noticeable peak occurring during the October-December quarter.⁵²⁹

The most recently available data for the October – December quarter shows that almost 5 per cent of all pre-booked jobs were not covered. For the remaining three most recent

⁵²³ ABS 6302.0 - Average Weekly Earnings, Australia, Nov 2013

⁵²⁴ IPART, Review of maximum taxi fares and review of annual Sydney taxis licences from July 2014, p.40

⁵²⁵ One minute per trip would save 13,007,268 minutes

⁵²⁶ Abelson estimates an average of 1.8 passengers in each taxi ride, although the basis for this is not clear.

⁵²⁷ OECD (2007), *Taxi Services: Competition and Regulation*, Policy Roundtable, p. 8.

⁵²⁸ Jobs not covered measures the amount of standard (non-MPT) Perth metropolitan taxi jobs not covered. This includes jobs where a passenger was never picked up or after waiting for 15 minutes, a passenger gave up waiting and left the pick-up point. These are calculated as a percentage of total Taxi Dispatch Service jobs demanded in that period

⁵²⁹ Department of Transport (2013), Taxi Industry Service Standards Quarterly Report: July - September 2013.

quarters, jobs not covered ranged between 2 per cent and 4 per cent of taxi jobs requested. However, the actual proportion of jobs not covered is likely to be even higher because data from high-demand public holidays and special events is excluded from the data set. ⁵³⁰ The extent to which this will affect the data is unclear.

The ERA has not quantified the dollar value of this cost. As such, the analysis is qualitative.

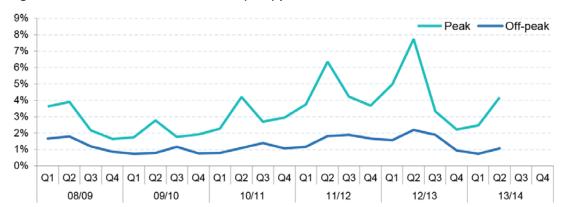


Figure 35 Historical Jobs Not Covered (JNC) performance

Source: Department of Transport

Lack of competition in the taxi industry (arising from quantity restrictions) reduces the incentives for taxi operators to compete with each other through product differentiation (for example, innovative or superior service offerings) particularly if there is a financial cost from doing so. This reduces customer choice and value.

The taxi market in Perth is dominated by two taxi companies, Swan Taxis and Black & White Cabs. Both companies offer comparable services for exactly the same (regulated maximum) prices. 531

In contrast, the choice of taxi services available in Auckland, New Zealand (which has a deregulated taxi market and a similar sized population to Perth)⁵³² is considerably greater. Auckland has more than ten taxi companies that between them offer a range of differentiated services including discount taxis, environmentally friendly taxis, 'executive' taxis and services offering fixed price fares from the CBD to the airport.

The ERA has not quantified the dollar value of this cost. As such, the analysis for this analysis is qualitative.

7.2.3.4 Taxi dispatch networks

Benefits

The restriction on the supply of taxi plates limits the extent to which the market for taxi dispatch services can grow. The investment required to establish a dispatch network that is capable of providing a competitive constraint on existing networks are understood to be

⁵³⁰ Department of Transport (2013), Taxi Industry Service Standards Quarterly Report: July - September 2013.

⁵³¹ Swan Taxis does offer 'Silver Service Taxis' for an additional flat fee of \$11 on top of the standard fare, but notes on its website that these services are not available in all areas.

⁵³² Auckland had a population of 1.42 million in 2013 compared to 1.83 million in Perth at June 2012. Statistics New Zealand, Auckland fastest-growing region since last census, and South Island districts grow most, 15 October 2013. Australian Bureau of Statistics, 3218.0 – Regional Population Growth, Australia, 2012.

material. The absence of potential market growth is expected to act as a barrier to new market entry and is to the benefit of existing dispatch networks.

The requirement that all taxi drivers affiliate themselves with a taxi dispatch network is of benefit to the dispatch network because the requirement guarantees the size of the market. This reduces the extent to which competition can develop because there is no risk of the market shrinking. As such, dispatch networks are only competing amongst themselves for market share.

Costs

Quantity restrictions place a ceiling on the revenue a dispatch network can generate by limiting the total number of taxis. The main source of income for dispatch networks is the weekly affiliation fee that taxi drivers are required to pay to affiliate with in the network. Removing the restriction on the supply of taxis could be expected to increase the number of taxis that affiliate with a dispatch network.

The ERA has not quantified the costs or benefits that supply restriction generates for dispatch networks. Accordingly, it is not clear whether the application of supply restrictions generates a net cost or benefit for taxi dispatch services. The ERA considers that irrespective of whether it is a net cost or a net benefit, the size of the benefit/cost is unlikely to be material in the context of the overall market.

7.2.3.5 Net costs and benefits

The removal of supply restrictions will result in a rebalancing of the market and will cost some stakeholders and benefit others.

The presence of supply restrictions primarily benefits plate holders, both private and government.

The restriction of taxi licences creates a situation where supply cannot adequately supply demand. This provides the owners of taxi plates with a degree of market power that allows them to extract profits from passengers in the form of higher prices. The extent to which plate owners can extract revenue from passengers is limited by the Department of Transport which sets a maximum price at which taxi plates can be leased. The cumulative value of these lease revenues equates to \$32.1 million per year. In the absence of supply restrictions, the ERA is of the view that there would be no market for leasing taxi plates because drivers would be able to purchase their own taxi plate for a negligible value. Therefore, the total annual benefit of supply restrictions to taxi plate holders is \$32.1 million. Of this value, \$18.4 million accrues to private plate holders, \$9.3 million accrues to the Government and the remaining \$4.4 million accrues to taxi drivers who lease their plates from the Government at preferential rates that allow them to extract greater profits than they would if paying the market price.

Passengers bear the cost of supply restrictions and these can come in a number of ways, but primarily via higher prices, longer waiting times, less reliable services.

The benefits outlined above for plate owners are a direct transfer from customers, via higher fares, so the implementation of supply restrictions cost existing passengers \$32.1 million per year. The presence of the higher prices that endure in regulated markets, result in lower demand for taxi services than would exist in a deregulated market. The cost of these foregone taxi trips has been estimated to be between \$596,261 and \$1.55 million per

annum.⁵³³ In total the estimate cost to taxi passengers of higher prices resulting from supply restrictions is between \$32.7 million and \$33.7 million per year.

Because the supply of taxis is insufficient to meet the demand for taxis, the time that passengers must wait for a taxi, relative to what would be expected in a free market. The cost of every minute that supply restrictions add to average passenger waiting times has been calculated to cost passengers between \$6.5 million and \$7.4 million per year.

Although data on the exact extent to which waiting times have fallen in response to supply deregulation is scarce, the ERA notes that in Dublin (Ireland) average waiting times had fallen by 5.3 minutes between 1997 and 2008 (deregulation occurred in 2000).

Comparing the proportional increase in the number of taxis that Dublin experienced with other jurisdictions that have also deregulated supply demonstrates that the Dublin experience is at the higher end of the range:

- Singapore: In Singapore, taxi fares were deregulated in 1998 and deregulation of the supply of taxis followed in 2003. Between 1996 and 2007, taxi numbers in Singapore rose by 45 per cent.⁵³⁴
- Netherlands: In the Netherlands, taxi numbers rose by numbers rose by 50 per cent in the four years following deregulation.⁵³⁵
- Sweden: In Stockholm and Goteborg, the number of taxis approximately doubled in the two years following the removal of supply restriction.⁵³⁶
- Wellington (New Zealand): In the four years following deregulation the number of taxis in Wellington increased by 105 per cent.⁵³⁷
- Dublin: The number of taxis operating in Dublin increased by 133 per cent between 1997 and 2004 (deregulation occurred in 2000).⁵³⁸

As noted earlier in this chapter, residual barriers to entry in the Netherlands and Singapore remained after deregulation that are likely to have stifled the extent to which competition (and therefore market entry) will have developed. Given these barriers to competition remained, the ERA does not consider the experiences in Singapore and the Netherlands to be representative of what would be expected to occur in Perth following deregulation. Rather, the ERA expects that outcomes would be more comparable to those experienced in Dublin and Wellington.

The ERA notes that the most recent data demonstrates that average waiting times in Dublin have fallen by 5.3 minutes (85 per cent) since deregulation. However, in the event that no further public data are available that demonstrates the extent to which waiting times fell following deregulation in other jurisdictions, the ERA conservatively assumes that waiting times will fall by just 60 seconds as a result of supply deregulation.

⁵³³ This is based on a linear demand curve, a fall in price of 15 per cent, an increase in quantity of between 6 per cent and 15.6 per cent and a calculation of (change in quantity)*(change in fares)*(0.5).

⁵³⁴ Jaguar Consulting (2011), Overview and analysis of possible transitional strategies: Moving from a tightly restricted supply model to an open entry taxi industry, p.53.

⁵³⁵ Bakker, P (2007). Deregulation of the Taxi Industry: Experiences in the Netherlands, p.73.

⁵³⁶ OECD (2007), *Taxi Services: Competition and Regulation*, Policy Roundtable, p.36

⁵³⁷ Morrison (1997), Restructuring effects of deregulation: the case of the New Zealand taxi industry, Environment and Planning A 29(5), p.917.

⁵³⁸ Goodbody Economic Consultants (2009), Economic Review of the Small Public Service Vehicle Industry, p.33.

Using the conservative assumption that supply restrictions artificially inflate waiting times by 60 seconds, the ERA estimates that the restriction on the supply of taxi services in Perth generates an annual net cost to the community of between \$6.5 million and \$7.4 million.

The excess demand for taxi services provides taxi operators with a greater degree of choice about the pre-booked fares that they accept (there is an obligation on taxi drivers to accept all rank and hail fares). In circumstances where the passenger is travelling a short distance there is less likelihood that their fare will be accepted by a taxi driver because bigger fares are available, this decreases service reliability, relative to the levels expected in a deregulated market.

While the net cost to passengers of a less reliable service has not been quantified, the remaining costs and benefits have been.

As noted before, these only represent the costs that have been quantified and have only been quantified for Perth, the cost to the remainder of Western Australia have not been quantified and would be expected to add to the existing quantified costs. The costs associated with having a less reliable service and a less competitive market and stifled competition have not been quantified, as such, these figures are likely to be the lower bound of the total cost associated with supply restrictions.

As such, the ERA estimates that the net quantifiable cost caused by the regulation of taxi supply in Perth is between \$7.1 million and \$9.0 million per annum.

		Lower Bound	Upper Bound	
Benefit to Plate Holders		\$27.7 million	\$27.7 million	
Benefit to Taxi I	Drivers ⁵⁴⁰	\$4.4 million	\$4.4 million	
Ocatha Danasana	Price	-\$32.7 million	-\$33.7 million	
Cost to Passengers	Waiting Time	-\$6.5 million	-\$7.4 million	
Net Cos	st	-\$7.1 million	-\$9.0 million	

Table 30 Costs and benefits of regulating the supply of taxis in Perth

7.2.3.6 Reform options

Having established the magnitude of the costs caused by the restriction of the supply of taxis in Perth, the ERA considers that there is a strong case for removing supply restrictions. The next step is to establish how deregulation should proceed. The ERA has identified three potential approaches to deregulating the supply of taxis in Western Australia.

Before considering this issue, the role of the other three aspects of taxi regulation need to be considered. The ERA considers that market conduct and quality regulation should be retained in its current form subject to the exception of the requirement that all taxis be affiliated with a dispatch service, which in the ERA's view, should be left to taxi drivers to determine.

The influx of taxis that would be expected following the deregulation of the supply of taxis has been shown to lead to falling service standards in some jurisdictions. As such, consideration should be given to improving the monitoring and compliance of taxi quality

⁵³⁹ Although the ERA is aware of anecdotal evidence that fare refusal still occurs.

⁵⁴⁰ This benefit is accrued by taxi drivers who lease their taxi plate from the Government.

and market conduct standards following deregulation in order to deter the same from occurring in Western Australia.

In the short-term, maximum price regulation should be retained in its current form. Over time the ERA expects that prices will fall in response to lower costs associated with operating a taxi and increased competitive pressure. Once consistent price competition has been observed, the ERA considers that there is scope to remove the regulation of maximum prices. As maximum price regulation is removed, operators should be required to notify the Department of Transport of their (maximum) fares 36 hours in advance of implementation. This requirement will prevent opportunistic operators from taking advantage of temporary periods of market power to price gouge.

These conditions apply irrespective of which of the reform options is implemented.

Under each of the reform options, the ERA notes that owners of taxi plates will be adversely affected. The need for some compensation and the means to do so are discussed below.

The provision of compensation does not change the aggregate net cost or benefit of reform for society. Just as the higher fares from regulated supply are a benefit to plate holders and in equal measure a cost to passengers, any payment of compensation is simply a transfer from one party to the other party.

In other jurisdictions that have deregulated the supply of taxis there has been no consistent framework. A report by Jaguar Consulting noted that five OECD countries have removed supply restrictions in the last twenty years. In each case, the removal of entry restrictions has occurred via immediate reform. In no case was compensation paid to taxi plate holders, although, in Ireland payments totalling less than 5 per cent of full compensation were made on the basis of financial hardship. ⁵⁴¹

The key considerations when assessing whether compensation should be paid are discussed in Chapter 2. At this stage, the ERA will provide an overview of four possible approaches to compensation and encourages submissions on the four following options:

No compensation: This approach reflects the view that investors are aware of the risks associated with investing in taxi plates and should be aware that changes in Government policy can have a material effect on plate values.

This appears to be verified by the fall in taxi plate prices at the time the National Competition Policy was being implemented and deregulation of the supply of taxis was being advocated.⁵⁴²

Compensation based on length of ownership: This approach takes the view that investors that purchased taxi plates recently have not had the opportunity to recover the cost of their investment and as such should be compensated for the loss of the value of their investment. The extent to which an investor receives compensation would depend on the value paid for the taxi plate, less the revenue received from leasing their plate to a driver. If the plate owner is also a taxi driver, the value that could have been gained from leasing their taxi plate is used as a proxy for the value gained. If this option were to be implemented, any sales of taxi plates after the publication date of this Draft Report would be ineligible for compensation to prevent existing plate holders from gaming the system by 'selling' their

⁵⁴¹ Jaguar Consulting (2011), Overview and analysis of possible transitional strategies: Moving from a tightly restricted supply model to an open entry taxi industry, pp.49 – 50.

⁵⁴² National Competition Council (2000), Reforming the Taxi Industry in Australia, Staff Discussion Paper.

plate to a friend or family member at the market price in order to receive the maximum compensation value.

Taxi plate buy-back: This option is similar to the previous option in that plate holders who have recovered the value of their initial investment do not receive compensation, however, the means of compensation differs. Rather than compensating plate holders with one lump sum payment, the Government systematically increases the supply of taxi plates by leasing an additional (predetermined) volume of plates each year. The revenue generated by issuing the additional licences, in addition to the revenue generated by the existing licences, can be used to compensate taxi plate owners.

As with the option above, any plate sales after the publication date of this report would not be eligible for compensation to eliminate the risk of the compensation framework being 'gamed'.

Full compensation: Under this option, all taxi plate owners are compensated for the loss of the value of their taxi plate at current market rates.

The ERA notes that existing Government revenue from leasing taxi plates amounts to approximately \$9.3 million per year, which is paid into the Taxi Industry Development Account. At the end of the 2012/13 financial year the Taxi Industry Development Account had a balance of \$25.4 million. 543 If compensation were to be paid, the funds in the Taxi Industry Development Fund would be the logical source of funds in the first instance.

For each reform option, the effect on taxi plate owners would depend on the compensation scheme that is undertaken.

Following on from these possible approaches to compensation, the ERA has identified three main options for improving competition in the supply of taxi services and similar related services. These are:

- the full and immediate removal of quantity restrictions in the taxi industry;
- · implementing a staged removal of quantity restrictions in the taxi industry; and
- retaining existing quantity restrictions on the taxi industry, but reducing regulation on the small charter vehicle industry to allow it to compete directly with the taxi industry.

Each of these options is discussed in more detail below.

Option 1 - Full and immediate removal of quantity restrictions

This option would involve full and immediate removal of quantity restriction on the number of taxis that can operate in Western Australia.

This is the most aggressive option and would result in the greatest and earliest benefits to taxi passengers in the form of lower prices, increased supply of taxis and shorter waiting times for passengers.

The value of taxi plates would fall drastically, to reflect the nominal value at which new taxi plates would be issued. In the absence of compensation, this would represent a sudden loss in wealth and income for taxi plate owners.

⁵⁴³ Department of Transport (2013), Annual Report 2012-2013, p118

The cost differential enjoyed by drivers who currently lease Government taxi plates would be eliminated and would represent a loss in income for these drivers. The income of Government drivers would be expected to equalise to a level consistent with those enjoyed by drivers privately leasing their taxi plates. Drivers who currently lease their plates privately are not expected to be materially affected by the reform. The barrier to drivers owning their own plates would be removed and more drivers would become owner/drivers. This will increase driver engagement in the industry and because they will directly receive the benefits from doing so, owner/drivers are more likely to improve service standards.

This option was the approach implemented in New Zealand and Ireland. Reviews of the outcomes post reform in New Zealand have found that prices fell in real terms, in the capital Wellington, the number of taxis increased by 105 per cent in the four years following deregulation⁵⁴⁴ and service innovation has developed with a range of taxi services now available including environmentally friendly taxi services,⁵⁴⁵ 'executive' services⁵⁴⁶ and fixed price fares.⁵⁴⁷

However, there were problems following deregulation. These were primarily related to poor service standards and small operators exploiting customers. These have subsequently been addressed through higher standards of quality regulation and effective enforcement.⁵⁴⁸

In Ireland similar outcomes have been identified, in particular a highly competitive and contestable taxi market, shorter waiting times, rapid increase in taxi numbers and no evidence of any decrease in quality standards.⁵⁴⁹

Option 2 - Staged removal of quantity restrictions

There are various ways in which quantity restrictions on taxis could be reduced in a staged way. One approach would be to remove supply restrictions, but retain a material price for leasing taxi plates that will decrease over time to a negligible annual fee⁵⁵⁰ that covers the cost of administering the taxi plate. Retaining a price for leasing taxi plates acts as a means of limiting the extent to which the supply of taxis will increase.

The supply of taxis will be rationed because to remain profitable, taxis must offset their higher lease costs (than would be incurred in a deregulated market) by maintaining a higher occupancy than they would need to in a deregulated market.

The ERA considers that a staged approach could be implemented in stages, during which the regulated maximum lease fee could be reduced from the current annual fee of \$18,460 to \$13,000 in the first instance. This would eliminate the cost advantage enjoyed by drivers who currently lease Government taxi plates. Depending on the desired speed of reform,

⁵⁴⁴ Morrison (1997), Restructuring effects of deregulation: the case of the New Zealand taxi industry, Environment and Planning A 29(5), p.917.

⁵⁴⁵ Green Cabs offer services in Hybrid vehicles and plant trees to offset all CO2 emissions produced by their fleet. See: http://www.greencabs.co.nz/

⁵⁴⁶ Corporate cabs offer high quality services on demand 24 hours a day, seven days a week See: http://www.corporatecabs.co.nz/

⁵⁴⁷ Cheap Cabs offers fixed price for transport between the Airport or CBD and all Auckland. See: http://www.cheaptaxi.co.nz/

⁵⁴⁸ Office of the Auditor General (NZ), *Effectiveness of controls over the taxi industry: Follow-up report*, November 2007

⁵⁴⁹ Goodbody Economic Consultants (2009), Economic Review of the Small Public Service Vehicle Industry.

⁵⁵⁰ This would be of a magnitude that would recover the costs of administering taxi plates and not be expected to be more than \$1000.

this annual lease fee could be reduced in equal increments until the cost of acquiring a taxi plate value reflects only the costs associated with their administration.

While the execution of this option is not dependent on compensation being paid to plate owners (it is a viable option in the absence of compensation), the stepwise nature of the reform lends itself to being combined with the buy-back of taxi plates approach if compensation was deemed to be appropriate, but the costs of immediate compensation too financially burdensome.

If it were to be combined with the buy-back of taxi plates, the time in which full deregulation could be achieved would depend on the cost of compensation and the revenues that could be generated by the Government from leasing taxi plates.

Under this approach there is no need to alter the regulated lease fees for the other categories of taxi such as area restricted taxis or peak period taxis because, as the price of leasing conventional taxi plates falls below the lease price for peak period or area restricted plates, plate holders will switch from their restricted plates to unrestricted conventional plates. For those that are subject to long-term Government leases, it is recommended that plate holders be provided the opportunity to exchange their existing plates for conventional plates at any time.

Under this option, it would take longer for taxi passengers to realise the full benefits of reform. In the absence of compensation, it would also give taxi plate owners longer to adjust to reductions in wealth and income. It would also give the taxi industry and taxi regulators longer to adjust to the new circumstances (for example, driver training, registration, enforcement and monitoring).

The major risk associated with this option is that the reforms are not fully implemented over time, leaving residual inefficiencies in the taxi industry.

Option 3 - Allowing small charter vehicles to compete

In many jurisdictions, including Western Australia, taxis are differentiated from small charter vehicles. This option would result in the removal of the barriers that restrict small charter vehicles from competing with taxis.

The principal barriers that currently prevent competition from developing are higher vehicle standards for small charter vehicles, restrictions on small charter vehicles picking up rank and hail fares, and differences in fare structure. However, taxis and small charter vehicles provide the same service (that is, point-to-point personal transport services for fewer than 12 people at a time) and distinction between the two services essentially exists only as a result of regulatory interventions. As such, regulatory differences between the two services are removed under this option.

The key difference between this option and Option 1 is that small charter vehicles are unable to compete for rank and hail work, so competition would not be as robust as in Option 1. However, the effect of emerging smartphone technology is expected to mitigate this risk over time in the face of increased passenger adoption of the technology and further development of technological capabilities.

⁵⁵¹ Private hire vehicles must charge passengers on an hourly basis and have a regulated minimum hourly rate of \$60 per hour.

⁵⁵² OECD (2007), Taxi Services: Competition and Regulation, Policy Roundtables, p.18

As with the other two options, the cost advantage enjoyed by drivers who lease their taxi plates from the Government will be removed and driver income across the industry would be expected to be at the level currently enjoyed by drivers that currently lease their taxi plates privately.

Under this option, the ERA expects that the development of smartphone applications will progress at a greater rate than in the other two Options because the rapid development and passenger acceptance of smartphone applications will allow small charter vehicles to decrease or remove entirely the effective competitive constraint that prevents them from competing for rank and hail passengers.

The removal of the barriers restricting competition from small charter vehicles would be expected to result in taxi plate values falling rapidly as the number of small charter vehicles grow and they begin to compete effectively with existing taxis. In the short to medium term, taxi plates are likely to retain some residual value due to their ability to pick up rank and hail work. In the medium to long term smartphone applications are likely to remove most of the barriers that prevent small charter vehicles from competing effectively with taxis for rank and hail work. As these barriers are removed, the value of taxi plates will tend to zero.

The benefits to passengers would be expected to be similar to those enjoyed under Option 1, although with small charter vehicles unable to collect rank and hail passengers, the extent to which this would reduce the benefit to passengers would only be limited by the extent to which passengers embrace the smartphone applications that allow them to circumvent the rank and hail market.

7.2.3.7 ERA conclusion

At this stage in the Inquiry the ERA prefers Option 1 over the other two options. However, the relative merits of each option would benefit from the robust debate that would be generated by submissions. As such, the ERA has elected not to offer a firm recommendation on the most appropriate method of reforming the Taxi market in Western Australia and encourages all interested parties to submit their views on the three options (or any alternate options) for reform of the Western Australian taxi market.

7.2.4 Recommendations

28. Consider options for reforming the taxi industry:

- a. full and immediate removal of quantity restrictions in the taxi industry; or
- b. staged removal of quantity restrictions in the taxi industry; or
- c. removal of the regulations that prevent small charter vehicles from competing with the taxi industry.

7.3 Potato marketing

7.3.1 Introduction

In Western Australia it is illegal to sell fresh potatoes grown in Western Australia for human consumption (ware potatoes) without a licence from the Potato Marketing Corporation, which is a statutory marketing organisation of the Western Australian Government.

The Western Australian ware potato industry was regulated after the Second World War in order to ensure supply and control price levels. Most other agricultural industries have since been deregulated, with Western Australian ware potato market being one of only two regulated agricultural industries remaining in Australia. 553

The Potato Marketing Corporation undertakes a number of functions under the Act that restrict competition in the market for ware potatoes. These functions (among others) include determining the quantity and the colour⁵⁵⁴ of potatoes produced, issuing licences (Domestic Market Entitlements) to grow potatoes, setting the price that growers will receive, licencing wash packers and acting as the monopoly seller of potatoes to the wholesale market.

The Potato Marketing Corporation has some onerous regulatory powers under the Act, including powers to search premises where potatoes are grown, stop and search vehicles suspected of carrying more than 50 kilograms of potatoes, impound crops for evidence, and prosecute farmers. The Potato Marketing Corporation can and has taken legal action against potato growers that have failed to comply with legislation. The ERA considers it to be unnecessary for a regulator to have such powers in relation to a crop that is not an illegal substance.

The ERA considers that there is no market failure in the potato industry that justifies such restrictions on competition. The Potato Market Corporation is not needed to predict and interpret trends in potato consumption: a free market is better able to respond to the changing needs of consumers.

The ERA also considers that a regulated system will always respond more slowly to consumer demand than will a deregulated market. For example, the Potato Marketing Corporation is planning to shift a large proportion of the State's production from white to yellow varieties over the next five years.⁵⁵⁷ However, in eastern Australia yellow varieties have been a large share of production for some time.

The restrictions on potato marketing have raised the incomes of potato growers in Western Australia. However, this has been at the cost of Western Australian consumers, who pay higher prices than otherwise, have limited choices of potato varieties and endure poor product quality.⁵⁵⁸ The restrictions have also limited productivity growth in the industry.

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⁵⁵³ The New South Wales Rice Board being the other (Australian Bureau of Agricultural and Resource Sciences, 2014, Australian Agricultural Productivity Growth: Past Reforms and Future Opportunities, p30)

⁵⁵⁴ Potato varieties are grouped into colours such as whites, blues, reds and yellows.

⁵⁵⁵ Marketing of Potatoes Act 1946, http://www.austlii.edu.au/au/legis/wa/consol_act/mopa1946232/

⁵⁵⁶ Countryman, 2013, http://au.news.yahoo.com/thewest/a/18042008/tony-galati-potato-charges-dropped/

⁵⁵⁷ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p22.

⁵⁵⁸ McKinna et al (2011), Strategic Analysis of the WA Ware Potato Supply Chain: Final Report

The ERA has found that the regulation of the ware potato market is hampering the development of a seed potato export industry in Western Australia. Western Australia has ideal conditions for growing seed potatoes; it has the right climate and is free from many of the diseases that are present in other potato growing areas. There is a significant opportunity for Western Australian growers to export seed potatoes to Asia, the Middle East and the Eastern States. Despite this, there has been a reluctance to invest because international exporters are prevented from selling seed tubers⁵⁵⁹ that cannot be exported on the domestic ware potato market unless they have a Domestic Market Entitlement. This constraint reduces profitability and investment in the industry.

The ERA estimates that the restrictions on the Western Australian ware potato market have a net cost of \$5.5 million per annum, or \$101 per tonne of current production. This equates to a present value of \$47.7 million over a 15-year period.

The ERA notes that a consultant engaged by the Potato Marketing Corporation (ACIL Allen) also found that the regulation of the potato industry imposes a net economic cost to Western Australia. ACIL Allen calculated a net cost of \$66/tonne⁵⁶⁰, or \$3.6 million per annum based on production of 55,000 tonnes per annum.

The Authority believes that the existing regulations on the potato market have outlived their usefulness and are holding back the industry, as well as not serving the Western Australian public well. The ERA considers that the *Marketing of Potatoes Act 1946* and *Marketing of Potatoes Regulations 1989* should be repealed.

In the remainder of this chapter, the ERA provides:

- an overview of the potato industry in Western Australia (including a description of the restrictions on competition);
- a summary of the submissions received on regulation of the potato industry;
- an assessment of the costs and benefits of the regulation of the potato industry; and
- an analysis of how the development of the seed potato export industry is being hindered by the regulated ware potato market.

7.3.2 Overview of the Western Australian ware potato industry

There are currently up to 78 growers licensed to grow ware potatoes in Western Australia. These growers produced approximately 52,000 tonnes⁵⁶¹ of ware potatoes in 2012/13 across four production pools spread between Moora/Dandaragan and Manjimup/Pemberton.⁵⁶² The Nadine variety is the most common variety of ware potato produced, accounting for approximately 60 per cent of Western Australia's ware potato production.

In addition, in 2012/13 Western Australian growers produced 24,600 tonnes of processing potatoes for crisp and French fry production and 9,300 tonnes of seed potatoes per annum.

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⁵⁵⁹ The tuber is the part of the potato plant that is eaten.

⁵⁶⁰ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p30.

⁵⁶¹ Potato Marketing Corporation, 2012/13 Annual Report, p21, the Potato Marketing Corporation's production target of 54,879 tonnes was not achieved.

⁵⁶² ACIL Allen, op. cit. p.15.

The Potato Marketing Corporation also licences these categories, along with ware potatoes for export, but does not impose any restrictions on their production.

The industry also includes five licenced wholesalers, termed wash packers. The wash packers receive potatoes from growers, brush or wash and grade them, and pack them for sale. The wash packers sell to a variety of customers including: the major supermarkets; greengrocers and the food service industry.

7.3.3 Potato Marketing Corporation

The Potato Marketing Corporation is established under the *Marketing of Potatoes Act 1946*. The Potato Marketing Corporation is a statutory marketing organisation of the Western Australian Government.

It employs 13 full time equivalents and is governed by a board, which is required, under the Marketing of Potatoes Regulations 1989, to be composed of:

- two grower representatives;
- three members who, in the opinion of the Minister for Agriculture, have 'relevant commercial expertise'; and
- a Chairman who, in the opinion of the Minister for Agriculture, has 'relevant commercial expertise'.

The Potato Marketing Corporation is funded by a levy placed on growers, from which it must fund its operations, including its licensing, marketing and biosecurity functions. The Potato Marketing Corporation's costs were \$2.79 million in 2012/13, equivalent to \$53.87 per tonne produced.⁵⁶⁴

The Potato Marketing Corporation's functions and powers are established under various sections of the Act. The most significant functions and powers of the Potato Marketing Corporation from a competition perspective are: licensing the quantity of ware potatoes produced; powers to compulsorily acquire potatoes from farmers; the ability to act as a monopoly seller to the wash packer/wholesale market; and powers to set prices consistent with growers gaining a 'reasonable opportunity for profit'.

Under Section 17(A)(a) of the Act, the Potato Marketing Corporation regulates the production of ware potatoes so as to ensure the supply of the quantities, kinds and qualities preferred by consumers in Western Australia. The Potato Marketing Corporation does this by issuing Domestic Market Entitlements to produce ware potatoes in Western Australia. The Domestic Market Entitlements establish the number of tonnes of ware potatoes that the holder can produce.

Under Section 22 of the Act a person cannot sell ware potatoes in Western Australia other than to the Potato Marketing Corporation or an agent acting on its behalf. The Act states that it is illegal to sell potatoes or be in possession of more than 50 kilograms of potatoes without proof that they are part of the official system.

Section 32 of the Act states that the Potato Marketing Corporation must set a price that provides "a level of return that should provide a reasonable opportunity for profit from the economically efficient production of potatoes during preferred planting periods in the State".

⁵⁶³ Potato Marketing Corporation 2012/13 Annual Report p 6

⁵⁶⁴ Potato Marketing Corporation Annual Report 2012/13, p21

The Potato Marketing Corporation sets a recommended price to pay growers by engaging a farm consultant to estimate⁵⁶⁵ the costs of production of a 'representative sample' of its growers.

The recommended pool prices were not achieved in 2012/13. That is, the potatoes sold on average for less than the Potato Marketing Corporation's recommended price. ⁵⁶⁶. The ability of the Potato Marketing Corporation to set prices is constrained by the ability of retailers (primarily supermarkets) to import potatoes from other States, which has occurred in recent time despite a high transport cost. ⁵⁶⁷ The Act does not place any restrictions on growers in other States selling ware potatoes into the Western Australian market.

The Potato Marketing Corporation seeks to license the quantity of ware potatoes produced in Western Australia in order to achieve the recommended price. This means that the Potato Marketing Corporation has the incentive to issue licences for a lower level of ware potato production than would be produced in a free market (to ensure that existing potato growers achieve the profit defined in Section 32 of the Act).

The Corporation licences production through four regional pools, which have recently been rationalised from seven pools previously. Growers are required to produce varieties consistent with a mix of 70 per cent white potatoes (mainly Nadine), 15 per cent blue or purple potatoes (mainly Royal Blue), 10 per cent red potatoes (mainly Ruby Lou) and 5 per cent yellow potatoes (manly Lady Chrystal). The Corporation intends to increase the proportion of yellow potatoes to 40 per cent over the next five years⁵⁶⁸, mainly at the expense of white varieties.

7.3.4 Submissions

The ERA received four submissions on regulation of the marketing of ware potatoes in Western Australia.

CCIWA argued that the Act restricted competition and resulted in Western Australian consumers paying higher retail prices (based on the Australian Bureau of Statistics' Average Retail Prices of Selected Items (Cat No. 6403)), and having less choice of varieties than other States. The CCIWA noted that there might be some reduction in price volatility as a result of the regulations, but this was not enough to offset the costs of regulation. CCIWA considers that the Act should be repealed.⁵⁶⁹

The Potato Marketing Corporation engaged ACIL Allen to prepare its submission to the Inquiry. ACIL Allen argued that the purpose of the Potato Marketing Corporation is to match supply and demand and that there is no restriction on competition as the Potato Marketing Corporation had not rejected any applications for Domestic Market Entitlements in recent years. ACIL Allen noted concerns expressed by the Australian Bureau of Statistics about the series that it produced on the Average Retail Prices of Selected Items. ACIL Allen

 568 ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p25 $\,$

Australian Venture Consultants, 2014, Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia February 2014 accessed from http://www.erawa.com.au/economic-inquiries/west-australian-microeconomic-reform/public-submissions on 2 April 2014, p. 14

Australian Venture Consultants, 2014, Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia February 2014 accessed from http://www.erawa.com.au/economic-inquiries/west-australian-microeconomic-reform/public-submissions on 2 April 2014, p. 17

⁵⁶⁷ Estimated at \$250 - 350 per tonne

⁵⁶⁹ Chamber of Commerce and Industry Western Australia (December 2013), CCI's Submission into the ERA Discussion Paper on Microeconomic Reform in Western Australia, p16

presented its data showing that the price of potatoes sold for retail in Perth have been lower than those in other Australian capital cities since October 2012.

ACIL Allen argued that the Potato Marketing Corporation is in the process of major reform flowing from a consultant's review of the Western Australian potato supply chain⁵⁷⁰ and that these reforms would improve the market for producers and consumers.

ACIL Allen conducted a cost-benefit analysis of the *Marketing of Potatoes Act 1946* and concluded that there would be a net economic benefit to Western Australia of \$3.6 million per annum if the market was deregulated. However, ACIL Allen considered that it would be difficult to implement reform and that the potential benefit would be small.

The Potato Growers Association through its consultant, Australian Venture Consultants, argued that there is sufficient consumer choice with over 28 varieties of potatoes currently being grown and distributed in Western Australia. Australian Venture Consultants noted that the Australian Bureau of Statistics had advised against using its Average Retail Prices of Selected Items series for intercity comparisons and so the CCIWA's claims regarding retail prices in Perth could not be substantiated.

Australian Venture Consultants presented data collected by the Potato Marketing Corporation to show that a weighted average of Perth retail potato prices was lower than those in other States over the past decade. It also noted that retail prices were less volatile in Perth than in other Australian capital cities. Consequently, Western Australian consumers suffered no disadvantage from the regulated market.

Australian Venture Consultants argued that Western Australian potato growers are close to world best practice in production yields. Also, coordination of the industry through the Potato Marketing Corporation reduces the cost of biosecurity, with Western Australia achieving a world first in 2010, declaring the State 'area free' of Potato Cyst Nematode.

The Western Australian Seed Potato Producers Committee (**WASPP**) argued that the activities of the Potato Marketing Corporation had no negative effects on the Western Australian seed potato industry. WASPP noted the Potato Marketing Corporation's role in collecting information on all potato production and regulating ware potato production in Western Australia which has contributed to pest and disease control. In addition WASPP argued that the Potato Marketing Corporation's role in ensuring payments to ware growers who in turn buy seed from WASPP members has led to greater financial security for growers. The Potato Marketing Corporation, WASPP submits, is assisting industry development through the underwriting of new varieties; and further, the regulated system ensures the identification of growers such that levies are collected to fund research and development.

7.3.5 Analysis

7.3.5.1 Background

Monopoly agricultural marketing schemes are designed to transfer value to producers from consumers or, as claimed by ACIL Allen and Australian Venture Consultants, from wholesalers or retailers.

However, such schemes can reduce the incentives for growers to become more efficient over time, particularly if there is strong competition from wholesalers and retailers to

⁵⁷⁰ McKinna et al (2011) Strategic Analysis of the WA ware potato supply chain: Final Report

purchase the product being regulated. This is because a monopoly seller will tend to underproduce relative to supply in a competitive market,⁵⁷¹ and the limited threat of new entrants to the market will reduce incentives to increase productivity.

7.3.5.2 Is there a restriction on competition?

Australian Venture Consultants, argues that the Corporation's activities do not restrict competition – there are no known cases in at least the last decade where new applicants have been denied, or where the transfer of a licence has not been approved⁵⁷². However, Australian Venture Consultants does concede that the Corporation could deny new growers entry under certain circumstances.

The ERA disputes the contention that the Potato Marketing Corporation does not restrict competition. Domestic Market Entitlements could be purchased or transferred for zero or a near zero price if there was no restriction on competition. New growers or existing growers wishing to increase production would simply apply to the Potato Marketing Corporation and an additional Domestic Market Entitlement would be granted in exchange for only an administrative fee.

However, the transfer or lease of a licence is not free. The Potato Marketing Corporation⁵⁷³ estimates that a 'permanent transfer' of a tonne of Domestic Market Entitlement is currently worth between \$150 and \$300 per tonne⁵⁷⁴. Industry participants have advised that Domestic Market Entitlements can be sold (on a permanent basis) at a price of \$300 to \$600 per tonne, or can be leased at a price of between \$50 and \$80 per tonne per annum. The price paid for a Domestic Market Entitlement varies by pool, reflecting the expectations of growers about the level profits that can be generated.

Growers wishing to expand would not sensibly pay such amounts for a transfer or lease of a licence if they expected the Potato Marketing Corporation to approve any new licence application. Therefore the ERA concludes that there is a restriction on competition in the Western Australian ware potato market and that the relevant questions are: whether there is a market failure to warrant that intervention; and whether the benefits of intervening to correct a market failure exceed the costs.

7.3.5.3 Is there a market failure in the Western Australian ware potato market?

Background

This section analyses whether there is a market failure that justifies government intervention in the Western Australian ware potato market. This is a prerequisite to quantifying the costs and benefits of the regulation, as regulation of the industry cannot deliver a net benefit to Western Australia if there is no market failure.

⁵⁷¹ Allocative efficiency, which is a measure of how well the available resources are allocated to production that meets the preferences of the population. Productivity Commission Staff Research Note May 2013

⁵⁷² Australian Venture Consultants, 2014, Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia February 2014 accessed from http://www.erawa.com.au/economic-inquiries/west-australian-microeconomic-reform/public-submissions on 2 April 2014, p. 7

⁵⁷³ The Potato Marketing Corporation does not administer this market: it only approves transfers of Domestic Market Entitlements between growers.

⁵⁷⁴ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p25

ACIL Allen and Australian Venture Consultants claim that the structure of the Western Australian retail fresh food market is not competitive and therefore results in a market failure. They make the following specific points:

- Data from the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) ⁵⁷⁵ indicates that the cost of producing potatoes in Western Australia is higher than in other States, Australian Venture Consultants notes Ausveg found Western Australia had the highest costs of production in 2008/09 at \$398 per tonne; in comparison South Australia had the lowest costs at \$250 per tonne⁵⁷⁶.
- The purchasing power of the two largest supermarkets (Woolworths and Coles) causes an imbalance of power between buyers and sellers in the Western Australian ware potato market and the Potato Marketing Corporation is only rebalancing this market. Australian Venture Consultants cites data showing that Coles and Woolworths account for 80 per cent of all grocery retail sales in Australia. ACIL Allen submits that Coles and Woolworths account for 43 per cent of the Potato Marketing Corporation's sales by volume⁵⁷⁷.
- Retail prices for ware potatoes are lower in Perth than in other Australian capital
 cities, based upon data collected by the Potato Marketing Corporation's contracted
 consultant Fresh Logic. ACIL Allen also presents online shopping data showing little
 difference in retail prices for ware potatoes between capital cities from late January
 2014 to late February 2014⁵⁷⁸.

Essentially, ACIL Allen and Australian Venture Consultants argue that Coles and Woolworths form a duopoly in the purchase of wholesale potatoes in Western Australia. This causes a loss of economic efficiency as wholesale buyers with market power will tend to buy less than in a competitive market situation because they know that the more they purchase the more they will bid the price of the good upwards. If true, this would mean that:

- Any loss in economic efficiency is caused on the demand-side of the market and that this is not affected by the presence of the Potato Marketing Corporation.⁵⁷⁹ The Corporation's activities merely redistribute some of the monopoly rents⁵⁸⁰ earned by the supermarkets to potato growers.
- Rents gained by the supermarkets are less valuable to Western Australia than those earned by potato growers. While not explicitly stated, this is presumably because profits of the supermarkets are distributed to their shareholders, most of whom do not live in Western Australia, effectively transferring money out of the State.

Hence, it is argued, any transfer of rents from the supermarkets to growers increases income in Western Australia and is a net benefit arising from the Act.

⁵⁷⁵ ABARES - Australian vegetable growing farms An economic survey 2010–11 and 2011–12 p35

⁵⁷⁶ AUSVEG (2010), Pricing, Cost Structures, and Profitability in the Australian Vegetable Industry p3. This survey used ABARES data

⁵⁷⁷ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p15

⁵⁷⁸ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p20

⁵⁷⁹ This situation is well-established in economics and called a bilateral monopoly.

⁵⁸⁰ Economic rent is the return over and above opportunity cost (or the normal rate of return) necessary to keep a resource in its current use.

ERA analysis

The ERA considers that the data presented showing that Western Australia is a high-cost location for producing potatoes is inconclusive. First, the claim of a high cost of production is inconsistent with claims that Western Australia is achieving higher yields than in other States⁵⁸¹.

Second, the ABARES data relates to all potato growers (that is, ware, seed and processing potato growers), but in 2010/11 Western Australia had a much greater share of ware potato production than the national average⁵⁸². The ERA understands that ware potatoes cost more to produce than processing potatoes as they need to meet higher quality specifications, such as skin finish.

The ERA concludes that a reasonable assessment of the cost of ware potato production in Western Australia relative to other States cannot be made based on the information that is currently available. A separate study would need to be conducted to compare the costs of ware production across States throughout a representative year.

With regard to retail prices, the ERA agrees that the Average Price of Selected Retail Items series produced by the Australian Bureau of Statistics is not a suitable series on which to base a comparison of inter-city retail potato prices. However, the ERA considers that the data presented by ACIL Allen and Australian Venture Consultants is also an inappropriate data series for inter-city comparisons if it is held to the same standards as the series developed by the Australian Bureau of Statistics.

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Australian Venture Consultants, 2014, Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia February 2014 accessed from http://www.erawa.com.au/economic-inquiries/west-australian-microeconomic-reform/public-submissions on 2 April 2014, p. 13 & 24

⁵⁸² Australian Bureau of Statistics (June 2012), Agricultural Commodities Australia: 2010/11, ABS Cat. No. 7121.0, http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/3007F1E747B9B03BCA257B7A0018C356/\$File/71210 _2010-11.pdf, p25

The ERA also has concerns with the online price data presented by ACIL Allen. The ERA notes that South Australia, which supplies much of eastern Australia, is currently experiencing production losses due to adverse weather conditions.⁵⁸³ This weather event will likely dwarf any impact the Potato Marketing Corporation has on relative retail prices for potatoes. Additionally, the comparison excludes the most common potato varieties in each market.

The ERA concludes that, given the large differences in varieties produced in each State, it is not possible to develop a robust comparison of retail potato prices between Australian capital cities. The Australian Bureau of Statistics is the premier statistical agency in Australia, but could not find a satisfactory way to construct such an index.

Additionally, the changes in varieties grown that the Potato Marketing Corporation intends to implement could increase the price of Western Australian potatoes, even though it claims consumers would be better off with the change. The Corporation intends to move from 8 per cent yellow potatoes in 2012/13 to 40 per cent by 2016/17⁵⁸⁴, but currently offers growers up \$110 per tonne more for yellow potatoes than the most common white varieties in some of its pools⁵⁸⁵.

Therefore, the ERA concludes that the claims made by the Potato Marketing Corporation, the Potato Growers Association and their consultants that average retail potato prices are lower in Perth than other Australian capital cities cannot be substantiated by the data presented. The data presented does not support or rebut the argument that the regulated system delivers a lower retail price in Western Australia despite a higher farm-gate cost.

However, an assessment of the structure of the Western Australian potato value chain is critical for this analysis. The ERA considers that the shares of potatoes purchased from the Potato Marketing Corporation by different segments of the retail market, as presented by ACIL Allen⁵⁸⁶, is more relevant than the total grocery share presented by Australian Venture Consultants. This is shown in Figure 36 below.

PotatoesSA (February 2014), February Heatwave in South Australia Causing National Potato Shortages, https://www.potatoessa.com.au/wp-content/uploads/February-heatwave-in-SA-causing-national-potato-shortages.pdf

⁵⁸⁴ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p22

⁵⁸⁵ Potato Marketing Corporation Annual Report 2012/13, p100

⁵⁸⁶ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p15

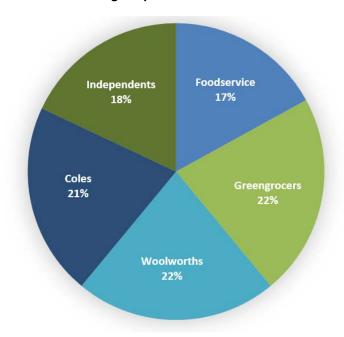


Figure 36 Typical Potato Marketing Corporation Sales

Source: ACIL Allen, Potato Marketing Corporation

The Western Australian retail potato market is characterised by three major customers and two major customer groups made up of relatively small firms. The ERA considers that the market shares indicate that there is a reasonable balance in market power between wholesale sellers and buyers of ware potatoes; in fact, the Potato Marketing Corporation is likely to have considerable power over the greengrocer and foodservice sectors, which account for 39 per cent of the market. Additionally, it appears that growers are gaining countervailing market power by forming alliances with wash packers⁵⁸⁷.

Additionally, while the inter-city comparisons provide no evidence of the impact of the Potato Marketing Corporation on the Western Australian retail potato prices, movements within the Perth index might contain the signature of a particular market structure.

If the supermarkets have market power on their buying and selling side, then they will only pass on around half of any input cost change to consumers. However, if there is competition in the retail sector, then the cost change will be passed on in proportion to the sensitivity of quantity demanded to price. Australian Venture Consultants submit that the response of quantity demanded to price is low, which means that most of the cost change would be passed through to consumers.

The most significant recent potato-input cost change faced by retailers was when the Potato Marketing Corporation's price for Grade 1 Nadine potatoes sold to merchants rose from

⁵⁸⁷ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p11

⁵⁸⁸ Nicholson, W. and C. Snyder (2008), Microeconomic Theory: Basic Principles and Extensions, 10th Edition, p497.

This is a fairly standard result for a monopolist with constant marrinal costs, which is a likely assumption in the

This is a fairly standard result for a monopolist with constant marginal costs, which is a likely assumption in the presence of a regulated minimum price.

See Australian Venture Consultants, 2014, Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia February 2014 accessed from http://www.erawa.com.au/economic-inquiries/west-australian-microeconomic-reform/public-submissions on 2 April 2014, p17

approximately \$850/tonne in August 2006 to approximately \$1,175 per tonne in June 2008, a rise of 38 per cent⁵⁹⁰.

With regard to whether this wholesale price rise was passed on to consumers in full or not, the ERA considers that, while all of the potato price series examined are invalid for intercity comparisons, comparisons over time within each series should be valid. For example, Potato Marketing Corporation data, as used by Australian Venture Consultants⁵⁹¹, indicate that the full price rise was passed on, with the retail price rising from \$2.30 per kilogram in September 2006 to \$2.72 per kilogram in September 2008.

The Australian Bureau of Statistics Average Retail Prices of Selected Items series indicates that retail potato prices rose from \$2.20 per kilogram in June 2006 to \$2.82 per kilogram in September 2008 before stabilising thereafter.

Both increases are greater than the increase in the recommended price of 32.5 cents per kilogram (\$325 per tonne) and indicates that the full price rise was passed on.

The larger retail price rises indicate that there may have been other factors driving retail prices upwards as well. Margins placed on goods to recover the cost of holding higher-priced stock might also be a factor. The ERA intends to investigate this issue further in the Final Report for this Inquiry.

This analysis is not conclusive and the correlation between wholesale and retail prices is far from perfect. Additionally, the Potato Marketing Corporation data⁵⁹² are quite volatile.

Nevertheless, the ERA's draft conclusion from the market share data and examination of price data indicate that there is no market failure and that the Western Australian retail purchasing market is competitive regardless of whether or not the ware potato market is regulated. This has the following implications:

- any transfer of income to farmers is taken directly from consumers; and
- there will be a loss of economic efficiency from the operations of the Potato Marketing Corporation.

These implications are examined in the cost-benefit analysis below.

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⁵⁹⁰ McKinna et al (2011) Strategic Analysis of the WA ware potato supply chain: Final Report, p21

Australian Venture Consultants, 2014, Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia February 2014 accessed from http://www.erawa.com.au/economic-inquiries/west-australian-microeconomic-reform/public-submissions on 2 April 2014, p18. These data were collected prior to Fresh Logic becoming the Potato Marketing Corporation's provider of price data.

⁵⁹² Collected prior to Fresh Logic being contracted by the Potto Marketing Corporation to collect data.

7.3.5.4 Cost-benefit analysis

Background

This section quantifies the costs and benefits of the regulation of the ware potato market in Western Australia and then calculates annual benefits and a 15-year present value of benefits. The major aim of the section is to quantify the net benefits, rather than to identify to whom those costs and benefits will accrue, as this will often depend on the exact dynamics of the potato market. The one exception to this is the transfer of benefits from consumers to producers under the regulations, as this demonstrates the workings of the regulation.

Costs of the regulation of ware potato marketing

Income transfer

The ERA estimates the per tonne transfer of income from consumers to growers is equal to the annual cost per tonne of the Domestic Market Entitlement. The annual cost of Domestic Market Entitlements per tonne representing the minimum additional profit the grower will receive from restricted supply arrangements.

ACIL Allen submits that the cost of a permanent transfer of Domestic Market Entitlements ranges between \$150 and \$300 per tonne. However, ERA consultation with industry participants indicates a somewhat higher value, ranging from \$300 to \$600 per tonne for a permanent transfer, depending on the time of year, or \$50 to \$80 per tonne for an annual lease.

For the purposes of this analysis the ERA estimates a cost of \$50 per tonne for the annual cost per tonne of Domestic Market Entitlement. This is a cost to consumers from the operation of the Act, although it will be directly offset by benefits to growers in the cost-benefit analysis.

Grower productivity

ACIL Allen estimates that the cost to productivity arising from the Act is \$72 per tonne per annum. ACIL Allen arrived at this estimate by considering the potential gain from economies of scale achieved by the smaller growers leaving the industry if deregulation were to occur and the remaining growers achieving the productivity of the largest growers in the State.

The ERA considers that the ACIL Allen calculated economies of scale impact is reasonably optimistic as a range of different sized growers are likely to remain if deregulation were to occur. However, it does not consider any productivity gains from the current larger growers increasing in scale should deregulation occur. The ERA has used the ACIL Allen estimate of \$72 per tonne, which equates to \$4 million per annum (based on production of 55,000 tonnes⁵⁹³ per annum), for this Report.

Efficient level of production

The value of the inefficiency from under production is dependent on the responsiveness of production and consumption to the fall in price from the removal of the income transfer. Potatoes are generally thought to be a staple good so consumers do not greatly increase

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⁵⁹³ Approximately the Potato Marketing Corporation's 2012/13 production target (Potato Marketing Corporation Annual Report 2012/13, p21.

their consumption in response to a fall in price.⁵⁹⁴ This is supported by the limited econometric research that the ERA could find.⁵⁹⁵

However, in McKinna (2011)⁵⁹⁶ one wash-packer estimated that the market was undersupplied by 20 per cent. For this analysis the ERA has used a low responsiveness of demand to changes in price. An elasticity of demand of -0.2 is used.

The ERA was not able to locate any research on how responsive supply would be to the removal of any supply restriction. The low elasticity of demand used means that the value of the supply response would not greatly affect the benefit to society, but would affect the share gained by new growers.

The ERA acknowledges that the availability of suitable land and water will eventually restrict production of ware potatoes in Western Australia. However, it concludes that supply would be reasonably responsive to the lifting of restrictions. In this regard, the Australian Bureau of Statistics estimates that the total area in Western Australia planted with potatoes in the late 1990s (ware and processing⁵⁹⁷) was roughly double today's levels. Additionally, the Potato Marketing Corporation intends to increase production within the regulated system by 10,000 tonnes over three years.⁵⁹⁸ Based on this, the ERA uses a supply elasticity of 2.0 for this analysis.

From a starting point of an average \$730 per tonne grower return⁵⁹⁹, a \$50 per annum per tonne licence value and a starting production of 55,000 tonnes per annum, production would increase in response to the removal of restrictions to 55,700 tonnes per annum and the total gain from consumption inefficiency is \$42,420 per annum.⁶⁰⁰ The aggregate loss is relatively small because the cost to produce the increase in production would be the highest cost of all production.

Seed potato industry costs

Seed potatoes are specially grown high-health tubers used by growers as genetic material to grow further crops of ware, processing or seed potatoes.

Western Australia has highly suitable conditions, a skilled grower base and the ability to produce seed potatoes 12 months of the year. Western Australia is well positioned to develop a substantial seed potato export industry.

⁵⁹⁴ Australian Venture Consultants, 2014, Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia February 2014 accessed from http://www.erawa.com.au/economic-inquiries/west-australian-microeconomic-reform/public-submissions on 2 April 2014, p17

http://www.tcd.ie/Economics/msceps/courses/understanding%20markets/14.%20Income%20elasticity%20food%20in%20home%20UK.pdf

 $^{^{596}}$ McKinna et al (2011) Strategic Analysis of the WA ware potato supply chain: Final Report p 12

⁵⁹⁷ Australian Bureau of Statistics, Historical Selected Agriculture Commodities, by State (1861 to Present), 2010-11, ABS Cat. No. 7124, http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/317C72EE05CF20AECA25709E003C52B0? OpenDocument

⁵⁹⁸ The West Australian (March 2014), Humble Spud Back in Flavour, http://au.news.yahoo.com/thewest/countryman/a/22034142/humble-spud-back-in-flavour/

⁵⁹⁹ Calculated from pool production and average pool returns in the Potato Marketing Corporation Annual Report 2012/13, indexed by inflation of 2.5% to obtain a value for 2013/14.

⁶⁰⁰ The production expansion of 700 tonnes and an industry cost reduction of \$122/tonne (\$50 licence cost removal and \$72/tonne productivity). The efficiency gain will be half of the value rectangle formed by these values.

"In the south of Western Australia, potatoes are produced under the most ideal climatic and phytosanitary conditions imaginable. In fact, the growing conditions there might be described as laboratory conditions, which is reflected in the yields close to what is believed to be the potential limit for producing potatoes on one hectare of land ... There is no bacterial wilt, no potato cyst nematode, no late blight ... found anywhere in the seed growing areas of WA. There is no other potato growing area in the world, known to CIP, where such conditions are found" 601

Seed potatoes are initially grown from disease free mini tubers, micro tubers or plantlets. These tubers/plantlets are grown over a three to four month period with the resulting crop stored for planting the following year. The seed potatoes are field multiplied over a number of years (generations) before generally being sold when the tubers reach the third to fifth generation.

There are major opportunities in Western Australia to develop seed potato exports of ware and processing varieties to Asia, the Middle East and the Eastern States. The Western Australian international seed export industry has grown from 1,303 tonnes in 2000/01 to 3,383 tonnes in 2011/12. Western Australian seed is also sold interstate but statistics on interstate trade are not collected.

The Western Australian Seed Potato Producers Committee has stated that there are no negative effects from the regulation of the ware potato market. 602 This may be the case for growers that produce seed potatoes for the local market. However, discussions between the ERA and seed potato producers that supply the international market identified some specific problems.

- International seed exporters indicate that international customers prefer small to medium sized tubers (35 grams to 175 grams) for seed and are generally unwilling to purchase large tubers (>175 grams) to use as seed. In contrast, domestic buyers of seed potatoes are willing to cut large tubers for seed buying seed sized between 35 grams and 300 grams.
- A seed crop will not be certified or registered if it is found to have viruses above certain limits or physical damage, preventing international exporters from meeting import country requirements. Seed growers producing for the domestic market can negotiate with their buyer and sell their seed outside the certification/registration system.

International seed exporters are prohibited from selling seed tubers that they cannot sell internationally as ware potatoes on the domestic ware market unless they have a Domestic Market Entitlement (which many do not). They will only be able to sell their seed crop as ware potatoes interstate at a low price. This lack of market access leads to a number of problems for export seed growers producing ware varieties:

- Seed growers sacrifice yield by spraying off their crop early⁶⁰³ to avoid oversize tubers, particularly for the final generation. This then reduces their yield and income. Growers are not always successful in minimising the quantity of oversize tubers in their seed crop.
- Seed growers selling their oversize/reject seed tubers interstate face large transport costs and competition from low cost South Australian producers.

⁶⁰¹ Dr Peter Schmiediche Regional Representative International Potato Centre (CIP) Bogor, Indonesia (1992–97))

⁶⁰² Western Australian Seed Potato Producers Association submission to the ERA.

⁶⁰³ Seed potato growers apply chemicals to their crop to prevent it growing and producing a large proportion of oversize tubers which cannot be sold on the regulated ware market.

This puts Western Australian producers at a significant disadvantage to interstate and international competitors who sell oversize/reject seed tubers on their domestic markets.

• If only a small quantity of seed is affected it is not feasible to send to the Eastern states and the seed is often used as cattle feed.

This has three major implications.

- It reduces the profits of existing seed potato exporters.
- It increases the price of Western Australian seed potatoes on international markets.
- It potentially prevents the expansion of the seed potato industry.

While the third of these effects is potentially significant, it is uncertain. Consequently, only the effect on existing growers sacrificing yield and receiving a lower price for oversize/reject seed is quantified for this analysis. The potential benefits of expanding the export sector are discussed below.

Over the past 5 years approximately 468 tonnes of ware seed crops have failed inspection each year and 591 tonnes of seed production has been foregone by the seed industry in Western Australia by spraying off the crops early to avoid excess oversize tubers. This gives an annual cost of approximately \$280,000 per annum, based on growers receiving \$200 per tonne for these crops sold interstate instead of domestic market prices of \$550 per tonne for oversized tubers and \$350 per tonne for failed seed crops.

It is also worth noting that Western Australia has imported approximately 2,300 tonnes of ware potatoes per annum over the past five years at a cost likely much greater than the 1,000 or so tonnes lost from the impact of regulation of seed potato production.

Operating costs of the Potato Marketing Corporation

ACIL Allen submits there would be an annual saving from deregulation of 50 per cent of the Potato Marketing Corporation's current costs, which is equivalent to \$26 per tonne. ACIL Allen considers that the remainder of the Corporation's costs would still be needed to perform functions required in a free market, such as marketing and merchant costs. Australian Venture Consultants submits that merchant and costs for other horticultural products are typically 15-19 per cent of the gross sales price. 605

The ERA has used the ACIL Allen estimate for this Report. The functions performed by merchants in horticultural markets are to some extent already performed by the wash packer agents in the potato marketing chain.

Grower administrative costs

ACIL Allen submits a cost of \$2 per tonne per annum for growers to comply with the systems of the Potato Marketing Corporation. The ERA accepts that there will be some costs

⁶⁰⁴ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p25

⁶⁰⁵ Australian Venture Consultants, 2014, Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia February 2014 accessed from http://www.erawa.com.au/economic-inquiries/west-australian-microeconomic-reform/public-submissions on 2 April 2014, p29

associated with complying with regulatory burden of the system and, while this estimate is not justified in great detail in the ACIL Allen report, accepts the estimate of \$2 per tonne.

Benefits of the restriction

Income transfer

Growers benefit from a transfer of income from consumers arising from the cost of the Domestic Market Entitlement. This is simply equal to the cost to consumers considered above (\$50 per tonne per annum) and nets out to zero when both costs and benefits are considered.

Other benefits

ACIL Allen submits a benefit of \$5 per tonne per annum for other benefits including the price stability offered by the Potato Marketing Corporation. The ERA uses this estimate at this stage, but notes that it is not justified in detail by ACIL Allen and will examine further in the Final Report for this Inquiry.

Cost and benefits submitted but not accepted

As part of its analysis, ACIL Allen also submits:

- costs of the existing system related to holding Domestic Market Entitlements⁶⁰⁶;
- benefits to the existing system relating to forgone marketing⁶⁰⁷; and
- benefits to the existing system from the avoided costs of grower compensation for the loss of capital value of Domestic Market Entitlements.⁶⁰⁸

The ERA considers the annual lease cost of Domestic Market Entitlements to be a superior estimate to the holding cost presented by ACIL Allen. Regardless, the value associated with this appears on both the cost and benefit side of the equation and so does not affect the net result of the analysis.

With regard to marketing forgone, the ERA considers that a marketing levy as applied to other agricultural products⁶⁰⁹ could achieve the same result as the operations of the Potato Marketing Corporation and so has not been included in this analysis.

ACIL Allen submits a value of \$28.50 per tonne for compensation of growers for the destruction of the capital value of Domestic Market Entitlements should deregulation occur. This is an avoided cost of deregulation and so ACIL Allen submits this as a benefit of retaining the Act.

Standard practice in conducting cost-benefit analysis dictates that compensation for a loss is a transfer from the beneficiaries of reform (that is, taxpayers represented by the Government) to the losers of the same reform (that is, holders of Domestic Market Entitlements). It does not affect the net benefit to society and so is not included in this cost benefit analysis. Nevertheless, the ERA notes that growers, particularly those who have

⁶⁰⁶ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p25

⁶⁰⁷ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p27

⁶⁰⁸ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p27

⁶⁰⁹ Agricultural Produce Commission, 2014, Committee, accessed from http://www.apcwa.org.au/index.php/committees on 2 April 2014.

purchased Domestic Market Entitlements from other growers in the recent past, will be adversely affected by deregulation. Therefore the need for some compensation and the means to do so are discussed in Section 7.3.6.

Net cost/benefit

Table 31 shows the net result from the ERA's cost benefit analysis for the *Marketing of Potatoes Act 1946*. The costs of the Act are represented as negative values, while the benefits of the Act are represented as positive values.

Table 31 Cost Benefit Analysis of the Marketing of Potatoes Act 1946

	Annual Per Tonne Value	Annual Total Value (\$m 2013/14)	Year Achieved Under Deregulation	Net Present Value (15 years, \$m 2013/14)
Costs				
Transfer	-\$50	-\$2.75	1	-\$28.54
Grower Productivity	-\$72	-\$3.96	5	-\$33.91
Seed Potato Losses	\$5	-\$0.28	5	-\$2.93
Economic Efficiency	-\$0.8	-\$0.04	5	-\$0.36
Cost of the Potato Marketing Corporation	-\$26	-\$1.65	5	-\$12.25
Grower Administration	-\$2	-\$0.11	1	-\$1.14
Total Costs	-\$156	\$8.57		-\$79.14
Benefits				
Transfer	\$50	\$2.75	1	\$28.54
Other	\$5	\$0.28	1	\$2.85
Total Benefits	\$55	\$3.03		\$31.40
Annual Net Benefit	-\$101	-\$5.55		
Net Present Value				-\$47.74
Benefit Cost Ratio				0.4

Source: ERA analysis

The table shows that the net present value of the Act over the next 15 years is a cost of \$47.7 million dollars in 2013/14 values, based on a real discount rate of 5 per cent. The Benefit-Cost Ratio of the Act is 0.4, which indicates that the costs of the Act to Western Australia are more than twice the value of the benefits.

The majority of the gains accrue through increased productivity of the industry as calculated by ACIL Allen.⁶¹⁰ The result is not sensitive to how much of the benefit is transferred to consumers or kept by retailers. If only 50 per cent of the costs of regulation are being passed through to consumers, the cost benefit ratio for regulation rises to only 0.48.

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⁶¹⁰ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p26

Factors not quantified for the analysis

Unquantified potential costs of regulation

Variety choice

The CCIWA claims that Western Australian consumers do not have the same choice of varieties on a year-round basis as consumers in other States, with Western Australia's regulated system encouraging production dominated by the Nadine variety.

However, ACIL Allen⁶¹¹ contends that 36 varieties of potatoes are grown in Western Australia and note that this choice reflects retail demand. The major varieties⁶¹² produced in Western Australia during the 2012/13 season are shown in Table 32 below:⁶¹³

Table 32 Potato varieties in Western Australia (2012/13)

Variety	Share	Colour	Cumulative Share	
Nadine	59.2%	White	59%	
Royal Blue	15.2%	Blue	74%	
White Star	5.9%	Cream/Yellow	80%	
Ruby Lou	4.1%	Red	84%	
Rodeo	3.3%	Red	88%	
Lady Chrystl	2.3%	Cream/Yellow	90%	
Laura	1.5%	Red	92%	
Carisma	1.3%	White	93%	
Mondial	1.2%	Cream/Yellow	94%	

Source: ACIL Allen Consulting

The number of varieties has increased from the late 1990s, when the white varieties Delaware and Nadine accounted for around 90 per cent of production. Nadine, which was introduced in the 1990s, became popular with growers because of its high yields. Supermarkets also favoured Nadine then as it presented well.

The Potato Marketing Corporation encourages production of different varieties through the allocation of Domestic Market Entitlements into different potato types and colours: notably 65 per cent white, 16 per cent blue, 11 per cent red and 8 per cent yellow in 2012/13⁶¹⁵. The Corporation also offers different prices by finer variety groups and lets growers select the best variety within each colour groups based on the price premium and growers individual ability to grow each variety.

McKinna (2011)⁶¹⁶ noted that this was an inefficient system because it meant that growers were forced to meet the required colour quota even though their land might not be suitable for particular varieties. The Potato Marketing Corporation currently lists this recommendation as pending due to the complexity of reform⁶¹⁷.

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⁶¹¹ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p22

⁶¹² Those with greater than 1% of production, including production of trial varieties.

⁶¹³ Potato Marketing Corporation Annual Report 2012/13 pp 89-105.

⁶¹⁴ Potato Marketing Corporation (2000), Annual Report 2000, pp 11-12.

⁶¹⁵ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p22

⁶¹⁶ McKinna et al (2011) Strategic Analysis of the WA ware potato supply chain: Final Report

⁶¹⁷ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p22

The Potato Marketing Corporation intends to dramatically change the allocation of Domestic Market Entitlements of broad categories over the next five years, with yellow varieties predicted to increase from 8 per cent in 2012/13 to 40 per cent in 2018/19, mainly at the expense of white varieties, for which Domestic Market Entitlements are forecast to fall from 65 per cent to 25 per cent.

As noted by ACIL Allen⁶¹⁸, comparisons with eastern Australia are difficult because data are not collected centrally and holders of Plant Variety Rights (**PVRs**) do not publish such information. However, the ERA makes the following observation based on conversations with industry participants:

- There is considerable market share in eastern Australia of low-frills "workhorse" varieties in the mould of the Nadine in Western Australia, but these tend to be cream/yellow in eastern Australia with a greater share of brushed potatoes⁶¹⁹; and
- The ERA could not find evidence of Royal Blues⁶²⁰ or blue/purple potatoes more generally being sold in eastern Australia in any large quantities, especially in the major supermarkets.

While difficult to make a definitive conclusion, the ERA does have some concerns with a central planning approach to variety production.

For example, the regulated system appears to be slower moving than the deregulated market in eastern Australia. The Potato Marketing Corporation plans to make cream/yellow varieties the most common category in Western Australia over the next five years. However, there is no guarantee that this will be achieved as yields of cream/yellow varieties are lower than those of Nadine, potentially meaning substantial grower resistance. In contrast, the deregulated market in eastern Australia already has cream/yellow as the most common category and this appears to have been the case for at least several years.

The ERA considers that the current Domestic Market Entitlements variety allocation is unlikely to ever truly reflect consumer demand as well as happens in a deregulated system. While reforms within the system (for example, offering price premiums reflecting wholesale sales prices rather than by compulsion) could make it more market orientated, managing such as system becomes very difficult.

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⁶¹⁸ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p22

⁶¹⁹ Brushed potatoes are more common in eastern Australia due to differences in soils.

⁶²⁰ The Potato Marketing Corporation's own data use Royal Blue to weight average prices only for Perth.

Product quality

McKinna (2011)⁶²¹ makes numerous references to quality issues and in particular the continual complaints by merchants regarding the poor quality of potatoes flowing through the supply chain (p14). As part of his analysis McKinna travelled to South Australia where 80 per cent of Australia's ware potatoes are produced. The South Australian industry is dominated by seven grower/washpackers and McKinna noted⁶²² that over 60 per cent of potatoes are packed out as Grade 1 in South Australia. In contrast the proportion of the Western Australian industry's packouts classed as Grade 1 have declined from 49.6 per cent of potatoes in 2008/09, to 40.2 per cent in 2012/13⁶²³.

McKinna (2011)⁶²⁴ commented on poor agronomic, harvesting and logistical practices, which impact on quality. These problems are ongoing and there is no clear explanation as to why packouts are declining in Western Australia. The Potato Marketing Corporation⁶²⁵ notes that supermarkets are tightening their quality standards without providing an explanation as to why. This could be in response to improvements in supply from South Australia or as a result of the price increase by the Potato Marketing Corporation in 2008.

The Potato Marketing Corporation has faced problems with the production of Royal Blue in several pools over the past few years, primarily due to high temperatures in growing regions. In response the Potato Marketing Corporation has on occasions issued Special Licences to ensure supply.

In 2007 Western Potatoes Ltd commissioned Peter Batt of Curtin University to conduct a survey of retail customers including an analysis of potato quality and varietal demand⁶²⁶. The Curtin University study of 2007 found that the level of dissatisfaction with pre packed bags of potatoes was higher than self-selected potatoes. Second grade potatoes tend to be provided in pre packed bags. Whereas some 77 per cent of respondents were seldom dissatisfied when they self-selected potatoes in a retail store, for those purchasing potatoes in pre-packed bags, the level of satisfaction was considerably less (58 per cent). Some 14 per cent of respondents were dissatisfied one time in every five occasions, 9 per cent one time in four, 8 per cent one time on every three occasions and 5 per cent were dissatisfied on each and every occasion that they purchased pre-packed potatoes

The ERA considers that the poor quality of Western Australian ware potatoes is in large part a result of the regulated system. The grower payments in the current system are failing to effectively reward better growers and deter poorer growers. Whilst better growers are more profitable and can use their profits to expand through the purchase (when available) or lease of Domestic Market Entitlement the allocation of additional Domestic Market Entitlement per pool has historically been on a pro rata basis with poorer growers receiving the same percentage as better growers. The regulations are rewarding poorer growers with additional Domestic Market Entitlement and the opportunity to lease that Domestic Market Entitlement to better growers.

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⁶²¹ McKinna et al (2011) Strategic Analysis of the WA ware potato supply chain: Final Report, p.14

⁶²² McKinna et al (2011) Strategic Analysis of the WA ware potato supply chain: Final Report p 50

⁶²³ Potato Marketing Corporation Annual Reports 2012/13 & 2011/12.

⁶²⁴ McKinna et al (2011) Strategic Analysis of the WA ware potato supply chain: Final Report, p.49

⁶²⁵ Potato Marketing Corporation Annual Report 2011/12

⁶²⁶ Batt, Peter, Western Potato Presentation, Claremont Showground 26th June 2007

Expansion of export seed potato industry

The ERA considers that considerable potential exists for the Western Australian export seed potato industry to grow substantially if growers are able to sell oversized tubers and rejected crops into the domestic market. As the development of such an industry is uncertain, the ERA has not attempted to quantify its net benefits. However, the ERA considers that it could be the most significant benefit from reforming the industry.

The seed potato industry is the world's largest seed industry both in terms of value and volume of seed produced annually. The major seed potato producing countries are in Central and Eastern Europe, India and China. Most of these countries use seed for domestic production with trade being dominated by the northern European countries and Canada.

Table 33 Major seed potato exporting countries, value and quantity of seed potato exports 2012 (only includes trade value to individual countries of greater than A\$1m)

Rank	Country	Trade Value (A\$)	Quantity (t)
1	Netherlands	497 432 103	884 205
2	France	69 460 499	125 792
3	United Kingdom	95 971 978	116 851
4	Canada	37 857 941	91 376
5	Germany	40 099 286	81 412
6	Denmark	27 910 136	49 346
7	Belgium	19 971 192	46 130
8	USA	8 485 446	18 041
9	Egypt	11 858 107	17 468
10	Spain	14 497 380	14 864
11	Ethiopia	2 662 178	11 897
12	Czech Republic	2 803 329	6 763
13	Portugal	4 630 573	6 077
14	South Africa	3 314 929	4 940
15	Australia	4 764 422	4 602

Source: http://comtrade.un.org

The ERA understands that Western Australian seed growers regularly receive inquiries from the Middle East to supply seed for the Northern Hemisphere autumn planting, when seed from Northern Europe is not available. This trade has not expanded as the varieties required are not grown in Western Australia and seed growers would have to import the varieties and then bulk them up over a number of generations to have sufficient quantities.

The world trade in seed potatoes increased from 2.149 million tonnes of seed potatoes worth US\$837 million in 2002 to 3.031 million tonnes worth US\$1,748 million by 2012.⁶²⁷ Additionally, countries near to Western Australia are increasing their potato consumption, as shown in Table 34.

⁶²⁷ http://comtrade.un.org

Table 34 Fresh potato consumption in Australia and neighbouring countries

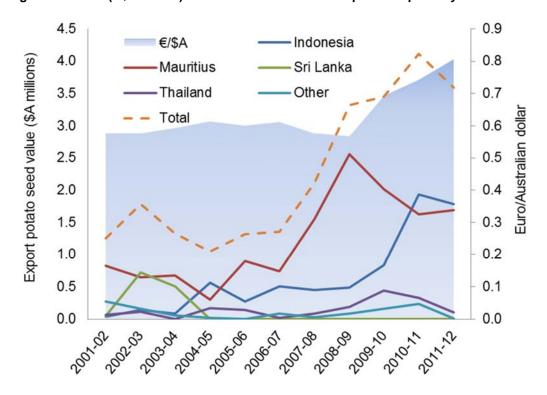
Country		Consumption				Change 1990 to 2010	
	1990	1995	2000	2005	2010	Consumption	Population
'000 tonnes							
Australia	1 171	1 105	1 169	1 238	1 242	6%	30%
Bangladesh	1 069	1 470	2 934	4 854	7 924	641%	41%
China	31 940	45 954	66 279	70 679	81 344	155%	17%
Indonesia	552	933	953	1 002	1 081	96%	30%
Philippines	58	85	65	81	131	126%	51%
Thailand	18	71	110	130	161	794%	21%
Sri Lanka	87	107	168	126	183	110%	20%

Sources: consumption FAO; population World Bank

High pest and disease pressures hamper potato production in Asia, particularly in tropical and subtropical regions. This also limits the production of high quality seed with domestic seed.

The Western Australian seed potato industry has been expanding in response to the growing demand from South-East Asian processing factories that require seed of the Atlantic variety for their growers. This growth has led to the increases in export seed sales depicted in Figure 37 below.

Figure 37 Value (A\$ millions) of Western Australian seed potato exports by market



Source: Agrifood Infonet and www.oanda.com/currency/historical-rates/

Note: Shaded area shows the appreciation of the Australian dollar against the euro.

Western Australia's proximity to South East Asia and South Asia affords it a transport advantage in terms of costs and timeliness over other horticultural regions in Australia and over seed potato export competitors. Western Australia is Australia's primary export seed potato state, supplying 81 per cent of Australia's exports by value in 2012/13.

Physiological age of the seed has a major impact on seed performance. ⁶²⁸ Because of its climate and proximity to Asia, Western Australia has the advantage over European producers of being able to produce seed potatoes all year round at the correct physiological age when competitors cannot.

The opportunity to export seed potatoes to Asia is not limited to processing varieties. Ware varieties such as Granola and Mondial are in demand in countries such as Indonesia, Bangladesh and Sri Lanka.

The Middle Eastern and Asian markets often require different ware varieties to those commonly grown in Western Australia. The development of seed potato exports to those markets would lead to new varieties being made available to Western Australian consumers if the ware market were deregulated.

However, the risk posed by not being able to sell oversize/reject seed ware variety tubers on the local market has limited investment in the seed potato industry. The ERA considers that there is a good chance that the industry could expand substantially if seed potato exporters were able to sell into the domestic market when required. This is because it would improve the profitability of these growers, encouraging them to expand or attract new growers into the industry

Non-quantified potential benefits of regulation

Functions performed by the Potato Marketing Corporation

The ERA considers that the Potato Market Corporation performs a number of functions that are beneficial to the potato industry but which are not strictly related to regulation of the industry. The ERA considers that the following functions could be performed by other entities, allowing for the Potato Market Corporation to be disbanded.

- Recording where potatoes are grown in Western Australia this function assists
 with the eradication of pests such as potato cyst nematode through comprehensive
 records of the location of pests. A system could be established to ensure all potato
 growers provide details of production to a central industry body or to Department of
 Agriculture and Food Western Australia (DAFWA).
- Introduction of new varieties DAFWA managed a successful variety development program between 1989 and 2008, which facilitated the introduction and adoption of varieties such as Nadine, Ruby Lou, White Star, Eureka, Mondial, Ranger Russet and Bliss⁶²⁹.

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⁶²⁸ The potato can be thought of as having an internal clock which determines when it is ready to grow. The length of time the tuber remains dormant after harvest is dependent on factors such as temperature and variety. There is an optimum time after harvest, to plant a seed potato tuber. If the tuber is planted too early it will not complete its dormancy, too late and it will perform poorly.

⁶²⁹ http://www.vegetableswa.com.au/documents/magazine/00201_WA_Grower_March_08.pdf

 Collection of levy fees – other non-regulated industries (for example, bananas, beekeepers and pork) effectively levy, collect and administer fees to fund research and development programs for the benefit of the entire industry.⁶³⁰

Social costs of adjustment

The ERA recognises that regulation of the industry does possibly have some social benefits for regions where potatoes are grown, in terms of the regulation supporting the maintenance of smaller growers compared with the large scale farming that occurs in South Australia.

In the course of this Inquiry the ERA has been made aware of the difficulties faced by Western Australia's milk producers when diary quotas were removed in June 2000 and also when adjustment packages ceased to operate in December 2008. The number of Western Australian dairy farms fell by approximately 60 per cent from before deregulation, with many regional centres particularly hard hit. The ERA notes that, while the adjustment was large, industry deregulation occurred because the net benefits of deregulation outweighed the costs.

However, the ERA notes that adjustment is already occurring in the Western Australian potato industry, with the number of growers in Western Australia falling from 154 growers in 2004 to 78 growers in 2014⁶³¹. Additionally, that a number of growers made net cash losses (that is, before repaying any capital) in calendar 2013⁶³² indicates that this adjustment will continue.

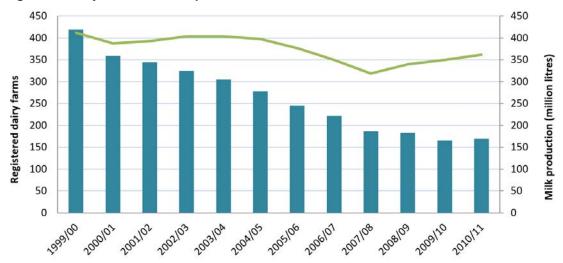


Figure 38 Dairy farms and milk production, 1999 - 2011

Source: Department of Agriculture

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⁶³⁰ Agricultural Produce Commission, 2014, Committee, accessed from http://www.apcwa.org.au/index.php/committees on 2 April 2014.

⁶³¹ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p16

⁶³² ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p8

The ERA considers that the deregulation of the Western Australian potato industry may hasten the adjustment in the industry, but change is inevitable even under a regulated system. The difference between the scenarios are that a grower exiting the regulated industry might be able to sell their Domestic Market Entitlements to other growers and gain some additional cash and that land prices might be more affected if many growers from a similar area are all selling their properties at a similar time. Any reduction in farm incomes will flow through to regional centre support businesses proportionally to the speed of grower exit.

The sale of Domestic Market Entitlements does not affect the aggregate net cost of the regulation as it is just a transfer between parties. However, it does enable the exiting grower to leave with some retirement or other income and it does mean that growers wishing to expand must continually find capital to purchase Domestic Market Entitlements, rendering them financially vulnerable if deregulation were ever to occur. This is examined further below.

7.3.6 Compensation

As discussed in Section 2.2.2, compensation does not change the aggregate net cost or benefit to society. It is simply a transfer from the beneficiaries of reform to the losers from that reform from the destruction of a Government-created property right.

The ERA notes that no investment is guaranteed and many companies' shares have fallen to zero over the Australian stock exchange's history. Additionally, it is likely that many growers have been allocated Domestic Market Entitlements at no cost, while others have paid for at least some of their Domestic Market Entitlements. Those that have paid for their Domestic Market Entitlements may have held it for such a period that they have received a good return on the asset.

Nevertheless, the ERA considers that a discussion of compensation is warranted if Government decides to remove property rights which it had created. There are also additional reasons to consider compensation in this case, including:

- one grower who wanted to expand outside of the regulated system was taken to court by the Potato Marketing Corporation on at least three occasions⁶³³ and eventually decided to purchase substantial Domestic Market Entitlements. Not only did Government create the property right, but it took an individual to court to prevent them from expanding their production in any other way than purchasing more DME; and
- the larger more efficient growers in the system today have often had to purchase substantial Domestic Market Entitlements and so might have substantial debts associated with these purchases. A destruction in asset value might leave these growers, who are the ones likely to drive the industry forward, financially vulnerable.

There are precedents in the payment of compensation for the removal of production quotas. In the case of dairy deregulation as mentioned above, an 11 cents per litre consumer levy⁶³⁴ was placed on milk which funded a program comprising:⁶³⁵

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⁶³³ Countryman, 2013, http://au.news.yahoo.com/thewest/a/18042008/tony-galati-potato-charges-dropped/

⁶³⁴ This was a national scheme so there was no restriction on placing a 'tax' (excise) on goods under s90 of the Australian Constitution.

⁶³⁵ http://www.daff.gov.au/agriculture-food/meat-wool-dairy/dairy/deregulation-of-the-Australian-dairy-industry

- Dairy Structural Adjustment Program (**DSAP**) to eligible dairy producers;
- Supplementary Dairy Assistance (SDA) to eligible dairy producers who were heavily
 dependent on market milk production and to people who, because of extraordinary
 circumstances, were excluded from DSAP payments, or their entitlements were
 significantly lower than normal;
- Dairy Exit Payments (**DEP**) and Dairy Type Grants (**DTG**) to eligible dairy producers who made the choice to leave the industry; and
- Dairy Regional Assistance Programme (**DRAP**) to assist dairy dependent communities to adjust to deregulation.

The program was administered by the Dairy Adjustment Authority (**DAA**), which operated from 1 July 2000 to 31 December 2008. Despite this scheme there was still considerable hardship within the industry and regional centres and the cessation of the DAA in December 2008 led to a large number of growers exiting the industry simultaneously and a subsequent temporary decline in production and rise in retail prices.

In this Draft Report the ERA does not provide a recommendation on the level of compensation required should the industry be deregulated, the form of compensation and how the compensation should be funded. Instead the ERA seeks feedback on this issue for consideration in the final report. The ERA does note, however, that an extended adjustment period, as seen with the dairy industry, would affect the export seed potato industry through the continuing loss of market access for oversize/reject tubers and limitation on investment.

7.3.7 Potato Marketing Corporation reform process

ACIL Allen⁶³⁶ notes that the Potato Marketing Corporation is currently undertaking a large reform process flowing from the McKinna Report (2011). These changes largely involve increasing the quality of seed used, the integrity of the wash packer system, some Domestic Market Entitlement reform as described above and the Potato Marketing Corporation resuming a marketing function with an increase in grower levies.

The ERA agrees that these reforms are improvements to the current system and should make the marketing chain more like a free market. However, the ERA considers that the system will never deliver the benefits to consumers that a deregulated system could and that additional related industries are being held back by the regulation of the market.

Additionally, the ERA notes that the reform could be unwound should a future Minister for Agriculture not share the same enthusiasm for reform as the current Potato Marketing Corporation Board.

7.3.8 Summary

Overall, the ERA's Draft finding is that the *Marketing of Potatoes Act 1946* and the *Marketing of Potatoes Regulations 1989* are a net cost to the Western Australian economy and, even with some adjustment costs, deregulation would lead to a net benefit to the economy.

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⁶³⁶ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p31

7.3.8.1 Are the potential gains too small?

ACIL Allen⁶³⁷ concludes that reform in this area will be difficult and the efficiency gain from deregulation will be small. Therefore, it recommends that regulation of the industry should be retained.

The ERA agrees that reform will be difficult as it always is with deregulation of any industry. However, it disagrees regarding the importance of the efficiency gain.

The net cost to the Western Australian economy of the regulated potato market is a present value of \$47.7 million over the next 15 years, with an additional \$28.5 million benefit to consumers. While this is not large in the context of the Western Australian economy, excluding an industry because the gains are too small opens up the possibility of regulation of another industry that is 'too small' and so on. Followed enough times, this logic could lead to substantial re-regulation and cost to the economy.

The ERA concludes that the benefits of deregulation exceeding the costs is the only calculation relevant to the decision of whether or not to deregulate an industry.

Additionally, the ERA considers that substantial expansion of the export seed potato industry could generate benefits much larger than those in the domestic ware potato market.

Should the market be deregulated, the ERA also seeks feedback on whether compensation should be paid, the form of the compensation and how it should be funded.

7.3.9 Recommendation

29. Either:

- a. repeal the *Marketing of Potatoes Act 1946* and *Marketing of Potatoes Regulations 1989* immediately; or
- b. repeal the *Marketing of Potatoes Act 1946* and *Marketing of Potatoes Regulations 1989* with an adjustment period.

⁶³⁷ ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p35

7.4 Domestic gas reservation policy

7.4.1 Introduction

In October 2006, the Government of Western Australia adopted the WA Government Policy on Securing Gas Supplies. This policy requires a commitment from liquefied natural gas (**LNG**) proponents to reserve the equivalent of 15 per cent of the LNG production from each export project for the domestic (Western Australian) market. This is known as the domestic gas reservation policy (**DGR policy**).

The rationale for the DGR policy is to "ensure secure, affordable domestic gas supply to meet Western Australia's long term energy needs and to sustain economic growth, development and value adding investment".⁶³⁹

The implementation of the DGR policy appears to have been the Western Australian Government's response to an adjustment by the market that involved a sharp spike in gas prices and tight supply of domestic gas. The ERA considers that there is no evidence of a market failure to justify the application of a DGR policy in Western Australia.

Historically low domestic gas prices were driven by legacy contracts (such as the *North West Gas Development (Woodside) Agreement Act 1979*). These long term contracts did not reflect the contemporary market conditions and prices, which have moved significantly from when the legacy contracts were signed. It was therefore inevitable that domestic customers would have to face a sharp increase in prices on the termination of the legacy contracts.

In turn, the low contract prices for domestic gas restrained investors from investment in new projects for the supply of domestic gas. This led to the balance between supply and demand for gas in the domestic market tightening.

It is economically efficient for the domestic prices of an internationally traded commodity, such as natural gas, to reflect international prices. The appropriate price attributed to the commodity is the price that it can attract internationally, adjusted for transportation and internal distribution costs (this adjustment is referred to as the net back price). Higher prices resulting from this principle are not indicative of market failure; indeed they demonstrate an effective functioning of an international market.

The ERA does not find any evidence of an on-going shortage of supply in the domestic gas market. A future gas supply shortfall is far from certain and is not an argument for government intervention in the domestic gas market.

The ERA believes that the DGR policy should be rescinded as soon as practicable. The costs that this policy imposes on the Western Australian economy far outweigh any benefits that it is believed to have. At the very least, it has the following negative consequences:

- It increases reliance on subsidised gas prices, leading to over consumption of the resource.
- It inhibits dynamic efficiency and technological innovation. For example, the policy artificially depresses domestic prices, which discourages domestic gas users to invest in technologies to lower or substitute their gas consumption.

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⁶³⁸ The 15 per cent commitment can be met from offsets from sources other than the fields producing exports, although this has not occurred to date.

⁶³⁹ Department of Premier and Cabinet, WA Government Policy on Securing Domestic Gas Supplies, 2006

- It perpetuates the existence of industries that may not have a comparative advantage in WA at the expense of investment in other industries.
- It reduces the incentive for investors to invest in the gas industry in the longer term, reducing future levels of gas available for domestic or international use.

The ERA acknowledges that choosing to end the reservation policy may involve some structural adjustments in the domestic market. Gas will go to its highest-value use and, in the short-term, prices may have to rise beyond the 'export parity' levels, to correct for past market anomalies. Gas intensive industries will need to adjust, by being more efficient, switching fuels or passing on some costs. However, in the longer-term this will result in sustainable prices, more competition and greater security of supply.

The remainder of this chapter is set out as follows:

- an overview of the gas market in Western Australia, including the historical decisions that led to the current arrangements;
- a description of the DGR policy and how it is applied;
- a discussion of the DGR policies that have been implemented in other jurisdictions;
- a summary of public submissions received by the ERA on the DGR policy;
- a discussion of the market failure, if any, that the domestic gas reservation (DGR)
 policy has been designed to address; and
- whether there are any unintended consequences associated with the DGR policy.

7.4.2 Background

7.4.2.1 Overview of gas market in Western Australia

The development of the Western Australian gas market was predominantly underpinned by an agreement between the then State Energy Commission of Western Australia (**SECWA**), a government-owned entity responsible for the supply of gas and electricity in Western Australia, and the original North West Shelf (**NWS**) joint venture (**JV**) partners.⁶⁴⁰

This agreement was designed to achieve the following objectives: (i) to develop the export potential of the vast hydrocarbon resources off the north-west coast; and (ii) to support local industry with long-term supplies of gas. The agreement required the joint venture to commit to delivering a significant volume of gas to the local market over a period covering at least 20 years.⁶⁴¹

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Owned by an international consortium, the venture is composed of six partners each holding a one-sixth share in the project. These are: Perth-based Woodside Petroleum; BHP Billiton; BP plc; Chevron Corporation; Royal Dutch Shell plc (which also own 24 per cent of Woodside through Shell Australia); a venture between Mitsubishi Corporation and Mitsui & Co called Japan Australia LNG (MIMI) Pty Ltd. North West Shelf Gas Pty Ltd. has a stake in the domestic gas phase of the project. Along with being a joint venture partner, Woodside is also the project operator on behalf of the other participants.

⁶⁴¹ The Economic and Industry Standing Committee, WA Legislative Assembly, *Inquiry into Domestic Gas Price*, 2011, p. 5.

SECWA also entered into a contract with the joint venture in September 1980 to purchase approximately 414 TJ per day of gas for 20 years commencing in 1985. The contracted price of the gas under this legacy contract was around \$2.50 per gigajoule (**GJ**).⁶⁴²

SECWA also funded the construction of a gas transmission pipeline (the Dampier to Bunbury Natural Gas Pipeline (**DBNGP**)) to bring gas to the domestic market.

When SECWA was disaggregated in 1995, the subsequent gas provider (AlintaGas) and electricity provider (Western Power) assumed independent legacy contracts with greater flexibility in the terms and conditions. When Western Power was disaggregated in 2006 into four different entities (Verve Energy, Western Power, Synergy and Horizon Power), Verve Energy assumed responsibility for (the original) Western Power legacy contract.

With the main pipeline infrastructure in place, several lateral pipelines including Griffin, Harriet, and Thevenard Island and Tubridgi were established by other producers to supply gas to the local market from other areas of the Carnarvon Basin. As a result, by the late 1990s, domestic gas was being supplied from nine separate sources (six in the Carnarvon Basin and three in the Perth Basin) and gas prices were reportedly in the range of \$1.50 to \$2.50 per gigajoule (GJ) at the field gate. 644

Since these contracts have been in place, the market conditions have changed significantly. The key drivers for the changing markets conditions include the following:

- Increasing demand for gas domestically and internationally. Western Australia's mineral boom has driven demand for gas in the domestic market. Worldwide demand for energy is growing due to rapid economic development in China, India, and the Middle East. Global gas consumption increased by 63 per cent between 1990 and 2010. By 2020 it is forecast to have nearly doubled since 1990.⁶⁴⁵
- Increasing development of LNG facilities, reducing barriers to export and so making export parity price more relevant than has been the case in the past. It is estimated that over \$116 billion is being spent on projects under construction in Western Australia to expand the LNG export industry. 646
- Increasing cost of production. Production costs have increased at a greater pace than the indexation in the legacy contracts, largely due to the mineral boom competing for resources.

These factors have meant that market prices for gas increased at a greater rate than the contract prices (even though the contract prices reflected markets conditions at the time the contracts were established). This led to investors holding back on investment for domestic gas supply, leading to the balance between supply and demand tightening.

There was a significant spike in prices when the gas contracts came up for renewal, from around \$1.50 to \$2.50 per gigajoule reportedly under the legacy contracts to around \$6 to \$7 per gigajoule – almost a threefold increase in prices. The Government intervened and introduced the DGR policy in response to this sudden spike in prices and the tightening

⁶⁴² The Economic and Industry Standing Committee, WA Legislative Assembly, *Inquiry into Domestic Gas Price*, 2011, p. 6.

⁶⁴³ The Economic and Industry Standing Committee, WA Legislative Assembly, *Inquiry into Domestic Gas Price*, 2011, p. 5.

⁶⁴⁴ The Economic and Industry Standing Committee, WA Legislative Assembly, *Inquiry into Domestic Gas Price*, 2011, p. 6.

⁶⁴⁵ Getting gas right, Australia's energy challenge, Tony Wood and Lucy Carter, Grattan Institute, June 2013

⁶⁴⁶ Getting gas right, Australia's energy challenge, Tony Wood and Lucy Carter, Grattan Institute, June 2013

supply. In other words, the Government intervention was due to the problems of the market not being able to respond to the dynamic environment.

The Western Australian gas market is highly concentrated on both the supply and demand sides of the market. On the supply side, the major suppliers of gas to the Western Australian domestic market operate in joint venture partnerships. The most prominent is led by Woodside, whose North West Shelf JV supplies more than 66 per cent of the local market. Apache Energy Limited operates two other JVs, which supply more than 31 per cent of the market. Both Apache's and Woodside's operations produce gas from the Carnarvon Basin. Basin. The balance of domestic gas comes from a range of smaller projects in the Perth Basin.

On the demand side, over 90 per cent of demand is consumed by five companies: Alcoa, Alinta Energy, BHP Billiton, Burrup Fertilisers and Verve Energy. Of all the gas purchased in Western Australia, over 80 per cent is used for power generation, alumina refining and resource processing and manufacturing in the South West. The remaining 20 per cent of gas is sold on the local retail market.

7.4.2.2 The Domestic Gas Reservation Policy

In October 2006, the Western Australian Government released the WA Government Policy on Securing Gas Supplies, known as the DGR policy. According to the DGR policy, the Western Australian Government will apply the policy in a flexible manner in accordance with the following requirements:⁶⁵¹

- LNG Producers will commit to make available domestic gas equivalent to 15 per cent of LNG production from each LNG export project by:
 - reserving domestic gas equivalent to 15 per cent of LNG production from each LNG export project;
 - o developing and obtaining access to, the necessary infrastructure (including a domestic gas plant, associated facilities and offshore pipelines) to meet their domestic gas commitments as part of the approvals process; and
 - showing diligence and good faith in marketing gas to the domestic market.
- Producers are required to undertake these actions such that domestic gas is available to coincide with the start of LNG production. The timing may vary depending on project circumstances.
- Prices and contracts for domestic gas will be determined by the market.

⁶⁴⁷ The Economic and Industry Standing Committee, WA Legislative Assembly, Inquiry into Domestic Gas Price, 2011, p. 4.

⁶⁴⁸ The Carnarvon Basin is a geological basin located in the north west of Western Australia.[1] This is the main geological feature that makes up the North West Shelf. The onshore part of the Carnarvon Basin covers about 115,000 km² and the offshore part covers approximately 535,000 km² with water depths up to 3,500 metres. It is separated into two major areas - the Northern Carnarvon Basin, and the Southern Carnarvon Basin.

⁶⁴⁹ The Perth Basin is a thick, elongated sedimentary basin in Western Australia. It lies beneath the Swan Coastal Plain west of the Darling Scarp, representing the western limit of the much older Yilgarn Craton, and extends further west offshore. Cities and towns including Perth, Busselton, Bunbury, Mandurah and Geraldton are built over the Perth Basin.

⁶⁵⁰ The Economic and Industry Standing Committee, WA Legislative Assembly, *Inquiry into Domestic Gas Price*, 2011, p. 3.

⁶⁵¹ Department of State Development, Domestic Gas Reservation Policy, available at http://www.dsd.wa.gov.au/8482.aspx, accessed on 24th March 2014.

Producers may propose to offset their domestic gas commitment by supplying gas
or other energy from alternative sources, rather than supplying gas from their LNG
projects. Such offsets must provide a net addition to the State's domestic gas
energy supply. The State will consult with industry to develop criteria for domestic
gas offsets

The DGR Policy is not underpinned by legislation; it is a statement of intent of the State's negotiating position when considering other approvals processes (for example, environmental approvals).

The DGR policy only applies to projects whose processing facilities are onshore. Floating Liquefied Natural Gas (**FLNG**) projects are not subject to the policy.

7.4.2.3 Other Jurisdictions

The Commonwealth of Australia has not adopted a domestic gas reservation policy for its offshore resources. It has argued that a national reservation policy would have a negative impact on investment and market development.⁶⁵²

Queensland has a Prospective Gas Production Land Reserve (**PGPLR**) policy, which was introduced in 2009. Under this policy, the Queensland Government may, when granting a production licence, require that any gas produced from an area be supplied domestically. To date, no gas field has been set aside for domestic gas development.

No other Australian jurisdictions have a domestic gas reservation policy.

7.4.2.4 Previous Studies on Domestic Gas reservation Policies

The ERA notes that most Australian studies of DGR Policies are modelling exercises where the results are in line with the interests of the party funding the research. Additionally, all studies found by the ERA and discussed in this section take into account the effect on the entire Australian economy, rather than Western Australia alone.

The empirical evidence quantifying the net cost (benefit) to the economy as a whole is limited. Two studies were commissioned by participants on the demand side of the market whereas the other two were commissioned by participants on the supply side. These studies represent different sides of the policy debate with each side having vested interests in whether or not the domestic gas reservation policy is adopted.

These studies used different methodologies and produced contrasting sets of estimates of the costs and benefits of the DGR policy. Each of these quantitative estimates is briefly discussed below.

The first study, conducted by the National Institute of Economic and Industry Research, was commissioned by the Australian Industry Group (AIG) and the Plastics and Chemicals Industries Association (PCIA) in October 2012. This study aims to examine the net effects specific to the east coast gas market of Australia. The finding from this study is that the estimated net annual GDP cost to the Australian economy of unrestricted east coast LNG exports to be \$22 billion (2009 dollars) in 2040.

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⁶⁵² Australian Government, 2012, Energy White Paper 2012 – Australia's energy transformation, pp. 143-144, accessed from http://www.aip.com.au/pdf/Energy_%20White_Paper_2012.pdf on 4 April 2014.

"if 1 PJ is instead shifted from local use by gas-dependent industries to export, the result is a direct loss of gross output of \$255 million compared to \$12 million gain from export revenues. The direct net loss in Australian value added is \$243 million, or a loss/benefit ratio of 21 to 1." (NIEIR Report, page 10).

The second study was conducted for the Queensland Large Industrial Gas Customers by the AEC Group in November 2012. The key finding from this report is that large industrial gas users are estimated to contribute between 5.5 and 7 times more Gross State Product (**GSP**) per PJ of gas consumed than LNG production.

The third study, conducted by Deloitte Access Economics (**DAE**), was commissioned by the APPEA. This study aims to examine the net effects of a reservation policy on the national economy. DAE estimated that the introduction of the domestic gas reservation policy on the east coast will cost the Australian economy \$6 billion in forgone annual GDP by 2025. In addition, based on the findings from a quantitative study prepared for APPEA by Deloitte Access Economics, APPEA concluded that there are clear negative impacts on jobs; industry competitiveness; investment; and living standards from the introduction of a DGR policy.

The fourth report was prepared by McLennan Magasanik Associates (**MMA**) for the Queensland Department of Infrastructure and Planning. The MMA report relates to the development of the gas market in Queensland and does not simulate the effects of a DGR policy directly. The key finding from this report is that expansion of the LNG industry would have positive effects on national real GDP, Queensland's real GSP and real gross product in the sub-state regions in which the LNG industry is located. As such, if the DGR policy does prevent gas from being exported, there would be negative macroeconomic consequences on the economy.

In addition, the economic modelling undertaken by the Economic Research Centre at the University of Western Australia using the WAG computable general equilibrium model indicates that WA GSP growth is likely to be maximised where downstream investment in mineral processing can be undertaken viably rather than simply relying on upstream petroleum and mineral production. This study estimates the impact on private consumption of a specific investment in mineral production of a net benefit equal to 17 per cent of the investment with this benefit increasing to 22 per cent of the investment where it is related to mineral processing investment.

The ERA considers that the quantitative modelling available does not greatly add to the understanding of the effects of the DGR policy in Western Australia. The ERA notes that many of the analysis:

- use exogenous assumptions on the number of LNG projects affected. That is, the results are the quantification of an opinion and not insights from a credible model;
- contain results too large to be credible (for example, NIEIR);
- tend to focus on the production of the projects only and not investment in new projects; and
- result in outcomes that always match the interests of the body financing the study.

A fuller discussion on the various studies is included in the ACIL Allen Consulting's report prepared for the ERA. 653

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⁶⁵³ ACIL Allen Consulting's report is available on the ERA's website www.erawa.com.au

7.4.3 Submissions

The ERA identified the Western Australian DGR policy as a potential restriction on competition in its Discussion Paper and sought submissions from interested parties. The ERA received five submissions in response. The ERA was particularly interested in whether any of the submissions could point to the market failure that the DGR policy was intended to address.

7.4.3.1 Opponents of the DGR policy

Two submitters – the Australian Petroleum Production and Exploration Association (APPEA) and the Chamber of Commerce and Industry of Western Australia (CCIWA) – opposed the continued application of the DGR policy.

APPEA argued that there is no identifiable market failure in relation to the supply of gas to the domestic market.

"A gas reservation scheme is not needed to obtain domestic gas supplies in Western Australia. Claims that future domestic gas supply is unavailable at any price are simply not true. There is ample evidence that gas consumers are able to obtain gas supplies on commercial terms. The three most recent domestic gas plants built in WA were financed on this basis (Red Gully, Macedon and Devil Creek)."

APPEA notes that the growth of LNG exports is the major factor exerting upward pressure on domestic gas prices in Western Australia. In this context, APPEA notes:

"The best policy response to rising gas prices lies in bringing more gas to market, rather than intervening through a domestic gas reservation policy. Experience in the US and Canada highlights how market forces bring an appropriate response to price signals, through technological innovation."

APPEA also points to a problem with intervening by using a DGR policy:

"The effect of a policy requiring LNG producers to reserve 15% of their gas resources for marketing to domestic customers is to create excess supply and lower prices. This "benefit" goes to domestic customers (largely industrial companies) not to the State or Commonwealth."

And further:

"In an advanced economy underpinned by competitive markets, such as Australia, one industry should not be required to subsidise the activities of another."

In a similar manner, the CCIWA states:

"CCIWA believes that there is not identifiable market failure in relation to the supply of gas to the domestic market, and therefore does not support the reservation policy. Such a policy distorts decision making, and penalises gas producers to subsidise gas consumers. It could also discourage the private sector from investing in exploring our energy resources."

7.4.3.2 Proponents of the DGR policy

Three submitters – the DomGas Alliance, the Energy Supply Association of Australia (**ESAA**) and Alinta – favoured the continued application of the DGR policy.

It is not clear from the DomGas Alliance submission what the market failure is that the DGR policy is designed to address. However, the DomGas Alliance states:

"The Western Australian market is compromised by many flaws including insufficient diversity of supply, lack of detailed scrutiny of retention leases and the resultant warehousing of resources, limited availability of long term contracting and lack of transparent pricing"

The DomGas Alliance submission focuses on the risks of not having a DGR policy, rather than presenting an economic analysis of the market failure and reasons for a DGR policy:

"The onus is clearly on those who wish to discard the domestic gas reservation to detail how domestic demand would be met in its absence, how the State would be compensated for the loss of economic activity and jobs in the manufacturing sector, and how Western Australia would avoid the economic and social consequences of an open slather approach to gas exports".

The DomGas Alliance considers the gap between gas supply and demand is growing and, in its view, the DGR policy does not discourage exploration and investment. In support of this view, the DomGas Alliance states:

"Petroleum and gas exploration expenditure in WA has risen significantly since the domestic gas reservation policy was first raised as a policy option in 2006."

The ESAA noted improvements in the market recently as a result of the Gas Bulletin Board, Gas Statement of Opportunities and Mondarra Gas Storage Facility. However, they expressed concern:

"... as to whether or not LNG producers would commit to providing domestic gas supply at volumes and prices consistent with a well-functioning market in the absence of a gas reservation policy."

Alinta also supports the continuation of the DGR policy, because:

"Western Australia now has a reasonable level of upstream and downstream gas competition" and "gas users have made investment decisions with the domestic gas reservation policy in mind".

Alinta does not identify any market failure, although it does say that:

"until recently, there has been little competition in upstream gas".

7.4.4 ERA assessment

In conducting its assessment of the DGR policy, the ERA has focussed on:

- whether there is a case for market failure that warrants government intervention in the domestic gas market; and
- whether there are any unintended consequences that result from the implementation of the DGR policy.

7.4.4.1 Is there a market failure?

In this section, the ERA assesses whether there is some form of failure in the market for domestic gas in Western Australia that warrants a government intervention.

It is important to note that the presence of high prices in a market is not indicative of market failure. In many domestic markets, the domestic price is set in relation to the world price.

For an internationally traded commodity, such as natural gas, it is economically efficient to let world prices set domestic prices. The appropriate price attributed to the commodity is the price that it can attract internationally, adjusted for transportation and internal distribution costs (this adjustment is referred to as the net back price).

In other words, the supply of the resource will flow towards those who value it most and are prepared to pay the highest price – regardless of whether they are domestic or international buyers. Accordingly, anyone wishing to consume the resource, must be subject to the international price, even when this means that the price is higher. Higher prices resulting from this principle are not indicative of market failure; indeed they demonstrate an effective functioning of an international market.

Allowing the free flow of goods to the highest bidders creates a greater net benefit for the country. This is because the benefits gained by the suppliers is greater than the costs incurred by (domestic) buyers through higher prices. These net benefits flow well beyond the direct buyers and sellers of the good, and have wider impact, such as on the workers (through higher wages and increased employment), growth in other related and supplementary industries and the overall higher tax revenue that the growing industry generates. Additionally, domestic buyers gain from other imports that are cheaper than would be the case, if they were only produced domestically.

The overall benefit from free international trade is well accepted in economics and by most governments worldwide (as evidenced by the principles underpinning the World Trade Agreement).

The Australian Government released its energy policy paper (White Paper), in which it also recognises the importance of international benchmark pricing. It stated that:

"...the key to stimulating effective and timely market response is to maintain open trading arrangements that do not constrict the proven ability of the market to deliver. This must allow price to play its role as a balancing incentive that can drive the development of additional supply. It is also critical that current impediments to the safe and sustainable development of new gas resources are addressed as a matter of priority.

For this reason, the Australian Government does not support calls for a national gas reservation policy or other forms of subsidy to effectively maintain separation between domestic and international gas markets or to quarantine gas for domestic supply. 7654

Energy White Paper, 2012: Australia's energy transformation. Department of Resources, Energy and Tourism, 2012. pp. 143-144.

Due to the reasons outlined above, the ERA rejects the notion that that there is a market failure due to the existence of high prices in Western Australia. Higher prices are the result of the current market dynamics and reflect efficient international benchmark pricing.

Historically low prices were driven by legacy contracts (such as the *North West Gas Development (Woodside) Agreement Act 1979*). These long term contracts do not reflect the current prices, which have moved significantly from when the legacy contracts were signed. It was therefore inevitable that domestic customers would have to face a sharp increase in prices on the termination of the legacy contracts. That is a price correction reflecting the current market conditions and is not a reflection of any market failure.

Other arguments for government intervention in the domestic gas market are based on a view that the Government should intervene to:

- avoid a future shortfall in the supply of domestic gas;
- lower the gas price to domestic manufacturers on the basis that manufacturing delivers a greater benefit to the domestic economy than does the export of raw materials; and
- deliver benefits to Western Australia from the LNG projects, which explore exhaustible natural resources belonging to the Commonwealth government.

Each of these arguments is discussed in turn.

A potential shortfall in the supply of gas to the domestic market

The main consequence of a market failure in the domestic gas market would be if domestic gas is not supplied into Western Australia at any price. There have been various forecasts that predict this outcome, but the ERA is not aware of any instance where a prolonged short fall in domestic supply has eventuated.

Proponents of government intervention in the domestic gas market appear to be concerned that the size of the domestic gas market is too small and not worth producers' time or effort when compared with ensuring export projects run efficiently.

It is argued that the Western Australian domestic gas market faces an ongoing lack of supply and that the supply of gas currently coming from the North West Shelf JV might decrease by two-thirds by 2020, leading to higher prices for local consumers and businesses. The DomGas Alliance estimates that, even after the adoption of the policy, Western Australia needs to find an additional 700 TJ per day to replace the decline in production from the North West Shelf. This compares to current consumption of approximately 1,000 TJ per day.⁶⁵⁵

The chart below, reproduced from the submission from the DomGas Alliance, shows that the gas currently reserved from Wheatstone and Gorgon will address some of the claimed shortages after 2020, but more gas will be required. The DomGas Alliance claims that these projected shortages justify continued application of the policy.⁶⁵⁶

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⁶⁵⁵ DomGas Alliance, Submission to the ERA's Inquiry into Microeconomic Reform in Western Australia, 2014, p. 3.

⁶⁵⁶ DomGas Alliance, Submission to the ERA's Inquiry into Microeconomic Reform in Western Australia, 2014, p. 5.

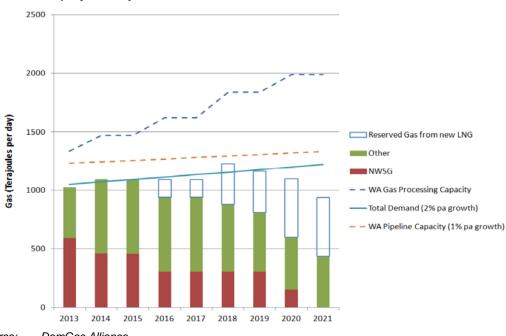


Figure 39 Gas Supply, demand and infrastructure capacity in Western Australia, as projected by the DomGas Alliance

Source: DomGas Alliance

The ERA notes that uncertain forecasts over long time periods are used to justify a future shortage of domestic gas in the Western Australian market such as those shown in Figure 39 above.

An independent source of gas supply and demand projection is the Gas Statement of Opportunities, produced annually by the Independent Market Operator (**IMO**). The IMO projects a different outcome to the one forecast by DomGas Alliance in its latest forecast of gas supply and demand projection (reproduced below).

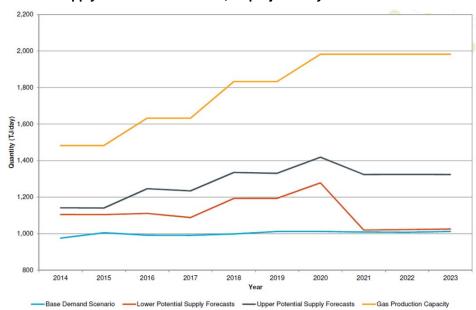


Figure 40 Gas Supply and demand balance, as projected by the IMO

Source: Gas Statement of Opportunities, Independent Market Operator, January 2014.

The IMO states that the North West Shelf JV may continue beyond the terms of their existing contract, but is dependent on commercial factors at the Karratha Gas Plant. The IMO developed two scenarios. The first scenario (the upper potential supply forecast) assumes the North West Shelf JVs will continue to supply gas to the Western Australian domestic market for the full forecast period, while the second scenario (the lower potential supply forecast) suggests the North West Shelf JVs will only supply domestic gas under their remaining contracts.

This projection shows that the base demand scenario will be met, even under the "Lower Potential Supply Forecast".

Projecting future gas supply will be subject to considerable uncertainty due to the long timescale involved. In general, forecasts underestimate the role of price and possible substitution to alternative fuels and technologies in determining the net supply and demand balance in Western Australia. In this regard:

- electricity demand is a major contributor to domestic gas demand, but retail demand is currently falling due, in part, to the growth in small-scale photovoltaic generation⁶⁵⁷ and reduced demand due to rising electricity prices; and
- technological changes are occurring rapidly in the energy industry, with gains in the productivity of renewable technologies are particularly strong.⁶⁵⁸ While considerable uncertainty exists whether these technologies can maintain these year-on-year gains, it is quite possible that these technologies will be a major share of Western Australia's energy use by the mid-2020s and the demand for gas might not be as high as implied by the DomGas Alliance.

Overall, the ERA considers that a future gas supply shortfall is far from certain and is not an argument for government intervention in the domestic gas market.

Manufacturing Provides Greater Economic Benefit than Raw Material Exports

A study by the NIEIR has been used to support government intervention in the domestic gas market on the grounds that manufacturing provides greater economic benefits than does raw-material export. This is sometimes referred to as the 'multiplier' argument, where it is argued that the value of 1 PJ of gas used domestically is worth multiple times more than its value from export.

However, this argument is based upon a flawed assumption. It assumes that the other inputs (labour and material) used in these manufacturing businesses would have zero value if they were not able to use gas. ERA's consultant, ACIL Allen has argued that NIEIR's analysis assumes that the other inputs have no opportunity cost, which is clearly wrong.

The sound economic principle of recognising the opportunity cost of other inputs is formally recognised in the Australian Government Handbook of Cost Benefit Analysis, which states that:⁶⁵⁹

"Inclusion of a multiplier effect from income and spending generated by a project is justified only when (a) the affected resources would otherwise have been

⁶⁵⁷ ESOO 2013 http://www.imowa.com.au/docs/default-source/Reserve-Capacity/soo_2013_rev1.pdf?sfvrsn=2

⁶⁵⁸ Barbose, G, Darghouth, N. and Wiser, R., 2012 Tracking the Sun V An Historical Summary of the Installed Price of Photovoltaics in the United States from 1998 to 2011, and https://www.ieawind.org/index_page_postings/WP2_task26.pdf accessed on 9/12/2013

⁶⁵⁹ Handbook of Cost Benefit Analysis. Commonwealth of Australia, January 2006, p. 118.

unemployed and (b) the activities displaced by the project would not also have made use of the idle resources."

Equally, other credible studies have commented on this flawed assumption used in the 'multiplier' argument. Deloitte Access Economics have stated that: 660

"By failing to account for the productive use to which the remaining inputs into final production would have otherwise been put, a multiplier analysis fails to give an accurate representation of the value of directing gas for domestic use. If, as has been claimed (National Institute of Economic and Industry Research 2012), one dollar's worth of export could be used to generate 21 dollars' worth of output if used domestically, it begs the question why the supply chain was not willing to pay more for that unit of gas than it was."

The 'multiplier' argument assumes that once an industry is closed due to lack of gas supply, the resultant labour will have no other productive use or potential for re-employment. Likewise, it assumes that all other input materials would be worthless and the only productive use of those materials would have been in the closed manufacturing business. The ERA rejects studies that are based on such assumptions.

The Grattan Institute has also disputed the 'multiplier' argument in its study on the DGR policy. It states that:⁶⁶¹

"Unfortunately, the [multiplier] argument is deeply flawed.

This type of analysis makes the extreme assumption that no worker would find another job if a manufacturing facility closed.

It also assumes that production inputs would not be put to other uses, which is clearly not the case - gas is clearly in demand from other sections of the economy and this is why prices are increasing. Further, multipliers assume that policy makers have no ability to influence employment and economic activity through fiscal and monetary policy settings. None of these assumed conditions would hold, except under extreme conditions that are not relevant to the current Australian context."

Overall, the ERA considers that there is no valid reason to support government intervention in the domestic gas market, based on the 'multiplier' argument.

No benefits for Western Australia out of the LNG projects located in Commonwealth waters

All petroleum (including natural gas) exploration and production in Western Australia is regulated under the Petroleum and Geothermal Energy Resources Act (PGERA) 1967 (which applies onshore and includes islands and internal waters); and the Petroleum (Submerged Lands) Act (PSLA) 1982 (which applies in coastal waters extending three nautical miles from the low watermark). These Acts together establish a 'common petroleum code' for application to onshore and offshore petroleum exploration and extraction.662

All onshore and offshore gas regulated by the Western Australian Government under the PGERA and the PSLA falls under the DGR policy.

⁶⁶⁰ The Economic Impacts of a Domestic Gas Reservation, Deloitte Access Economics, October 2013, pp 16

⁶⁶¹ Getting gas right, Australia's energy challenge, Tony Wood and Lucy Carter, Grattan Institute, June 2013, pp16

⁶⁶² Productivity Commission, Review of Regulatory Burden on the Upstream Petroleum (Oil and Gas Sector), 2009.

Gas resources located in Commonwealth waters fall under Western Australia's DGR policy if one of the following two conditions exists: (i) there is a need to locate LNG processing facilities onshore (on Western Australian land) or (ii) a need to locate LNG processing facilities within Western Australian territorial waters. Floating LNG (**FLNG**) facilities located in Commonwealth waters are not subject to the Western Australian DGR policy. 663

Studies such as the NIEIR study imply that gas sold into the domestic market has greater economic value to Western Australia than gas sold as LNG to export markets. ACIL Allen note in its report⁶⁶⁴, that while the policy creates deadweight losses, transfers between foreign and domestic shareholders could benefit the Western Australian economy.

However, the ERA notes that many of the beneficiaries of the policy, including members of the DomGas Alliance, are similarly owned by shareholders outside of Western Australia. ACIL Allen also argued that the DGR policy would not increase the extent to which gas rents are captured by Western Australians. The reason is that the quantitative studies do not include sufficient detail on the ownership issues that determine how reallocation of activity between sectors affects the distribution of income between Western Australians and non-residents. Nevertheless, it is likely that the effect on domestic economic welfare will depend as much on the welfare weights attached to the winners in the income transfer relative to the weights attached to the losers as it does on the net income loss.

The ERA is of the view that export projects in Commonwealth waters do deliver a net benefit to the State, mainly in the investment phase. 665 Consequently, the DGR Policy's net benefit is highly dependent on it not affecting the future investment in the LNG Industry. To the extent that DGR policy results in less export of gas, this would result in reduced investment.

7.4.5 Unintended consequences of a domestic gas reservation policy?

Domestic gas users have argued that exploration and investment in the upstream market are not affected by the DGR policy. For example, proponents have argued that Gorgon, Wheatstone and Pluto projects all went ahead under the DGR policy. However, the ERA is concerned that the DGR policy may have an unintentional adverse effect on the exploration for gas, both for the export and domestic markets. In this section, the ERA first considers the theory behind a DGR policy and how the policy can impact on exploration.

7.4.5.1 Theory of a domestic gas reservation policy

The Economics of Domestic Gas Reservation Policy is succinctly presented in the Report by Deloitte Access Economics, reproduced in Box 22 below. It concludes that a DGR policy:

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⁶⁶³ Haylen, A. and Montoya, D., Gas: Resources, Industry Structure and Domestic Gas Reservation Policies, New South Wales Parliamentary Research Service, December 2013.

⁶⁶⁴ Domgas Reservation Policy, Review of Literature And Policy Recommendations, ACIL Allen, March 2014.

For example, Layman (2006) argued that the major welfare impact of a large foreign-owned resource exporting project came during the investment phase of the project, with the export phase of the project providing minimal benefits. Layman, B., Lessons in Analysing Proposals from Major Project Assistance using MMRF-Green, Paper presented to the Fifth Biennial Regional CGE Modelling Conference, September 2006.

"represents a distortion in the market that prevents Australia from realising the full value of its gas reserves. There would be winners, as there are with any price change, but the gains to these winners would not offset the direct losses to producers and the broader losses that emanate from this. The net losses are likely to be large and can be estimated by investigating the magnitude of projects rendered uneconomic through the scheme and the lost profits to producers."

Box 22 Deloitte Access Economics report findings

A free, open market for gas

In a free, open market, facing an export parity price (Px) above the domestic non-trade price (P₀), gas producers will sell to domestic users if they are willing to pay a price at least as high as the export parity price (i.e. PD=Px).4 Domestic users respond to this price by reducing the amount they purchase (from Qo to Q1 in Figure 3.1 below).

Note that domestic users are not limited in the gas they can consume—they are simply required to pay the world price for what they purchase—and voluntarily reduce consumption in the face of higher prices. Producers are better off as they are able to sell their output at the higher price—they react by increasing supply (from Q₀ to Q_X).

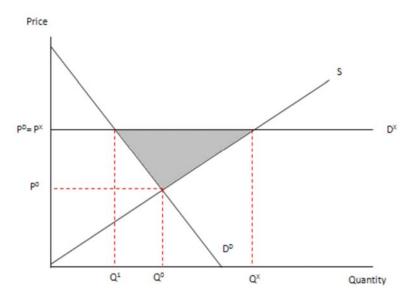


Figure 3.1: A free, open natural gas market

Overall, the process is not a zero-sum game—the gain to the economy from being able to sell at a higher international price is unequivocally positive (shown as the grey shaded area interlinked sectors and tax revenues to government.

A gas reservation policy imposed

A reservation policy entails setting aside for domestic users an amount of gas greater than they would have consumed under free trade. This would result in excess supply of gas at the initial export parity price, causing the domestic price to fall.

Typically the amount of gas to be reserved is in direct proportion to the quantity of gas produced (for example, in Western Australia, it is 15% of LNG production). Since gas producers receive a lower price for this quantity (that is, they receive the artificially depressed domestic price rather than the international price), it is essentially a tax on production from their perspective.

In the short run, gas producers respond to this 'tax' by reducing total supply, illustrated by the shift in the supply curve from S to S' in Figure 3.2 below. This results in a contraction in the total supply of gas, including that reserved for domestic consumption, since one is proportional to the other. Gas exports are also reduced (from $Qx-Q_D$ to $Qx-Q_D$ in Figure 3.2 below).

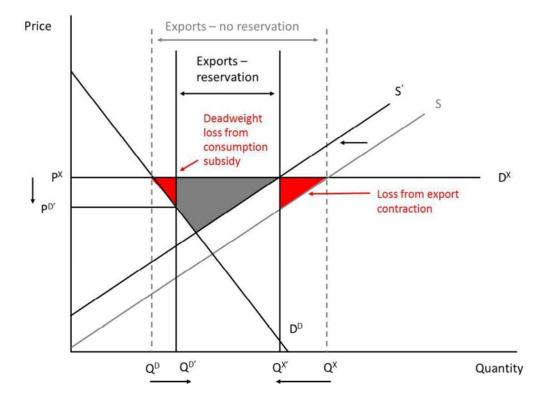


Figure 3.2: Gas market with a reservation policy imposed

The reduction in total gas output generates a loss of producers' surplus, shown in the diagram above as the right-hand red-shaded triangle. However, this is not the only loss. Unlike the usual case of a production tax, the proceeds from this 'tax' do not go to the government. Rather, they fund the domestic subsidy to gas consumers, resulting in additional distortions.

Although domestic gas users benefit from the lower 'subsidised' price, the value these users place on the gas is less than the value that could have been realised by exporting it, and this represents a net loss to the economy. The marginal benefit of the gas to the domestic user is below its opportunity cost to the producer (that is, the producer could sell the same quantity of gas at a higher price on the export market and be better off). This welfare loss is shown in the diagram as the left-hand red-shaded triangle.

What happens in the long run?

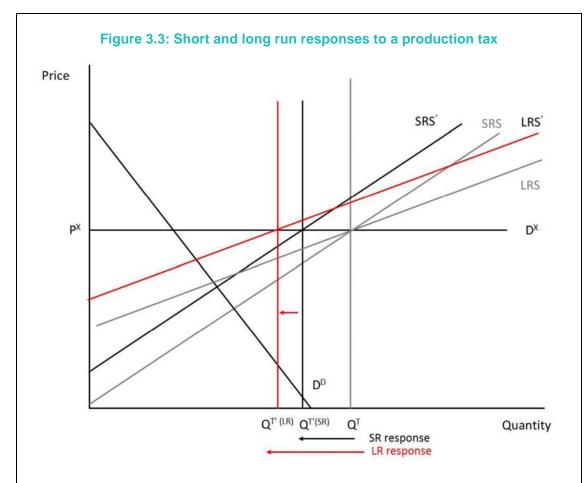
The above analysis is short run. In the short run, producers are limited in their ability to respond to the tax by contracting supply. Their supply response would largely result from a reduction in hours of production.

In the long run, however, domestic producers will respond to the lower return on gas production though their investment decisions. Less profitable gas production will lead to a reduction in investment in the industry and, as a result, total supply will fall even further. The recent experience in

Western Australia stands as testament to this (refer to Section 2.2, above). Essentially, this means that the long-run supply is more elastic than short-run supply. The output responses in the short run and long run are illustrated in Figure 3.3. The actual size of the responses is uncertain and depends upon elasticities, which ultimately depend on factors such as competing investment opportunities and the overall level of uncertainty created by the reservation policy.

Irrespective of the precise orders of magnitude, what these mechanisms demonstrate is the potential for artificially low prices – and the reduced investment incentives that accompany them – to have long term consequences on the productive capacity of the sector. Over time, as the experience in Western Australia demonstrates, this raises the risk that long term domestic supply is in fact compromised by the DGR rather than assured by it.

It also raises the prospect of longer term inefficiencies on the demand side (that is, among gas consuming industries). The short-term demand side inefficiencies described above are amplified over the longer term if artificially depressed input prices lead to investment in downstream capacity that would not otherwise be productive.



In principle, a gas reservation represents a distortion in the market that prevents Australia from realising the full value of its gas reserves. There would be winners, as there are with any price change, but the gains to these winners would not offset the direct losses to producers and the broader losses that emanate from this. The net losses are likely to be large and can be estimated by investigating the magnitude of projects rendered uneconomic through the scheme and the lost profits to producers.

Source: The Economic Impacts of a Domestic Gas Reservation, Deloitte Access Economics, Oct 2013, pp 10-13

7.4.5.2 Reservation policy as a subsidy

A domestic gas reservation policy imposes both short term and long term impact on the gas industry and the economy at large. By imposing greater supply of gas in the domestic market, it is lowering domestic prices. In other words, artificially diverting gas away from higher priced LNG towards a domestic supply will lead to depressed domestic prices. As such, reservation policy is a subsidy to the domestic users, and the subsidy is paid for by the producers. This weakens the Western Australian economy in many ways.

Sustained lower domestic prices will result in over consumption of gas. Over time, access to subsidised gas will inhibit innovation of use of other fuels/processes, as well as encourage capital spend on infrastructure that is reliant on subsidised gas, self-perpetuating the need for subsidy.

In the longer term, the reservation policy will reduce the profitability of investors in the industry and lower their incentives to make further investments that would help increase supply and lower prices. Without greater investment in the industry, prices will be pushed up higher, resulting in greater pleas for subsidies—again, self-perpetuating the need for the policy.

Some of those users will struggle to compete when gas prices rise. The Western Australian economy would be better off developing industries that are highly competitive. The practical implications of the reservation policy are discussed below.

7.4.5.3 Practical implications of a DGR policy

The DGR Policy is unlikely to deliver more domestic gas into Western Australia, let alone be a net benefit to the State, if it contributes to future investment being lower than it would have been in the absence of the policy.

The DGR policy requires LNG proponents to build domestic gas processing infrastructure and market with best intentions. Once this infrastructure is built, the costs become sunk. As a result, there is the incentive for buyers to wait until infrastructure is built and then negotiate with gas producers to buy gas. This is because, once the infrastructure is built, gas producers have a financial incentive to sell gas at prices as low as short run marginal cost, without fully recovering their capital cost.

Since the DGR policy requires the infrastructure to be built immediately, it provides an incentive for buyers to not commit to a long term contract because they may be able to negotiate a better deal if they wait until the infrastructure is built. This is an unsustainable position for investors who face a real risk of not being able to earn a reasonable return on their investment. As a consequence, it will depress future investment in the state.

DomGas Alliance has argued that the DGR policy will not have a negative impact on future investment. As evidence, it has provided data which shows that total gas exploration in Western Australia has increased after the announcement of the Policy. The ERA is not convinced of this argument since the counterfactual of how much exploration would have occurred without the DGR Policy is not known. The data that the DomGas Alliance has presented includes exploration for both export and domestic fields. It is likely that the increase in gas exploration is due to high international oil and gas prices rather than the DGR policy. Indeed, exploration for gas specifically for the domestic market would likely have been higher had the DGR not been in place.

The ERA notes that the environment in the gas market in Western Australia may be now changing. This may have implications for the ability of the Policy to deliver additional domestic gas into Western Australia. Specifically:

- The Gorgon project has experienced substantial cost blowouts. Chevron
 originally estimated the project would cost US\$37 billion in 2009. The cost then
 increased to US\$52 billion in 2012. However, in December 2013, the cost for
 the project blew out for the second time, to US\$54 billion.
- Woodside decided not to bring Browse Basin gas onshore due to high costs.
- FLNG is now a real option with some LNG projects adopting the technology, including the Browse Basin and Scarborough projects.

It is evident that onshore projects in Western Australia are becoming much more expensive and FLNG technology is becoming much more price competitive, leading to potential adoption of FLNG technology for new projects. This means that the project proponents can avoid the DGR Policy as they do not need any onshore approvals from the Western Australian Government for these projects to proceed.

The DomGas Alliance points out that costs have increased in the LNG projects for reasons unrelated to the Policy and that the Policy has not been mentioned by project proponents who have cancelled projects. It also claims that there has been no mention of the Policy in decisions to utilise FLNG technology in Australia.

However, the ERA considers that, when there is a threat to projects from high costs and alternate technology, it makes no sense to put more costs on top of the costs already faced by LNG projects.

The ERA is of the view that if FLNG technology is successful, then the widespread deployment of this technology is probably inevitable. Given this, at best the DGR Policy may simply deliver no additional domestic gas to the free market. However, there is a risk that the DGR Policy will be another factor hastening the implementation of FLNG technology and may cost the State projects coming on shore if the economics of the two options are close.

7.4.6 Conclusion

On the basis of the above considerations, the ERA is of the view that the DGR policy in Western Australia should be removed.

Policy intervention can only be justified if there is some market failure that has been identified. Higher prices, particularly over the short term, are a function of free market dynamics, and not in themselves, a market failure. The ERA is of the view that there is no evidence that there will be a future shortage of domestic gas at any price.

NERA's report on gas restrictions in the US concludes that there is no case for intervention. It states that:

"There should be nothing surprising about the conclusion that the U.S. economy is better off with unrestricted trade in natural gas than with any restrictions because basic international trade economics principles makes this inescapable. This same conclusion is reached by other researchers that have deep knowledge of the natural gas markets, despite many differences in details of the level of exports and price impacts."

The ERA believes that the DGR policy should be rescinded as soon as practicable. The costs that this policy imposes on the Western Australian economy far outweigh any benefits that it is believed to deliver. At the very least, it has the following negative consequences:

- It increases reliance on subsidised gas prices, leading to over consumption of the resource.
- It inhibits dynamic efficiency and technological innovation.
- It perpetuates the existence of industries that may not have a comparative advantage in Western Australia at the expense of investment in other industries.
- It reduces the incentive for investors to invest in the gas industry in the longer term, leading to potential future gas shortages.

The ERA acknowledges that choosing to end the reservation policy may involve some structural adjustments in the domestic market. Gas will go to its highest-value use and, in

the short-term, prices may have to rise beyond the 'export parity' levels, to correct for past market anomalies. Gas intensive industries will need to adjust, by being more efficient, switching fuels or passing on some costs. However, in the longer-term this will result in sustainable prices with net back international prices establishing the upper price limit. It will also lead to more competition and greater security of supply. It will ultimately lead to a more resilient Western Australian economy.

7.4.7 Recommendation

30. Rescind the domestic gas reservation policy as soon as possible.

7.5 **Keystart**

Keystart was established in 1989 as an incorporated company wholly owned by the State Government. Keystart is designed to help Western Australians into home ownership when they are unable to secure financing from the private sector. Clients are provided with low deposit home loans that allow them to purchase homes they would not ordinarily be able to.

Since its inception, Keystart has assisted more than 80,000 Western Australians into home ownership. 666 In the late 2000s, following the global financial crisis the program expanded rapidly, approving 20,000 loans in the period from 2008 to 2010. Currently the Keystart loan book consisted of over 16,000 loans at a total value of almost \$3.5 billion. 667

Historically, Keystart has had low rates of default and has delivered a profit. Despite this, it represents a significant financial risk to the State Government with each dollar lent implicitly underwritten by taxpayers. This risk is exacerbated by increased activity during economic downturns and the effects of adverse selection⁶⁶⁸ on Keystart's loan book reflecting that Keystart has less onerous lending requirements than its private sector competitors.

Keystart also has the potential to disadvantage existing privately financed home buyers, who must compete for properties with Keystart clients who would ordinarily not be able to enter the market. This increased demand for housing and may force all buyers to pay more for their property.

Further, it appears that Keystart's activities are attempting to address a problem that is not a true market failure. The issue as it stands is that some potential homebuyers are unable to access private finance because they have insufficient deposits or unattractive credit ratings. To justify a regulatory intervention in a market requires evidence of a market failure. Yet the outcome described above does not suggest a market failure, but rather is consistent with financial markets operating efficiently. Accordingly, there exists no reason that Government should be intervening in the market.

Reflecting these considerations, the ERA considers that there are two options for reform:

- 1. Keystart is abolished; or
- 2. Keystart's pricing structure is altered to allow Government to be adequately compensated for the risk to which it is exposed.

7.5.1 **Submissions**

The ERA received no public submissions on this issue.

7.5.2 Keystart loans

Keystart provides financing to potential home buyers who are unable to obtain financing from a private lender. Keystart provides an attractive lending option due to its financial

⁶⁶⁶ http://www.keystart.com.au/about-us/about-us

⁶⁶⁷ Thirty-ninth Parliament of Western Australia, First Session, 2013, Legislative Council Standing Committee of Estimates and Financial Operations 2012-13 Agency Annual Report Hearings: Department of Housing: Supplementary Information A12 18 November 2013.

⁶⁶⁸ Adverse selection occurs when a product or service (in this case a home loan) is selected by only a certain group of people (low income earners) who offer the worst return for the company.

requirements being significantly below those of private lenders. The financial conditions required of borrowers obtaining a Keystart loan differ substantially to those typical of private lenders, for example, Keystart 669:

- requires a minimum deposit of 2 per cent of purchase price. Private lenders typically have a minimum of 5 per cent;
- requires a minimum of 1 per cent of the purchase price in genuine savings.⁶⁷⁰
 Private lenders typically have a minimum of 5 per cent;
- does not charge Lenders Mortgage Insurance (LMI). Private lenders charge LMI for loans with a low deposit (less than 20 per cent); and
- does not charge ongoing monthly account keeping fees.

To be eligible for Keystart, clients must meet certain criteria. Aside from the deposit and savings requirements outlined above, clients must⁶⁷¹:

- Have a maximum income of \$95,000 for singles or \$135,000 for couples and families in the Metropolitan area; \$110,000 and \$135,000 for purchases in regional areas excluding the Kimberley and Pilbara; \$120,000 and \$150,000 for purchases in the Kimberley; and \$150,000 and \$180,000 for purchases in the Pilbara;
- Be purchasing a home not exceeding \$480,000 in a Metropolitan area, \$500,000 in regional areas excluding the Kimberley and Pilbara, \$700,000 in the Kimberley and \$850,000 in the Pilbara; and
- Not have existing debt repayments that exceed 10 per cent of gross income.

Based on current income requirements, an estimated 69 per cent⁶⁷² of households or individuals in the Greater Perth area would be eligible for Keystart financing.⁶⁷³ Eligibility requirements that are so broad are an indication that the activities of Keystart go beyond the Department of Housing's policy objectives and into commercial activities.

While Keystart is available to such a large portion of the population, borrowers who have sufficient deposits and credit requirements will generally prefer a private lender as they offer a lower interest rate. Borrowers will prefer private lenders when the savings from a decreased interest rate are more than the money that they would save by not paying for LMI.

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⁶⁶⁹ Keystart, 2014, *Keystart Home Loan Fact Sheet*. Accessed from: http://www.keystart.com.au/home-loans/fact-sheet-keystart-home-loan.

⁶⁷⁰ Genuine savings are those that have been accumulated in the buyers name over a period not less than 3 months. This may include: term deposits, shares, cash, equity in an existing property, or a gift or inheritance that has been held for the minimum period. Some lenders require savings to be displayed for a longer period.

⁶⁷¹ Keystart, 2014, Keystart Home Loan Fact Sheet. Accessed: http://www.keystart.com.au/home-loans/fact-sheet-keystart-home-loan

⁶⁷² A total of 383,266 out of the 551,956 households who provided income information in the 2011 Census are below the income threshold. Income brackets are inflated to account for income growth according to the Wage Price Index (WPI). Source: Australian Bureau of Statistics, Census 2011 and Australian Bureau of Statistics; Wage Price Index, Australia, 6345.0.

⁶⁷³ Australian Bureau of Statistics, 2013, 2011 Census Community Profiles: Greater Perth Basic Community Profile. Accessed from http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/communityprofile /5GPER?opendocument&navpos=220.

7.5.3 Costs

7.5.3.1 Risk to Government finances

As Keystart clients are typically those that have been refused finance from private lenders, they are likely to be at a higher risk of default. Increased default risk in debt issuance is typically met with a higher interest rate. In a home mortgage context, default risk is often offset by the charging of an LMI premium to borrowers who have a low deposit. This enables the lender to insure itself against the risk of default.

Despite its riskier client profile, Keystart interest rates are charged at the average standard variable rate of the big four⁶⁷⁴ banks.⁶⁷⁵ The fact that banks are unwilling to take on these clients at the same interest rate suggests that the default risk associated with Keystart mortgages is under-priced. Therefore, it is unlikely that the interest rates charged by Keystart are adequately compensating Government for the risk it is taking.

Private lenders use LMI as a means of compensating for the increased default risk that they are exposed to when lending to borrowers with deposits below 20 per cent of purchase price. LMI premiums give an indication of the value that is placed on the risk of lending money to these riskier clients.

As an example, a buyer who, using private finance, purchases a home for \$300,000 (the approximate average of a Keystart loan) with the minimum accepted deposit of five per cent would be liable for a LMI payment of around \$7,500⁶⁷⁶. In total, from 2008/09 to 2012/13, Keystart's foregone LMI payments would have totalled over \$100 million.⁶⁷⁷ This provides a conservative estimate of the expected value of risk, as the calculation is based on buyers with a 5 per cent deposit, two and a half times the minimum Keystart requirement. The real risk exposure could be much greater.

7.5.3.2 Counter-cyclical operations

In addition, Keystart often operates counter-cyclically to the market. During tougher economic times lenders increase deposit and savings requirements as they deem loans to carry more default risk. During the same periods, Keystart retains low deposit and savings requirements, attracting more clients that are excluded from private lenders due to the increased requirements imposed by those lenders.

During the Global Financial Crisis from 2008 to 2010, most banks lifted minimum deposit rates from 5 to 10 per cent and increased genuine savings requirements to 5 per cent. The broadening gap between the requirements of Keystart and that of private lenders resulted in the provision of 5,344 Keystart loans in the 2008/09 financial year 979, a 45 per cent increase on the 2007/08 figure of 3,688 680. This rate of increase was maintained

⁶⁷⁴ The "Big Four" banks are Commonwealth Bank, ANZ, NAB and Bankwest.

⁶⁷⁵ It is noted that the rates charged by the Big Four banks may be significantly higher than those of other lenders.

⁶⁷⁶ This figure is calculated as an average of estimates available online at: http://www.yourmortgage.com.au/calculators/mortgage_insurance/; http://www.genworth.com.au/borrower-centre/homebuyer-tools/lmi-premium-estimator; http://www.yourinvestmentpropertymag.com.au/calculators/mortgage-insurance/; and http://www.homeloanexperts.com.au/lenders-mortgage-insurance/lmi-premium-rates/.

⁶⁷⁷ Estimate based on standard LMI rates and average Keystart loan over the period.

⁶⁷⁸ Thirty-eighth Parliament of Western Australia, First Session, 2010, *Parliamentary Debates: Legislative Assembly* 3 June 2010 (Hansard) p. E495.

⁶⁷⁹ Government of Western Australia, 2009, Housing Authority 2008-09 Annual Report.

⁶⁸⁰ Government of Western Australia, 2008, Housing Authority 2007-08 Annual Report.

in 2009/10 when 5,493 loans were approved. 681 In contrast, Keystart provided less than 4,000 loans in total from 2010/11 to 2012/13 682 , when economic conditions had begun to strengthen.

This counter-cyclical behaviour increases the risk that the Government is exposed to through Keystart at times when default risks are higher. Over the period described above, the subsequent economic recovery meant that Keystart avoided mass defaults, however, this may not have been the case had conditions deteriorated further. Had Western Australia sunk into recession, unemployment would have risen and placed pressure on low income earners, which could have led to defaults and large financial losses to Government.

7.5.3.3 Adverse selection

Customers who use Keystart do so because they are of a higher default risk and are therefore unable to obtain financing from a private lender. This results in an adverse selection problem whereby the structure of Keystart and the section of the market that it targets lead to a loan book that contains purely customers who are of high default risk.

This is exacerbated by the fact that many Keystart clients switch to other loan providers with rates lower than the big four banks once they have a proven credit history. This is a result of Keystart interest rates being at the higher end of the market. Once Keystart customers have accumulated more equity in their properties and developed a better credit rating, they tend to re-finance their mortgage with a private lender. The average loan term for Keystart is 3.4 years, with approximately 2,000 clients leaving Keystart for alternate financing sources each year.⁶⁸³ The clients that leave are typically those of lowest default risk.

This process whereby the lowest risk Keystart clients switch lenders could lead to an adverse selection problem where only the higher risk clients remain and the quality of Keystart's book deteriorates. This decrease in quality increases Keystart's exposure to default risk as clients that were least likely to default are no longer on their books, while clients that are more likely to default remain. The adverse selection problem is perpetuated by the fact that the rates applied to Keystart borrowers do not rise to reflect the increasing default risk associated with those borrowers.

7.5.3.4 Impact on other buyers

Providing home loans to people who are ordinarily unable to obtain financing allows them entry to the market, effectively expanding the demand for low-end housing. While this may improve the chances of Keystart clients entering the market, it also makes it more difficult for buyers who are financed through private lenders as there is increased competition for properties.

Pressure is likely to be felt most by those who are financed privately but are only marginally above the income cut-off for Keystart or have sufficient deposits and credit history to obtain finance from a private lender. In this situation, Keystart customers have an advantage over private borrowers as they are not liable for LMI premiums. The extra expense associated with LMI is a major barrier to purchasing a home for many Western Australians. The lack of such expense for Keystart customers means that it essentially costs them less than a privately financed buyer to purchase the same property. This is outlined in Box 23.

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⁶⁸¹ Government of Western Australia, 2010, Housing Authority 2009-10 Annual Report.

⁶⁸² Government of Western Australia, 2011, Housing Authority 2010-11 Annual Report.; Government of Western Australia, 2012, Housing Authority 2011-12 Annual Report.; Government of Western Australia, 2013, Housing Authority 2012-13 Annual Report.;

⁶⁸³ Thirty-eighth Parliament of Western Australia, First Session, 2012, *Parliamentary Debates: Legislative Assembly* 31 May 2012 (Hansard) p. E430.

Box 23 Costs of purchase: Keystart vs privately financed

Consider two buyers who are attempting to purchase their first home:

Buyer 1: Has an annual gross income of \$94,000. Buyer 1 has a deposit of \$8,000 and credit card repayments of \$500 a month. Buyer 1 is financed through Keystart.

Buyer 2: Has an annual gross income of \$96,000. Buyer 2 has saved a deposit of \$20,000 and has no current debts. Buyer 2 is ineligible for Keystart, obtaining finance from a private lender.

Both buyers intend to purchase a unit with a price of \$400,000. The full cost of purchasing the unit for each buyer is outlined below:

	Buyer 1	Buyer 2 ⁶⁸⁴
Purchase Price	\$400,000	\$400,000
Deposit	\$8,000	\$20,000
Lenders Mortgage Insurance Premium	\$0	\$12,702 ⁶⁸⁵
Upfront Fees	\$1,000686	\$600
Total Loan Required	\$393,000	\$393,302
Monthly Service Fee	\$0	\$8
Monthly Repayments ⁶⁸⁷	\$2,321	\$2,331

Despite the fact that the privately financed buyer has a significantly larger deposit, they are still liable for higher monthly repayments. The cost of LMI and monthly service fees exceeds the \$12,000 deposit that Buyer 2 has saved. Due to the conditions of Keystart financing, Buyer 1 is now viable competition for Buyer 2. This may result in Buyer 2 being forced to purchase a different property or pay a higher price for this property.

The ERA is concerned about the potential for Keystart to place unnecessary financial pressure on low-end housing buyers. By introducing new buyers into the market, Keystart makes housing somewhat less affordable for existing buyers than would be the case if there were no intervention. In this way, Keystart is potentially creating more difficulty for the affordability of low-end housing. Expanding demand, under conditions of fixed supply, can cause an increase in prices that forces buyers to pay higher purchase prices than they would ordinarily need to.

$$P = \frac{r(PV)}{1 - (1+r)^{-n}}$$

Where P = Monthly Repayment, PV = Total Loan Value, r = monthly interest rate and n = number of months of the loan

The loan is assumed to have an interest rate of 5.86 per cent and a term of 30 years.

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⁶⁸⁴ Buyer 2 is assumed to be financed by one of the Big Four banks. Fees, charges and interest rates are then calculated as the average of the Big Four.

⁶⁸⁵ This is calculated as an average of large LMI providers. Figure is calculated for a first home buyer, subsequent home buyers are liable for a larger fee.

⁶⁸⁶ Keystart, 2014, Key Facts Sheet, Accessed from: http://www.keystart.com.au/external/key-facts-sheet

⁶⁸⁷ Repayments are calculated using the annuity payment formula:

7.5.3.5 Eroding the benefits of supply side policy

The Department of Housing utilises a range of policies in an attempt to increase the supply of housing, particularly affordable housing, in Western Australia. This forms the majority of a broader strategy focused on increasing the housing options available to low-to-moderate income earners. These initiatives include:⁶⁸⁸

- **Implementing Planning Reforms** that enable increased housing supply and help to ensure developments support positive social, physical and commercial goals;
- Leveraging the Private Sector through the development of new initiatives that attract necessary investment into activities that better utilise existing resources;
- Leveraging Government Development Activities to directly provide and develop land into affordable housing;
- **Developing Alternative Tenures** by working with industry and community to explore development options.

These initiatives address the likely cause of declining housing affordability; inadequate supply. However, at the same time as these policies increase supply, Keystart increases demand by increasing the number of people who are able to purchase a home. The demand increases that result from Keystart are likely to be offsetting the effect of supply-side policies to some extent.

7.5.3.6 Potential consequences of economic fluctuation

Keystart has historically had low rates of default and delivered a profit. However, external economic conditions could heavily influence the return that is earned and expose the financial risk associated with lending money. If Western Australia were to experience a recession, the chance of default would increase dramatically.

If more clients were to default, Keystart would be forced to sell their properties to recover the balance of the loan. In tough economic conditions housing prices could fall, in which case the sale price could be insufficient to cover the value of the mortgage. As Keystart deposits are very low, these home loans are typically worth almost the full value of the house and there is thus very little room for a decrease in house value before Keystart would make a loss on the default. Banks are better protected against this risk through higher deposits and/or LMI. As discussed above, Keystart actually increases its exposure during economic downturns, increasing the consequences of poor economic conditions.

The situation has parallels to the sub-prime mortgage crisis in the US, where the two government-sponsored enterprises Fannie Mae and Freddie Mac encouraged the provision of loans to low income earners who were not being serviced by the private market.⁶⁸⁹

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⁶⁸⁸ Government of Western Australia, 2010, Affordable Housing Strategy 2010-2020: Opening Doors to Affordable Housing, p. 30.

⁶⁸⁹ Tung and Martin, 2012, The Impact of the Bailout of Fannie Mae and Freddie Mac on Mortgage and Housing Industries.

There were significant differences in the US: Fannie Mae and Freddie Mac bought mortgages off banks rather than providing them directly and held a much larger share of the market than Keystart.⁶⁹⁰

The fact that Keystart plays a much smaller role than those played by Fannie Mae and Freddie Mac means that we would not expect their actions to cause a financial crisis. However, the experience of Fannie Mae and Freddie Mac illustrates:

- the potential for property values to fail to cover the full value of associated debts in the event of default;
- the higher default risks associated with sub-prime mortgages;
- the consequences for taxpayers when downside investment risks are realised, and more generally
- the risks associated with distorting credit markets to further social policy objectives.

While Keystart is not of the same scale as Fannie Mae and Freddie Mac, it does come at a risk and could lead to significant losses for the Government. Despite the reserves that Keystart holds, difficult economic conditions could have significant financial consequences.

7.5.4 Benefits

7.5.4.1 Social policy

Western Australia has experienced continual declines in housing affordability in recent decades. Particularly, in recent times low-end housing has been largely removed from the market. Keystart attempts to give a means for low to moderate income earners to enter the market.

This has a number of potential benefits, including:

- Improved individual social outcomes, providing stability, security and increased community connection⁶⁹¹;
- Easing pressure on rental markets as more people transition into ownership from renting; and
- Providing a transition for social housing tenants into home ownership, reducing the waiting list for social housing.

These benefits are already addressed in a number of other Department of Housing policies that focus on the supply-side of the market. Accordingly, it is difficult to ascertain the extent to which Keystart contributes to these outcomes.

7.5.4.2 Impact on building industry

Arguments in support of Keystart include that the housing demand that it creates supports the building industry. This occurs as a portion of Keystart customers take out loans for new construction.

⁶⁹⁰ Pollock, 2013, North America – an American housing finance dilemma: what to do with Fannie Mae and Freddie Mac?

⁶⁹¹ Australian Housing and Urban Research Institute, 2010, The benefits and risks of home ownership for low-to-moderate income households.

At times Keystart criteria has been changed as a policy decision to ensure that construction demand continues during economic downturns. Speaking of the global financial crisis period, the Director General of the Department of Housing, Mr Searle noted:

"....it was deemed appropriate to change the Keystart criteria to actually enable money to flow and the building industry to survive, quite literally, during that period." 692

As a considerable number of Keystart buyers build their own home, it is likely that the program provides some benefit to the building and construction industry.

7.5.5 ERA assessment

It is clear that the Government, with the interest rate that is currently charged and in the absence of some form of LMI, is not being sufficiently compensated for the risk that it is exposed to by providing Keystart loans. This is demonstrated by the fact that the private sector is unwilling to provide finance to this section of the market and has additional requirements of clients that are of a lower risk than those of Keystart.

The provision of loans to persons who would be unable to obtain finance from the private sector expands the demand for low-end housing, potentially forcing marginal private borrowers out of the market. The impacts of such a policy may offset the impact of a number of other Department of Housing policies that address the supply-side of the market. The Department of Housing increases the supply of affordable housing through several supply-side policies, while at the same time increasing the demand for these properties through Keystart.

Additionally, the operations of Keystart are not explicitly accounted for in budgeting and annual reporting. There is a lack of transparency surrounding the activities of the organisation and the profit that it returns.

The ERA considers that there are alternative methods for addressing housing affordability in Western Australia that do not pose the same risk to Government finances.

The ERA considers that Keystart should be abolished as:

- it exposes Government to undue and unnecessary risk that it is not adequately compensated for;
- it holds a competitive advantage over private lenders;
- it contradicts other Department of Housing policies relating to the market for affordable housing; and
- it has adverse demand-side effects on the market, impeding the entry of marginal private buyers.

7.5.6 Recommendations

31. Abolish Keystart as soon as possible.

⁶⁹² Thirty-ninth Parliament of Western Australia, First Session, 2013, Legislative Council Standing Committee of Estimates and Financial Operations 2012-13 Agency Annual Report Hearings: Department of Housing 18 November 2013.

Appendix 1 Terms of Reference

INQUIRY INTO MICROECONOMIC REFORM IN WESTERN AUSTRALIA

TERMS OF REFERENCE

I, TROY RAYMOND BUSWELL, in my capacity as Treasurer and pursuant to section 38(1)(a) of the *Economic Regulation Authority Act 2003* request that the Economic Regulation Authority (**ERA**) undertake an inquiry every four years into the microeconomic reform priorities for Western Australia.

The objective of the inquiry is to develop the most advantageous package of microeconomic reform measures that the Western Australian Government could implement to improve the efficiency and performance of the Western Australian economy.

The inquiry should identify areas of reform that have the potential to achieve the following outcomes:

- improved productivity and flexibility of the Western Australian economy;
- increased choice for consumers and business that leads to net economic benefits to Western Australia;
- increased opportunities for Western Australian businesses to effectively compete for national/international market share: and
- the removal or streamlining of unnecessary regulation.

In developing its recommendations, the ERA must give consideration, but not be limited, to the following:

- assess the current level of efficiency of Western Australia's economy, including by comparison with other relevant national and international economies;
- identify those areas in the economy where reform could enhance their contribution to the overall Western Australian economy;
- identify options for improving economic efficiency of the key areas identified above;
- prioritise key areas of reform based upon the potential impact on overall economic efficiency and future growth; and
- recommend a small number of specific key reforms or sectors that require further investigation by the ERA and policy development by the Government.

For the first inquiry, the ERA will publish an issues paper as soon as possible after receiving these terms of reference. During the course of the inquiry, the ERA will publish a draft report and then provide a final report to the Treasurer by 30 June 2014.

For subsequent inquiries, the ERA will publish an issues paper not later than nine months prior to the election of a new State Government, publish a draft report not later than three months after the election, and provide a final report to the Treasurer as soon as practicable thereafter.

Appendix 2 Glossary

AA2 & AA3 Western Power's Access Arrangements 2 and 3

ABARES Australian Bureau of Agricultural and Resource Economics and Sciences

ABS Australian Bureau of Statistics
ACAT Aged Care Assessment Team

ACCC Australian Competition and Consumer Commission

AIG Australian Industry Group

APPEA Australian Petroleum Production and Exploration Association

ASX Australian Stock Exchange
ATO Australian Taxation Office

AUD Australian Dollar

BCC Business Cost Calculator
BCR Benefit Cost Ratio

BITRE Bureau of Infrastructure, Transport and Regional Economics

BRT Bus Rapid Transit

CBA Cost-Benefit Analysis

CBD Central Business District

CCF (CCFWA) Civil Contractors Federation of Western Australia

CCIWA (CCIWA) Chamber of Commerce and Industry of Western Australia
CEDA Committee for Economic Development of Australia

CGE Computable General Equilibrium

CIO Chief Information Officer

CIRA COAG Competition and Infrastructure Reform Agreement CME (CMEWA) Chamber of Minerals and Energy of Western Australia

CO₂ Carbon Dioxide

COAG Council of Australian Governments

CPI Consumer Price Index
CPP Critical Peak Pricing

CRIS Consultation Regulatory Impact Statement
CTC Electricity Industry Customer Transfer Code 2004

CTO Chief Technology Officer

Customer Code Code of Conduct for the Supply of Electricity to Small Use Customers

DAA Dairy Adjustment Authority
DAE Deloitte Access Economics

DAFWA Department of Agriculture and Food Western Australia

DAP Development Assessment Panel

DBNGP Dampier to Bunbury Natural Gas Pipeline

DGR Domestic gas reservation
DME Domestic Market Entitlements
DMP Department of Mines and Petroleum

DoH Department of Housing

DomGas Domestic Gas

DoP Department of Planning
DoT Department of Transport

DPC Department of Premier and Cabinet
DRIS Decision Regulatory Impact Statement
EERC Economic Expenditure Review Committee

EIA Electricity Industry Act 2004

ENAC Electricity Networks Access Code 2004

ERA Economic Regulation Authority

ESAA Energy Supply Association of Australia
ESC Essential Services Commission (Victoria)

FLNG Floating Liquefied Natural Gas
GDP Gross Domestic Product

GJ Gigajoule

GSP Gross State Product
GST Goods and Services Tax
GTE Government Trading Enterprise

GVA Gross Value Added

ICT Information and Communications Technology

IGA Independent Grocers of Australia
IMO Independent Market Operator

IPART Independent Pricing and Regulatory Tribunal (IPART)

IPE Independent Procurement Entity

JV Joint Venture

KPI Key Performance Indicator

kWh Kilowatt hour

LMI Lenders Mortgage Insurance

LNG Liquefied natural gas
LRT Light Rail Transit
MAX Metro Area Express

Metering Code Electricity Industry Metering Code 2005

MFP Multi Factor Productivity

MMA McLennan Magasanik Associates
MRIT Metropolitan Region Improvement Tax

MW Megawatts

NCP National Competition Policy
NEM National Energy Market

NIEIR National Institute of Economic and Industry Research

NPV Net Present Value

NQ&R Code Electricity Industry (Network Quality and Reliability of Supply) Code 2005

NWS North West Shelf

OAG Office of the Auditor General

OECD Organisation for Economic Co-operation and Development
OTCR Electricity Industry (Obligation to Connect) Regulations 2005

PCIA Plastics and Chemicals Industries Association

PCN Potato cvst nematode

PGERA Petroleum and Geothermal Energy Resources Act 1987

PGPLR Prospective Gas Production Land Reservation

PIA Preliminary Impact Assessment
PMC Potato Marketing Corporation
PNFC Public Non-Financial Corporation
pphpd People per hour per direction
PPP Public Private partnership

PSLA Petroleum (Submerged Lands) Act 1982

PV Present Value

QCA Queensland Competition Authority
QEII Queen Elizabeth II Medical Centre

RAC Royal Automobile Club
RBA Reserve Bank of Australia

REIWA Real Estate Institute of Western Australia

RFR Royalties for Regions

RGU Regulatory Gatekeeping Unit
RIA Regulatory Impact Assessment
RIS Preliminary Impact Statement
RTC Red Tape Challenge (UK)

RTRG Red Tape Reduction Group

SAMF Strategic Asset Management Framework

SCM Standard Cost Model SCV Small Charter Vehicle

SECWA State Energy Commission of Western Australia

SSSSR Electricity (Supply Standards and System Safety) Regulations 2001

SWIN South West Interconnected Network
SWIS South West Interconnected System
TEC Tariff Equalisation Contribution
TNPS Total Non-Financial Public Sector
TOD Transit Orientated Development

ToT Terms of Trade
TOU Time of Use

UAE United Arab Emirates
USD United States Dollar

WALGA Western Australian Local Government Association

WAPC Western Australian Planning Commission

WASPP Western Australian Seed Potato Producers Committee

WEM Wholesale Electricity Market

WPI Wage Price Index

WST Western Australian Standard Time

Appendix 3 Government service efficiency indicators

Productivity Commission Report on Government Services – Efficiency Indicators

Volume B: Child care, education and training (2012, 2013)(\$)(\$)School educationRecurrent expenditure per student18,73115,76819%School educationUser cost of capital per student3,6432,43949%School educationTotal expenditure per student – Govt. Schools22,37418,20723%Family day careMedian weekly service cost of child care services3673398%Vocation Educational TrainingRecurrent expenditure per annual hour151319%Vocation Educational TrainingRecurrent expenditure per load pass191525%Volume C: Justice (2013)Police ServicesRecurrent expenditure police services per person47941615%CourtsCost per finalisation - District Court18,1419,71387%CourtsCost per finalisation - Magistrate's Court89456159%CourtsCost per finalisation - Children's Court83952460%	1 1 1 1 2 1
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Courts Cost per finalisation - Magistrate's Court 894 561 59% Courts Cost per finalisation - Children's Court 839 524 60%	
Courts Cost per finalisation - Children's Court 839 524 60%	
Courts Continuition Chill (Company) 7 224 5 224	1
Courts Cost per finalisation - Civil (Supreme) 7,231 5,621 29%	1
Corrective Services Cost per prisoner per day 276 222 24%	1
Corrective Services Cost per offender per day 45 23 97%	1
Volume D: Emergency management (2011, 2012, 2013)	
Fire services Fire service expenditure per person 186 159 17%	2
Ambulance services Ambulance expenditure per person 81 109 -26%	5
Volume E: Health (2011, 2012, 2013)	
Public hospital performance Recurrent cost per case-mix adjusted separation 5,733 5,204 10%	1
Public hospital performance Capital cost per case-mix adjusted separation 542 493 10%	2
Maternity services Cost per maternity separation - trad. 5,669 4,998 13%	1
Maternity services Cost per maternity separation – caesarean 13,196 9,681 36%	1
Primary & community health Fee for service expenditure 225 286 -21%	5
Mental health cost per inpatient bed - general mental health 1,123 921 22%	1
Mental health cost per inpatient bed – psychiatric 1,104 918 20%	1
Volume F: Community services (2012)	
Aged care Cost per ACAT assessment 474 502 -6%	4
Disability Govt. funding per user of NGO accommodation 86,198 59,551 45%	1
Disability Cost per user of administered services 39,049 35,640 10%	1
Child protection Expenditure per notification 8,434	2
Child protection Expenditure per investigation 11,639	2
Child protection Expenditure per substantiation 43,827	1
Child protection Cost of out-of-home care per child 58,675	2
Child protection Cost of out-of-home care per night 184 140 31%	1
Volume G: Housing and homelessness (2012, 2013)	
Social housing Recurrent cost per dwelling-public housing 10,152 7,835 30%	1
Social housing Occupancy rate - public housing (percentage) 95.8% 97.8% 2.0%	1
Homelessness Cost per completed support period 2,515 1,683 49%	1
Homelessness Cost per client 3,161 2,421 31%	•
Homelessness Cost per day of support 36 29 24%	1

Source: Productivity Commission, 2014, Report on Government Services.

^{*} Ranking of the five mainland states (NSW, Qld, Vic, SA, WA) from 1 (least efficient) to 5 (most efficient)

Appendix 4 Reducing the cost of complying with regulation

Western Australia's regulatory environment

Historical and recent reforms

Significant reforms have been made to regulatory systems in Western Australia over the past two decades. Two of the most substantial regulatory reforms have been the work undertaken as a part of the Federal National Competition Policy (**NCP**) review, and the establishment of the Red Tape Reduction Group (**RTRG**).

National Competition Policy

The NCP is a bundle of specific policies introduced by the Federal Government through the 1990s, intended to bring about microeconomic reform at both a Federal and State level.

While the aims and outcomes of the Policy were broad-ranging, extending beyond regulatory reform, the Policy significantly assisted the progress of red tape reduction of Western Australia. In particular, the Policy's legislative review requirement appears to have triggered the development of a culture of legislative review in the State, with several hundred outstanding reviews completed during the late 1990s and early 2000s.

Reducing the Burden report and regulatory gatekeeping

In 2009, the Government formed the Red Tape Reduction Group (**RTRG**) to identify and report on specific opportunities to reduce the burden of existing regulation in Western Australia. This culminated in the *Reducing the Burden* report delivered in 2010, which contained 107 recommendations. Over half of the recommendations in the report have been implemented to date. ⁶⁹³

During the 2008-2009, the Government also established the Regulatory Gatekeeping Unit (**RGU**) and developed the *Regulatory Impact Assessment Guidelines* (the **Guidelines**). These initiatives substantially transformed the State's regulatory environment.

Responsibility for regulatory oversight in Western Australia

Key organisations in Western Australian with responsibilities for implementing regulatory process are identified and described below.

Regulatory Gatekeeping Unit

The Regulatory Gatekeeping Unit (**RGU**) is currently a part of the Western Australian Department of Finance. It was established in 2008 to establish and administer the newly introduced RIA process. The RGU reports to Government on regulatory compliance, assists Government departments in developing Regulatory Impact Statements where required, and oversees the implementation and monitoring of the RIA process in Western Australia.

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⁶⁹³ Communication with the Department of Finance.

Small Business Development Corporation

The Small Business Development Corporation (**SBDC**) is a State Government agency that functions as an advocate for small business in Western Australia. The Corporation provides advice to the RGU and Government departments on the likely effects of regulatory proposals on small businesses, approaches to minimising any negative effects, and in identifying alternatives to regulation.

Parliamentary committees

As in all States and Territories, the Western Australian Government has established a number of Parliamentary committees, responsible for the scrutiny of legislation that has proceeded to Parliament, and some legislative reviews. These are the Legislation Committee, the Delegated Legislation Committee, and the Uniform Legislation and Statutes Review Committee. While they do not have an explicit mandate to consider RIA outcomes, the appropriateness of legislation under review is a key consideration for each of these committees.

Other Government organisations

A number of other Government bodies provide specialist review and regulatory functions, either on an ongoing basis, or as required. Over the past decade, these have included, but are not limited to:

- Law Reform Commission of Western Australia
- Office of the Auditor General
- Economic Regulation Authority
- Ministry of Fair Trading
- Office of Higher Education
- Water and Rivers Commission
- Other special purpose advisory committees and working groups

Best practice policy development and Regulatory Impact Assessment: COAG principles

COAG has provided a clear outline of the overarching principles of best practice policy development, and requires all levels of government in Australia to ensure that regulatory processes in their jurisdictions are consistent with the following:

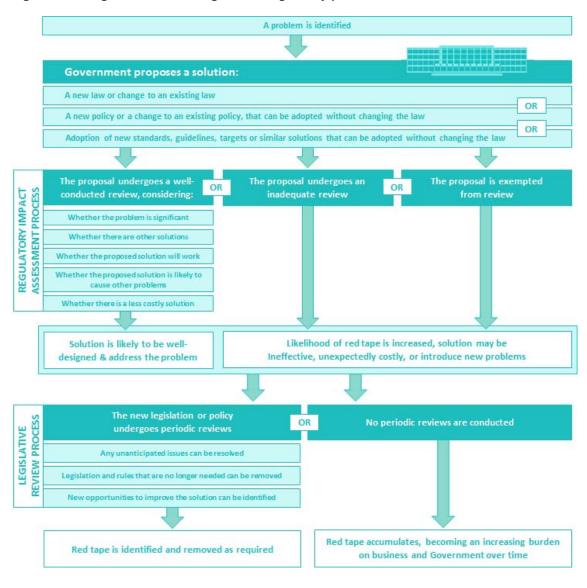
- 1. establishing a case for action before addressing a problem;
- 2. a range of feasible policy options must be considered, including self-regulatory, co-regulatory and non-regulatory approaches, and their benefits and costs assessed:
- 3. adopting the option that generates the greatest net benefit for the community;
- 4. in accordance with the Competition Principles Agreement, legislation should not restrict competition unless it can be demonstrated that:
 - a. the benefits of the restrictions to the community as a whole outweigh the costs, and
 - b. the objectives of the regulation can only be achieved by restricting competition;
- 5. providing effective guidance to relevant regulators and regulated parties in order to ensure that the policy intent and expected compliance requirements of the regulation are clear;
- 6. ensuring that regulation remains relevant and effective over time;
- 7. consulting effectively with affected key stakeholders at all stages of the regulatory cycle; and
- 8. government action should be effective and proportional to the issue being addressed.

How Regulatory Impact Assessment Process and Legislative Review Processes prevent regulatory burden

As discussed in Chapter 5, poor quality regulation can arise from inadequate scrutiny of newly proposed regulatory solutions, or from existing regulations becoming inappropriate over time.

Figure 41 shows the points at which regulatory burden can be introduced, and the types of safeguards that can be applied at each stage of the process.

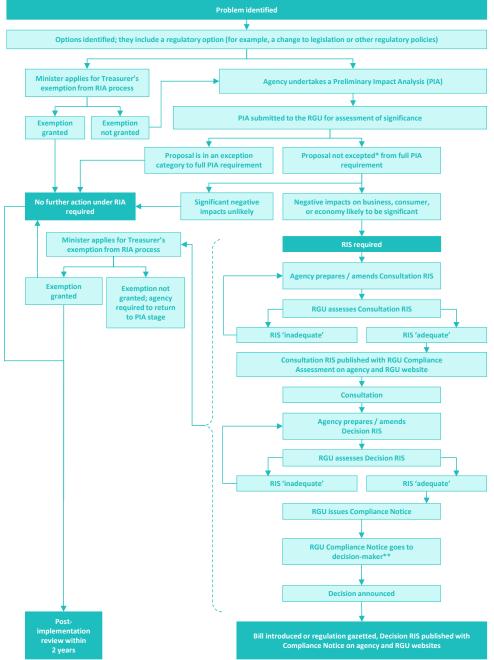
Figure 41 Safeguards at each stage of the regulatory process



How the Regulatory Impact Assessment is applied in Western Australia

While the national and international understanding of best practice RIA is reasonably consistent, the practical application of the process does vary somewhat between jurisdictions. The specific process adopted in Western Australia is shown in Figure 42.

Figure 42 The Regulatory Impact Assessment process, as applied in Western Australia



^{*} The term 'exception' is used to describe proposals in categories that are automatically excluded from the RIA process. The term 'exception' is used to describe situations where a decision has been made to exclude the proposal from the process.

Source: Productivity Commission; Department of Finance, Western Australia

^{**} For example the agency or office of the Minister responsible for introducing the proposed regulation.

Benchmarking Western Australia's RIA processes against other jurisdictions

Key RIA Practices across Australia

Table 35 provides an overview of Western Australian RIA practice as it compares to that of other Australian Governments.

Western Australia leads most other jurisdictions in the application of a two-stage process, where a Preliminary Impact Assessment is submitted to the RGU for scrutiny. However, the State lags in the publication of RIS documents, in spite of the publication requirement included in the Guidelines.

The benchmarking in Table 35 shows that Australian governments have generally been poor at implementing certain aspects of best practice RIA, including operational independence, and disclosure around adequacy, exemptions and non-compliance. However, the field is an evolving one, with the Productivity Commission providing benchmarking results and recommendations to both State and Federal governments to improve local RIA processes.

Table 35 Examples of RIA practices by jurisdiction as at January 2012

Fully implemented	Partially implemented	Not implemented
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	WA	Cwith	COAG	NSW	Vic	Qld	SA	Tas	ACT	NT
RIA requirements apply to election commitments	&	•	n/a	Ø						
Exemptions granted only by head of government	3	Ø	Ø	8	Ø	8	8	8	8	8
Agencies determine need for RIS with oversight body monitoring	3	8	8	Ø	9	Ø	Ø	0	Ø	8
Two-stage RIA process	Ø	3	9	8	8	0	8	8	8	8
Guidance requires recommended option results in the greatest net benefit	Ø	8	Ø	Ø	Ø	9	Ø	9	Ø	Ø
Publish RISs - primary legislation	•	Ø	Ø	•	8	•	9	9	•	8
- subordinate legislation	0	9	Ø	•	Ø	Ø	Ø	Ø	Ø	&
Central listing of published RISs	•	Ø	Ø	•	Ø	8	Ø	8	Ø	8
Public annual compliance monitoring and reporting	&	Ø	Ø	8	•	8	8	8	8	8

	WA	Cwlth	COAG	NSW	Vic	Qld	SA	Tas	ACT	NT
Adequacy assessments published	•	Ø	Ø	8	•	8	8	②	&	8
Adequacy assessments include reasons or qualifications	②	3	②	8	•	8	8	&	3	8
Oversight body has operational independence	②	8	②	8	Ø	⊗ a	8	8	3	8
Ministerial explanation for exempt/non-compliant proposals proceeding	&	8	8	8	0	8	8	8	8	8
PIR required for all exempt and non-compliant proposals	0	⊘	8	8	3	•	8	8	8	8

^a This table shows the state of RIA processes in Australia as at January 2012. Since that time, the creation of the Queensland Office of Best Practice Regulation within the statutory body, the Queensland Competition Authority, in July 2012, increased the operational independence of the Queensland regulatory oversight functions and introduced new transparency and accountability features for future RIA activity.

Source: Productivity Commission 2012

Coverage of RIA requirements in Australian jurisdictions

The applicability of RIA requirements to various kinds of regulation also varies between States, as shown in Table 36. Australian Governments are largely effective at capturing most kinds of regulation in the RIA process, but Western Australia is unique in its lack of application of RIA to the remaking of sunsetting provisions, being the provisions that require the review of specific pieces of regulation on a given date. Given that legislative and regulatory reviews can be an onerous process, other jurisdictions submit sunsetting provisions to RIA to ensure that the required reviews are necessary and appropriate.

Table 36 Regulatory proposals subject to RIA

Type of regulation	WA	Cwlth	COAG	NSW	Vic	Qld ^a	SA	Tas	ACT	NT
New bills	Ø	Ø	Ø	9	0	Ø	Ø	Ø	Ø	Ø
Amending bills	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
New regulations (gazetted)	Ø	Ø	Ø	9	9	Ø	Ø	Ø	9	Ø
Amending regulations	9	Ø	9	9	Ø	Ø	Ø	Ø	9	Ø
Remaking of sunsetting regulations	8	Ø	n/a	Ø	Ø	Ø	Ø	⊘ a	9	Ø
Quasi regulation	8	Ø	Ø	⊗ b	⊗ c	Ø	Ø	8	Ød	Ø

- a A RIS is not required for the remaking of subordinate legislation where the original regulation has been in operation at some time in the preceding 12 months, and has been in operation for less than 10 years, and a RIS was prepared in relation to the earlier regulation. In practice, this means that regulation could potentially last for up to 19 years without a review.
- b Quasi regulation is considered a non-regulatory approach in NSW, and hence it is not subject to RIA.
- c Victoria has treated quasi regulation as an 'other regulatory form' not subject to RIA. Recent legislative changes have meant that some forms of quasi regulation are now subject to RIA.
- d The ACT classifies quasi regulation as a non-regulatory approach, however a RIS should still be undertaken. .. not applicable.

Source: Productivity Commission 2012

It is important to note that some areas of regulation listed in Table 36 as being covered by the RIA requirements, are not effectively reviewed in practice. A notable example of this is quasi regulation, 694 which can be challenging to capture effectively within the RIA process. 695 As such, lack of oversight of quasi regulation can represent a significant weakness in the regulatory process, since this kind of regulation fails to attract the level of scrutiny that would be given to, say, a new Act.

While the Western Australian Guidelines do specify that quasi regulation should be subject to the RIA process, the Productivity Commission noted that in practice, quasi regulation is absolved from the process in part because it is not generally submitted to Cabinet. ⁶⁹⁶ In a 2012 report, the Commission acknowledged some of the challenges and risks in the effective oversight of quasi regulation:

"Part of the reason for the variable treatment of quasi regulation is that there remain issues around what constitutes quasi regulation. There are also practical difficulties in monitoring the development of quasi regulation, as it often is developed outside parliamentary processes. If quasi regulation were excluded from RIA, this could potentially incentivise agencies to categorise regulatory proposals as quasi regulation so as to circumvent the RIA requirement. However, it is unclear to what extent this concern could be realised due to the low level of monitoring that quasi regulation typically receives." ⁵⁹⁷

The Commission also noted that, despite the practical difficulties of monitoring quasi regulation, any proposed regulation with a widespread expectation of compliance ought to be subject to RIA.

Exceptions to the RIA process in Australian States and Territories

Certain categories of regulatory proposal are automatically excluded from RIA. These categories generally capture regulation that is already captured by other oversight processes (for instance, taxation and electoral rules, police powers, criminal laws, and administration of courts), or regulation that is standard or trivial in nature (correction of drafting errors, and standard fee increases).

Most notably, Western Australia, Queensland, and New South Wales are the only States that place management of the public sector in an exception category. Given that red tape can impose significant day to day expenses on Government departments as well as private

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⁶⁹⁴ The Productivity Commission describes quasi regulation as those regulations 'that encompasses those rules, instruments and standards by which government influences business to comply, but which do not form part of explicit government regulation. Examples can include government endorsed industry codes of practice or standards, government issued guidance notes, industry-government agreements and national accreditation schemes. Whether or not a particular measure is deemed to be quasi regulation depends on the nature of government involvement and whether there is a 'reasonable' expectation of compliance.' Productivity Commission 2012, Regulatory Impact Analysis: Benchmarking, Research Report, Canberra.

⁶⁹⁵ Productivity Commission 2012, Ibid.

⁶⁹⁶ The Department of Finances has noted that it does occasionally receive Preliminary Impact Assessments for quasi-regulation going to Cabinet.

⁶⁹⁷ Productivity Commission 2012, op. cit.

businesses, the Guidelines would be strengthened by the removal of this exception category.

Public information on granting exemptions

With the exception of Victoria, public reporting of exemptions (including both publication of an exemption document, and the provision of reasons for that exemption) is universally poor. In contrast the Commonwealth Government and COAG publish exemption information in real-time, via the Office of Best Practice Regulation.

The inadequate performance of the majority of State and Territory Governments in this area provides Western Australia with an opportunity to lead best practice RIA implementation in Australia.

Providing guidance on performing RIA and the preparation of the RIS

Western Australia is the only Australian Government not to provide departments and decision-makers with guidance as to how to assess the costs and benefits of regulation. This is a significant shortcoming, since evidence-based assessment is at the core of the RIA process.

In addition to investing in training and resourcing, it is critical for the Government to provide practical advice to RIS-preparers as to what is expected, and the options available. This serves to promote the use of robust, internationally recognised assessment methodologies, and encourages a consistent standard of analysis across Government.

It is the responsibility of Government to communicate its expectations as to the level and type of analysis required to compile an adequate RIS, and departments and agencies should not be expected to second-guess what may or may not be required. The Guidelines will be considerably strengthened by the inclusion of detailed guidance similar to that provided to decision-makers in New South Wales, Victoria, and Queensland.

Type of Qld^b WAa Vica COAG NSW SA NT regulation Cwlth Tas ACT Cost-benefit analysis Cost-M d effectiveness analysis Multi-criteria analysis

Table 37 Guidance provided on methods of assessing costs and benefits

Source: Productivity Commission 2012

The Western Australian Guidelines are also somewhat weaker than those seen in other jurisdictions when it comes to requiring disclosure of the reasons for the selected regulatory option (Table 38), and in providing guidance on implementing and enforcing the proposed regulation (Table 39).

a Western Australia does not adopt a particular method for formally assessing costs and benefits, however costs and benefits do need to be assessed in order to establish which option yields the greatest net benefit.
 b Where potential costs and benefits are likely to be particularly large, then an even closer examination of the impacts is warranted, and this may include an assessment of indirect effects (e.g. through general equilibrium modelling).
 c Break-even analysis also accepted.
 d As part of the CEA, cost-utility analysis can be used.

Western Australia's RIA process would benefit from the introduction of requirements and guidance in these areas that mirrors that currently provided to decision-makers in Victoria, Queensland, South Australia and the ACT.

Table 38 Recommended option requirements in a RIS

Recommended option demonstrates:	WA	Cwlth	COAG	NSW	Vic	Qld	SA	Tas	ACT	NT
Greatest net benefit to the community	Ø	②	Ø	Ø	Ø	⊘ a	Øb	⊘ a	9	⊘ c
Reasons for rejecting other options	8	Ø	Ø	8	Ø	Ø	Ø	Ø	Ø	8

a Or least net cost.

Source: Productivity Commission 2012

Table 39 Guidance on implementing and enforcing the preferred option

The RIS should discuss:	WA	Cwlth	COAG	NSW	Vic	Qld	SA	Tas	ACT	NT
Implementation and enforcement strategies	9	Ø	Ø	Ø	Ø	Ø	Ø	&	Ø	&
Compliance strategies	8	Ø	Ø		Ø	Ø	Ø	8		8

Source: Productivity Commission 2012

Note: The Regulatory Gatekeeping Unit in Western Australia does seek information from departments on proposed evaluation strategies.

b While maximising the net benefits to the community (in NPV terms) is the primary objective, agencies should be mindful also of the government's objectives to reduce regulatory costs imposed on business. If two (or more) options have a similar net benefit NPV result, but the costs imposed on business vary considerably, consideration could be given to the lowest cost option even if not the option which maximises the net social benefit.

c On the balance of probabilities.

Appendix 5 Goods that different categories of special retail shops may sell

The following is a replication of Section 7(2) of the *Retail Trading Hours Regulations 1988*, which lists the items that may be sold by each category of Special Retail Shop.

Art and craft (shops engaged in the sale of art and craft works)

Original art and craft works; prints and reproductions of original works; art and craft supplies; art and craft related reading materials; calico or similar re-useable shopping bags.

Souvenirs (Shops offering items of tourism significance)

Souvenirs featuring Australian flora, fauna, locations, characteristics or events or national significance; souvenirs projecting the flavour of the pioneering era or Aboriginal culture; original Australian art and craft works, reading materials and video cassettes or tourism significance; souvenirs and jewellery featuring Australian minerals and pearls; souvenirs crafted from unique Australian woods, hides or skins; Australian coins; calico or similar reuseable shopping bags.

Pharmacy

Goods and services that may be sold or provided at a pharmacy in accordance with the Pharmacy Act 2010; calico or similar re-usable shopping bags.

Domestic development shops (shops offering items for domestic improvements, construction and maintenance, floral arrangements and products for the establishment and maintenance of gardens)

Swimming pools; spas; patios; garages; garden sheds; home additions; household fixtures and fittings (excluding free standing furniture other than shelving units, carpets and electrical items other than ceiling fans); ready to assemble raw timber and finished timber household furniture, and kitchen cupboard panels, sold in flat pack form; desk fans; indoor television antennae; floor mats and rugs; synthetic rolled matting, synthetic grass and marine carpeting; flowers; greenstocks; seeds bulbs; reticulation equipment; hoses, sprinklers and fittings; fertilizers, pesticides, herbicides and applicators; compost tumblers; landscaping and garden decorative products; plant containers and household items for the display of garden produce; construction, maintenance and garden related books and video cassettes; domestic construction and maintenance materials; paint and wallpaper products and accessories; tools; outdoor furniture and accessories; household cleaning products (excluding powered equipment); swimming pool chemicals and accessories; extension cords and electrical fittings (excluding decorative light fittings); computer cables; barbecues; kitchenware (excluding electrical items); solid fuel space heaters; outdoor lighting; water heaters; gas powered camping equipment and accessories; awnings and blinds; personal safety equipment (excluding clothing except overalls); playground equipment; auto body filler and spray putty; auto surface primer and body black; art and craft supplies; calico or similar re-useable shopping bags.

Marine Craft (shops engaged in the sale of marine craft)

Marine craft and vessels associated spare parts and accessories, boating related books and video cassettes; calico or similar re-useable shopping bags.

Video shops

Digital video disks, video cassette tapes and video head cleaning products; promotional items relating to any video; confectionery and savouries; calico or similar re-useable shopping bags.

Duty Free Shops (shops which trade only as inwards duty free shops or outwards duty free shops as defined under the Customs Act 1901 of the Commonwealth in respect of which permission is granted under section 96A(2) or 96B(3) of that Act)

Goods offered for sale duty free under the terms of the permission granted; calico or similar re-useable shopping bags.

Motor Vehicle Spare Parts Shops (shops other than shops located on premises on which motor vehicles are sold)

Motor vehicle spare parts accessories and lubricants; tools; motor vehicle related books and video cassettes; boating equipment limited to flares, anchors, life jackets, boat drainage bungs, navigation lights, fuel line bulbs, outboard motor water pump impellers, outboard motor service parts (filters, points, etc.), zinc anodes, outboard motor fuel tanks, outboard motor pull cords, and outboard motor shear pins; calico or similar re-useable shopping bags.

Sports Venue Shops (shops located at special sports participation venues)

Sporting goods and associated equipment relevant to the sports activities at each applicant venue; calico or similar re-useable shopping bags.

Newsagencies and book shops

Newspapers, books and stationery requisites; magazines and periodicals; greeting cards; educational requisites; educational toys (excluding mains operated computer games and equipment); photograph albums; sheet music; playing cards; paper plates, cups, doilies; lottery tickets; party decorations; smoker's requisites; small replacement items of sporting equipment (fishing hooks, table tennis balls, darts, etc.); calico or similar re-useable shopping bags.

Hotel Tourist shops (shops catering for tourist requirements in hotels classified as "4" star or "5" star under a scheme of classification approved by the Minister or any hotel that is in the opinion of the chief executive officer of an equivalent standard)

Newspapers, books and stationery; haberdashery; clothing; sporting equipment; giftware; photographic equipment; cassette tapes, records and compact discs; toys; original art and craft works; prints and reproductions of original works; souvenirs featuring Australian flora, fauna, locations, characteristics or events of national significance; souvenirs projecting the flavour of the pioneering era or aboriginal culture; souvenirs and jewellery featuring Australian minerals and pearls; souvenirs crafted from unique Australian woods, hides or skins; Australian coins and stamps; first aid requisites; toilet and cosmetic requisites; smokers requisites; hairdressing services; flowers and floral arrangements; travel goods; calico or similar re-useable shopping bags.

Appendix 6 Goods that can be sold at filling stations

The following is a replication of Sections 11(1) and 11(2) of the *Retail Trading Hours Regulations 1988*, which lists the items that may be sold at filling stations (section 11(1)) and small filling stations (section 11(2)).

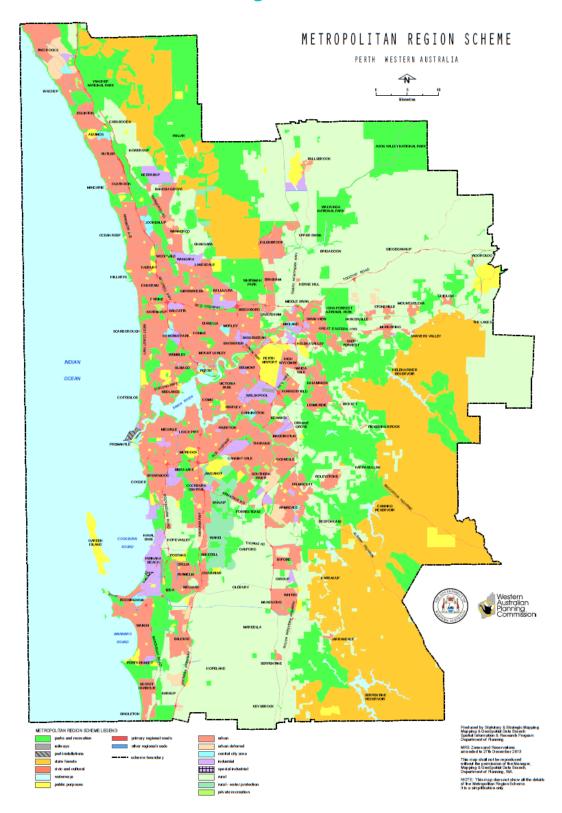
Under section 14A(1)(b) of the Act the following goods are prescribed for the purposes of sale at all filling stations —

- a) food (excluding canned fruit and vegetables, canned meat, canned seafood and fresh meat other than prepacked quantities not exceeding 500 g weight);
- b) first aid requisites;
- c) smokers' requisites;
- d) toilet and cosmetic requisites;
- e) garden and landscaping products (excluding furniture and powered equipment);
- f) reading material and stationery requisites;
- g) pet and veterinary requisites;
- h) household cleaning products (excluding powered equipment);
- replacement sporting equipment (including fishing hooks, lines, sinkers, bait, balls and tees);
- j) film;
- k) flash bulbs;
- I) light globes;
- m) torches:
- n) dry batteries;
- o) pantyhose;
- p) candles;
- q) boot and shoe laces;
- r) cotton, needles and pins;
- s) sunglasses;
- t) work of local artists including paintings, pottery and handicraft products;
- u) local souvenir products; and
- v) swimming pool chemicals and accessories.

The following goods are prescribed for the purpose of section 14A(1)(d) of the Act (prescribed small filling stations) —

- a) work clothing;
- b) travel rugs;
- c) 12 volt and 24 volt vehicle accessories;
- d) video cassettes and pre-recorded music;
- e) portable barbeques and requisites:
- f) cameras;
- g) coolers;
- h) portable cassette or compact disc players;
- i) canned food.

Appendix 7 Perth Metropolitan Area as referenced by the Retail Trading Act 1987



Source: Government of Western Australia, Western Australian Planning Commission

Appendix 8 The regulation of regional Western Australian taxis and Small Charter Vehicles

The main restrictions applying to taxis in Regional Western Australia and to small charter vehicles are outlined in this Appendix. The key differences between small charter vehicles and taxis are the higher standard of vehicle that must be used to operate as a small charter vehicle and the inability of a small charter vehicle to serve the rank and hail markets.

Quantity Regulation

Regional Western Australia

In Regional Western Australia, there are a fixed number of licences available in each regional area. In all towns that currently have taxis, a review of the need for additional licences is held every three years.

These reviews can be brought forward in instances where the Department of Transport, members of the public, the taxi industry or local government believes that the demand for taxis has increased significantly and/or that the public is not being serviced effectively.

Small Charter Vehicles

There is no restriction in the number of small charter vehicles that may operate in Western Australia.

Price Regulation

Regional Western Australia

Taxi fares are set by the Department of Transport and differ in each region. Prices are set based on nine different locations. ⁶⁹⁸

Fares are increased consistently with movements in the Private Motoring Index. The Private Motoring Index measures the movements in a range of motoring costs (for example, fuel, running costs, licensing costs). In exceptional instances the local taxi industry can submit additional information to support a higher increase for consideration.

Small Charter Vehicles

Price regulation for small charter vehicles differs significantly from that applied to taxis. Small charter vehicles are required to charge by the length of time the vehicle is hired for, with a minimum fare of one hour.

Minimum hourly rates are enforced, with the minimum for vehicles with five or fewer passengers being \$60/hour and minimum for vehicles with more than five passengers being \$85/hour for the first two hours and \$60/hour for each additional hour after that.

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⁶⁹⁸ Gascoyne; Goldfields – Esperance; Great Southern; Kimberley; Mid West; Peel; Pilbara; South West; and Wheathelf

Quality Regulation

Regional Western Australia

In Regional Western Australia there are no age limits on vehicles and no requirements for security cameras. Vehicles must pass the annual road-worthy inspections and be maintained in a presentable condition, regardless of the age of the vehicle.

The types of vehicles approved for use as a taxi are dependent on the specific local need as demonstrated to the satisfaction of the Department of Transport. In general, vehicles other than standard sedans, station wagons or people movers will usually not be licensed for use as a taxi. Although such action is not uniformly ruled out.

To operate a taxi in Regional Western Australia, drivers must be at least 20 years of age, have held an unrestricted licence for at least three years and provide two referees that have known the driver for at least four years.

Small Charter Vehicles

Small charter vehicles are required to be a higher quality of vehicle than those that may operate as a taxi. Specifically, small charter vehicles must fall into one of the following vehicle categories:

- luxury (valued at no less than \$60,316);
- modified stretched;
- · vintage; or
- green (electric/hybrid).

To qualify as a driver of a small charter vehicle, drivers must obtain an F or T extension to their motor driver's licence.

Market Conduct Regulation

Regional Western Australia

The conditions that apply in Perth also apply in Regional Western Australia.

Small Charter Vehicles

Small charter vehicles are largely free from market conduct regulation. Because transport is discussed before pick-up operators have the flexibility to refuse service immediately, affording passengers the opportunity to seek alternative transport if necessary.

Appendix 9 Submissions received in response to the Issues Paper and Discussion Paper

Submissions received in response to the ERA's Issues Paper

Ajilon

Alinta Energy

Australasian Railway Association (ARA)

Australian Council for Private Education and Training

Australian Information Industry Association (AIIA)

Australian National Retailers Association (ANRA)

Brett Mayberry

Chamber of Commerce and Industry (CCIWA)

Clean Energy Council

Department of Aboriginal Affairs

Department of Corrective Services

Department of Fisheries

Department of Lands

Department of Parks and Wildlife

Disabilities Services Commission

Eliot Besson

Forest Industries Federation WA (FIFWA)

Ian Hill

Landgate

Mannkal Economic Education Foundation

Marie Jennings

Master Builders

Murdoch University

Pastoralists and Graziers Association of WA (Inc) (PGA)

Public Sector Commission

Retail Energy Market Company Limited (REMCo)

Robert Halvorsen

Samuel Green

Shelter WA

Shopping Centre Council of Australia - Real Estate Licensing

Shopping Centre Council of Australia - Regulation of Trading Hours

Small Business Development Corporation

State Library of Western Australia

Suncorp

The Chamber of Minerals and Energy of WA (CME)

Tony Pratico

UnionsWA

Vestas Asia Pacific and China

WA Nightclubs Association

Water Corporation

Western Australian Council of Social Service (WACOSS)

Western Australian Local Government Association (WALGA)

Woolworths

Submissions received in response to the ERA's Discussion Paper

Australian Taxi Federation

Potato Growers Association

Potato Marketing Corporation of WA

Western Australian Local Government Association (WALGA)

Alinta Energy

Australian Forest Growers Western Australia

Australian National Retailers Association (ANRA)

Australian Petroleum Production and Exploration Association Ltd

CCF Western Australia

Chamber of Commerce and Industry WA (CCIWA)

Coles

Debbie Hughes

Department of Planning

Department of Regional Development

Department of Transport

DomGas Alliance

Energy Supply Association of Australia

Martin Sheridan

Master Builders

North Native Hardwoods

R Moore

Roger Seares

Small Business Development Corporation

The Chamber of Minerals and Energy of WA (CME)

Water Corporation

Woolworths

Appendix 10 Potential areas of reform for further consideration

The Terms of Reference for the Inquiry into Microeconomic Reform requires the ERA to recommend a small number of specific key reforms or sectors that require further investigation by the ERA and/or policy development by the Government.

By necessity, the ERA had to limit the scope of its Inquiry into Microeconomic Reform to areas that would have the largest potential benefits to society and could be examined in the timeframe available for this Inquiry.

The ERA became aware of a number of areas of potential reform that could be of benefit to the Western Australian economy through public submissions, consultations with Government Departments and businesses, and through the analysis that the ERA has undertaken.

These areas were either not addressed in this Inquiry or were not fully examined, but may be the subject of future inquiries. The ERA has categorised these areas as follows:

- areas that were simply too large in scope to be considered as part of this Inquiry and would justify their own separate inquiry;
- areas that were examined by the ERA as part of this Inquiry but which would warrant further examination in a separate inquiry; and
- areas that were identified in the public submissions or during the course of the Inquiry that are worthwhile areas of examination, but were unable to be included in this report because of the need to prioritise the areas with the greatest potential benefits.

The topics in each of these three areas are elaborated upon in the subsequent sections.

Areas too large in scope to examine in this Inquiry

A number of potentially beneficial reform areas were identified, but excluded from the present Inquiry because they were too large in scope.

- Health Sector: The Western Australian health sector accounts for a significant proportion of Western Australia's State Government expenditure and thus provides a considerable opportunity for reform toward the efficient and effective use of health resources. Reform in the sector is currently driven by the 2011 National Health Reform Agreement that encompasses all States and Territories.
- **Education:** As is the case with the health sector, education accounts for a substantial proportion of Government expenditure. Additionally, education is a significant contributor to economic growth and productivity. Accordingly, the ERA considers that a review of the education sector could provide significant economic benefit to the State.
- Procurement, IT and Communications Reform: There may be potential benefits
 of well-designed models for collaboration and service sharing between Government
 Departments and agencies relating to Government procurement and service
 delivery.

- Occupational Licensing: The licensing of various trades and accredited occupations has been the subject of major federal review under National Occupational Licensing initiative since 2008. However, the progress under this initiative has slowed in recent times and may justify a higher level of priority.
- Energy: The Chamber of Commerce and Industry of Western Australia proposed that a detailed policy is needed for our State's energy sector over the long term, to provide direction with respect to management and development of energy resources, energy production, security and supply. In March 2014, the minister for Energy launched the State Government's Electricity Market Review to be undertaken by the Public Utilities Office.

Areas considered in this Inquiry that warrant further examination

Throughout its analysis the ERA identified reform areas that, while addressed in this Inquiry, could be the subject of extended investigation.

- **Review of State Taxes:** State tax reform could be subjected to a more thorough review. This could include Computable General Equilibrium modelling of the benefits of reform and a more thorough investigation of potential reform options.
- **Flexible Electricity Pricing:** A full cost benefit analysis of introducing smart metering and flexible pricing should be undertaken.
- **Congestion Charging:** Further investigation is required to determine the borders of a potential charging area, the fee structure, the management system and the capacity of the public transport system to handle increased peak patronage.
- Government Ownership: The ERA notes that the Asset Taskforce is undertaking
 a review of government ownership of specific assets. A review could be undertaken
 examining the divestment potential of assets and businesses not considered in this
 review, with a particular focus on recommending divestments that will result in
 significant efficiency gains.
- Innovative Sources of Funding: The potential for the wider use of user charges
 and developer charges was examined in this Inquiry. There exists many more
 potential funding sources that could be implemented or be more widely used.
 Investigation of these sources of funding could carry significant benefit to the
 economy.

Other issues that may warrant future consideration

A number of potential areas of investigation were identified in submissions or by the ERA during the course of the inquiry. While these areas are potentially beneficial, they were unable to be addressed in this Inquiry because of the need to prioritise the areas with the greatest potential benefits, or because of time and resourcing constraints.

- **Forestry:** Submissions requested that Government conduct a major review of the forestry sector on the basis that competition is being stifled by its current structure.
- **Bulk Handling of Grain:** The ERA received submissions requesting a review of the Bulk Handling Act 1967 that governs the activities of Co-operative Bulk Handling. It was the view of the Pastoralists and Graziers Association that it has negative effects on the productivity and performance of the Western Australian grains industry.

- Operations of Government: The Chamber of Commerce and Industry of Western
 Australia highlighted that Government spending has outpaced revenue for the past
 five years and there are now significant costs built in to the operational expenditure
 of the public sector. As a result, reform to the operation of Government could deliver
 significant economic benefits.
- Liquor Licensing: Liquor licensing was addressed in submissions that referenced the significantly longer time taken to obtain a license in Western Australia than in the Eastern States.
- Waste management: The Chamber of Commerce and Industry of Western Australia believes that waste management demonstrates many of the natural monopoly characteristics of other utilities. Further analysis is warranted to consider the scope to implement initiatives that encourage greater competition, efficiency and innovation.
- Government expenditure on safety: In a previous inquiry, 699 the ERA recommended that the Government introduce a mechanism that more transparently and consistently prioritises capital expenditure on safety across government services. Such a mechanism would require all safety-related expenditures to be justified using common measurements (such as cost per statistical life saved and benefit cost ratios). To achieve this objective, government may need to establish greater institutional capability within either the Department of Treasury and Finance or a new body such as an Office of Public Safety.
- Industrial Relations: Industrial relations regulate the manner in which employers are able to manage and interact with their employees. Western Australia is the only state to retain its own industrial relations system. The Chamber of Commerce and Industry of Western Australia believes that there is no justification for Western Australia to retain its own industrial relations regime, and that the state should refer its industrial relations powers to the Commonwealth Government.
- Regional Air Routes: Western Australia's aviation market is subject to government regulation that grants individual airlines a monopoly over particular regional routes. The Chamber of Commerce and Industry of Western Australia proposed that the deregulation of intrastate air services, to encourage the competition that is needed to support the State's economic growth.

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⁶⁹⁹ Economic Regulation Authority, 2007, Revised Final Report Inquiry on Harvey Water Bulk Water Pricing.