

Inquiry into Microeconomic Reform in Western Australia

Final Report

30 June 2014

Economic Regulation Authority

WESTERN AUSTRALIA

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Preface

The challenge facing all economies or societies is that we have unlimited wants, but limited means or resources to satisfy those wants. This is not just about material benefits, but also broader societal benefits. The economic challenge of using scarce resources to satisfy insatiable appetites applies equally to individuals and to governments.

This is why many economists say that, in the end, it is only productivity that matters if we wish to raise the living standards of our citizens. Productivity is about getting more value from our limited resources so that we can all benefit from higher living standards, including ensuring that those resources are directed to areas that society values the most. Microeconomic reform is the primary policy lever available to governments to improve productivity.

The overarching purpose of this Microeconomic Reform Inquiry is to identify a package of microeconomic reform measures¹ that the Western Australian Government could implement to improve the efficiency and performance, and hence productivity², of the Western Australian economy.

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.³

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; ensuring taxes comply with the core principles of good tax design; and increasing competition as competitive markets will generally serve the interests of consumers and the wider community.

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 1990s away from incentives and towards enablers.⁴ One reason for this shift in focus is that changing

¹ Microeconomic reform can be defined as government policies or initiatives aimed at improving the productivity of specific industries or sectors in the economy. Forsyth, P. *A Perspective on Microeconomic Reform*, in Forsyth, P. (ed) *Microeconomic Reform in Australia*, Allen and Unwin, Sydney, 1992.

² 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).

³ Hilmer, F., 'Competition Policy from 1992 to 2014', *Presentation to the Business Council of Australia on 13 February 2014*, 2014.

⁴ Hilmer, F., 'Competition Policy from 1992 to 2014', *Presentation to the Business Council of Australia on 13 February 2014*, 2014.

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, better education) is often a far easier political debate.

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".⁵ This reinforces the need to focus on incentives as well as enablers, particularly by removing regulatory barriers to entry or new technology and letting the forces of competition drive innovation.

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

The ERA has made 38 recommendations for reform across 17 different areas⁶ of the Western Australian economy. These recommendations, if implemented, are expected to generate considerable benefits to Western Australians and ensure the Western Australian economy remains resilient in the face of national and global economic change.

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. The benefits of the suggested reforms have not been quantified but the ERA considers that they would be significantly greater than \$622 million per annum⁷, or \$245 per year for every Western Australian resident, as this accounts only for the benefits from State taxes, the taxi industry and the potato market.⁸

The benefits from remaining reforms identified in the Final Report have not been quantified. These benefits would be derived from better provisioning of infrastructure, more efficient use of existing infrastructure, reducing regulatory burden, deregulating retail trading hours, and rescinding the domestic gas reservation policy.

⁵ Hilmer, F., 'Competition Policy from 1992 to 2014', *Presentation to the Business Council of Australia on 13 February 2014*, 2014.

⁶ The 17 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; public/private partnerships; unsolicited proposals; divestment of Government assets; fit for purpose investment; innovative funding sources; State infrastructure strategy; reducing regulatory burden; retail trading hours; domestic gas policy; and Government involvement in the housing sector (including developments and Keystart).

⁷ This is based on the estimated benefit of \$580 million from reform of State taxes, \$38 million from reform of the taxi industry and \$3.8 million from the reform of the potato industry.

⁸ 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).

In addition, the recommended reforms will remove barriers to entry or new technology and growth in a number of areas. The ERA expects substantial benefits to be derived from growth in the retail trading sector, the taxi industry and the seed potato industry. The ERA also expects that the removal of regulatory burden on business will result in the entry of new businesses, greater competition, and growth in employment.

Lyndon Rowe
Chairman, Economic Regulation Authority

Executive Summary

In August 2013, the Treasurer requested that the ERA undertake an Inquiry into Microeconomic Reform in Western Australia.

As part of this Inquiry, the ERA was required to develop a package of microeconomic reform measures to improve the efficiency and performance of the Western Australian economy. In particular, the Treasurer asked the ERA to focus on areas of reform that will:

- improve productivity and flexibility of the Western Australian economy;
- increase choice for consumers and business;
- increase opportunities for Western Australian businesses to compete nationally and internationally; and
- remove or reduce unnecessary regulation.

In developing its recommendations, the ERA was required to:

- assess the efficiency of the Western Australian economy compared to similar national and international economies;
- identify areas of the Western Australian economy whose contribution could be improved through reform;
- identify options for improving the economic efficiency of these key areas;
- prioritise reforms based upon their potential to improve 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.

Identification of issues

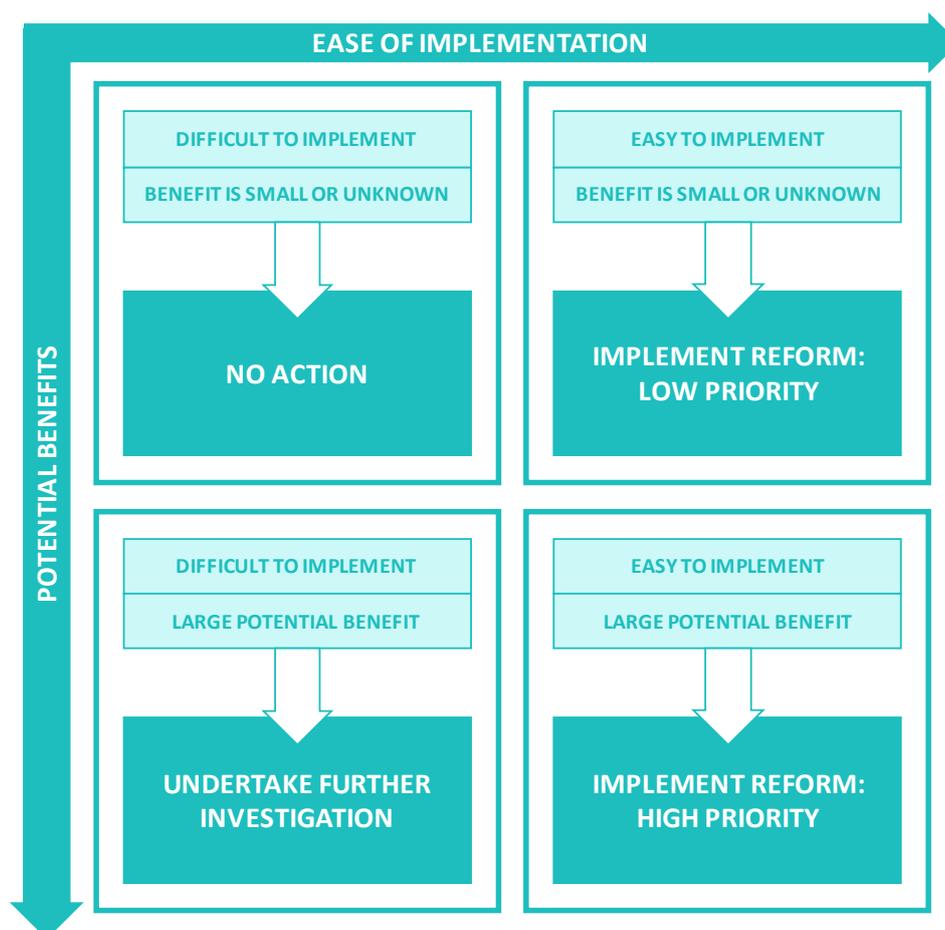
The terms of reference for the Inquiry are broad ranging, and as such, the ERA has been highly selective in determining the areas of reform that could be examined in this Inquiry.

The ERA developed a list of potential areas for consideration in this Inquiry based on submissions in response to the Issues Paper and Discussion Paper, meetings with government departments and agencies and from ideas generated within the ERA.

The ERA prioritised reforms that it considered would have the largest potential benefits to society and that would be relatively easy to implement by the State Government. Figure 1 provides an overview of the ERA's approach to prioritising possible reforms in terms of their potential benefit versus difficulties in implementation.

By necessity, the ERA had to limit the scope of its Inquiry to areas that would have the largest potential benefits to society and could be examined in the timeframe available for this Inquiry. The Terms of Reference for the Inquiry also required 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.

Figure 1 ERA's approach to assessing potential reforms



Issues considered in the Inquiry

The ERA has broadly grouped the issues that it has dealt with in this Inquiry as follows:

- Infrastructure:** State funded infrastructure is a key driver of productivity and has the potential to have a significant impact on our future prosperity, but the State only has limited resources to fund infrastructure. The ERA examines how we can maximise the productivity of this important enabler of growth through better decision making, potentially divesting some public assets to the private sector, and providing incentives to use infrastructure efficiently through user charges.
- Addressing disincentives:** Reducing unnecessary regulation will assist 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, will reduce behavioural distortions and lower the efficiency costs associated with State taxes.
- Removing barriers to competition:** Removal of barriers to competition will provide the incentives for new businesses to enter the market. An increase in suppliers is beneficial as it encourages innovation, efficiency and can drive growth in employment. In this section of the Final Report the ERA examines regulation of

retail trading hours, regulation of the taxi industry, regulation of the market for potatoes, the domestic gas reservation policy, and Keystart home loans.

Infrastructure

Strong relationships exist between infrastructure investment and productivity, which in turn is the major determinant of standards of living over the long term. This is because 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. Hence, a failure to deliver the right level and mix of infrastructure will lead to lower standards of living than would otherwise be the case.

Infrastructure expenditure in Western Australia is significantly higher on a per capita basis than other jurisdictions, reflecting not only higher economic activity, but also that the Government is more active in more sectors of the economy than is the case in other jurisdictions. This has been a contributing factor in the State's burgeoning net debt levels that led to a credit rating downgrade in September 2013.

The State's net debt levels and the Government's focus on the credit rating have forced the Government to place some form of constraint on infrastructure expenditure as it is simply unable to afford many of the projects that it would like to implement.

The ERA considers that a review of the way that the Government makes decisions on new infrastructure, the way it utilises existing infrastructure, and on the assets that the Government owns, will deliver significant productivity benefits to Western Australia.

Improving decisions on infrastructure

The ERA has sought to identify ways to improve decision making around infrastructure to deliver greater benefits to the economy. Improved decision making and utilisation may in turn assist the Government to fund the infrastructure that consumers want, while reducing pressure on the State budget. The ERA has identified several areas in which infrastructure processes could be improved.

The Government already has good processes in place for infrastructure planning that are simply not consistently applied. To facilitate effective decision making, the Government should provide stronger leadership in the consistent and rigorous application of proper process. The most effective way of ensuring that consistent quality information is supplied is to provide an appropriate incentive framework and structures for information sharing to centralise some, but not all, expertise and to require that established processes are followed in all cases.

An effective project selection and evaluation process may identify alternative projects that can appropriately address the original problem for a fraction of the cost. Currently, infrastructure projects that cannot be afforded are delayed or cancelled entirely. A better way of approaching the situation may be to identify and implement alternative "fit-for-purpose" projects that could result in solutions being delivered earlier, more cost-effectively and in a way that better meets the needs of consumers.

The ERA concluded in its Draft Report that hypothecation of royalty income to Royalties for Regions is not an ideal way to reflect the Government's commitment to regional development. The ERA also noted that the impact of hypothecation of royalty income on the budget has been compounded by the offsetting effect increases in royalty income has on the GST revenue grants.

As part of the 2014-15 State Budget (which was handed down after the release of the Draft Report), the Government implemented a \$1 billion expenditure cap that will limit expenditure from Royalties for Regions to a level well below the amount that would otherwise be allocated (assuming 25 per cent of royalty income is hypothecated to regional projects). The ERA considers that its recommendation in the Draft Report to restrict regional funding has effectively been implemented with the introduction of the expenditure cap. Under these circumstances, the ERA considers that optimal expenditure on regional priorities can now be achieved provided that the Government actively manages the expenditure cap and follows good process for project selection.

There are a number of areas in which existing infrastructure could be better utilised. Before considering new infrastructure expenditure, the Government should investigate demand management tools that may obviate the need for such expenditure. For example, in many cases the more efficient use of existing infrastructure may delay or reduce the need for expensive capacity enhancement. In this review the ERA has considered time-of-use electricity charging and road congestion charging as measures that not only reduce the need for infrastructure enhancement, but provide significant productivity gains as a result of changing the behaviour of consumers.

Currently, most Western Australians pay a flat rate tariff for electricity that is applicable at all times of the day. This pricing structure does not take into account the fact that the demand and the cost of supply for electricity can fluctuate significantly throughout the day, with clear peak periods in the afternoon when people return from work. The generation and distribution network is built to accommodate peak periods of demand that only occur for a few days each year that can be further exacerbated by extreme weather (for example, during very high temperatures air conditioner use is dramatically higher).

Accordingly, the ERA considers that a move to time of use charging (charging users more to use electricity in peak periods and less in periods of lower demand) could smooth demand for electricity by encouraging customers to consume less electricity during peak periods. This could reduce the peak capacity requirement of the network and therefore delay the need for expensive network enhancements.

Additionally, current electricity tariff structures do not fully recover the cost of providing electricity. The ERA considers that Western Australia should progress towards fully cost-reflective tariffs.

The inefficient use of infrastructure can impose considerable costs. The under-pricing of road use in Western Australia has resulted in rapidly increasing traffic congestion, with the cost of congestion in Perth expected to reach \$1.6 billion by 2015.⁹ This cost is composed of increased travel times, less reliable travel times, pollution costs and additional fuel costs.

Congestion in Perth is typically confined to morning and afternoon peak periods as people commute to and from work. In order to alleviate congestion, road users must be given incentives to either travel outside of peak periods or switch to public transport. Many urban economists agree that the best method for achieving this is some form of congestion charging scheme¹⁰ that charges road users for using particular road facilities or for entering the confines of a restricted area.

The ERA considers that a trial of a congestion charge should be implemented for vehicles that enter the CBD during peak periods in the morning and afternoon. Evidence from other

⁹ See for example, Bureau of Infrastructure, Transport and Regional Economics, *Estimating urban traffic and congestion cost trends for Australian cities*, 2007.

¹⁰ Based on a study by Small and Gomez-Ibanez. (Small and Gomez-Ibanez, *Road pricing for congestion management: the transition from theory to policy*, 1998.)

cities shows that congestion charging is a highly effective traffic management solution that also brings about reductions in vehicle accidents and inner-city pollution, and has consistently reduced congestion by around 15 to 30 per cent where it has been implemented.¹¹ The evidence also shows that congestion charging schemes generally gain public approval once the benefits become evident, despite initial public resistance.¹²

Congestion charging schemes do require significant up-front expenditure for payment management systems and the public transport investment necessary to accommodate an increase in peak hour demand. However, experiences in other cities indicate that this need not impose a substantial burden on the Government. Elsewhere, revenue from congestion charges has paid back the initial set-up costs in a relatively short period (ranging from around 6 months in Milan, through to 4 years in Trondheim) while also covering all operating expenditures. Ongoing revenue from congestion charging schemes is also frequently used to improve and expand public transport facilities.

Time of use pricing and congestion charges are designed to incentivise consumers to change their behaviour, not raise funds for the Government. However, there are situations where the Government should introduce user charges purely as a means of funding infrastructure. Developing innovative sources of funding can ease budgetary pressures and allow the continued maintenance and provision of public infrastructure. The ERA has considered the potential for widening the use of developer charges and user charges.

The ERA supports the implementation of user charges to fund and maintain infrastructure in place of general government funding as it enables a more equitable outcome by charging only the people who use that infrastructure. Additionally, the ERA considers that widening the base of developer charges could benefit Western Australia. It is reasonable that the developers and individuals that benefit from the infrastructure should incur all or part of the cost of its provision.

Finally, the ERA considers that the Government is not the only source of infrastructure investment proposals and in some cases not the best source. Developing a mechanism by which the private sector is encouraged to present unsolicited projects may result in a source of innovative solutions to infrastructure backlogs. Such a mechanism needs to balance the protection of private sector intellectual property with the over-riding requirement for value-for-money from government procurement.

Reviewing government ownership of assets and businesses

The Western Australian Government owns a large number of infrastructure assets and Government Trading Enterprises that are owned and operated by the private sector in other jurisdictions. Government ownership of assets and businesses has become a topical issue following the loss of the State's AAA credit rating.

The State Government has announced that it is reforming its Business Model and Asset Investment Program with the aim of recovering the State's AAA credit rating. The State Government will initially focus on a process to facilitate the sale of underutilised land holdings, discrete port assets, and certain electricity assets.

¹¹ Ernst & Young, *Communauté métropolitaine de Montréal: Portrait des expériences de tarification routière en milieu urbain*, 2012; The Urban Mobility Portal, *Traffic Reduction Data*, 2014, <http://eltis.org/index.php>, (accessed 4 June 2014); European Platform on Mobility Management, *Durham City: First Road User Charging Scheme in the UK*, 2014, http://www.epomm.eu/index.php?id=2771&lang1=en&study_id=169, (accessed on 4 June 2014); Button, K., *The Economics Behind Transport Congestion*, Mercatus Center Seminar, Washington D.C, 2007.

¹² Muz, I., *Why the Attitude? An analysis of attitudes towards the congestion charge in Gothenburg prior to implementation*, 2013.

The ERA supports the Government's review of its assets, but considers that the review should focus on sales that will improve the efficiency of the economy rather than focusing strictly on the impacts on net debt.

Historically, the Government has owned an asset or business to ensure that certain goods and services are delivered in a manner consistent with society's interests. 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.

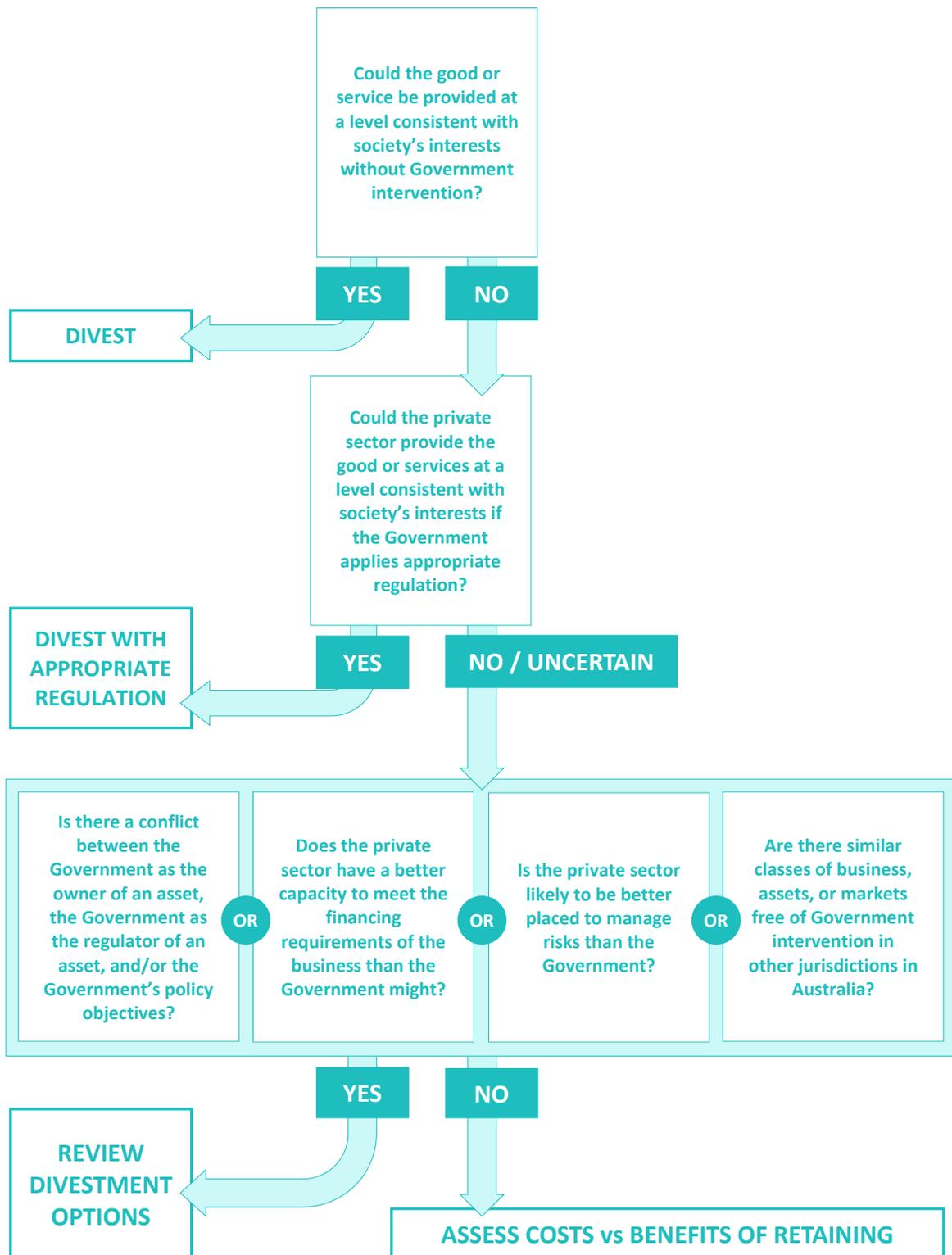
Divesting government assets, where appropriate, has the potential to increase the efficiency and productivity of the asset, which in turn may benefit consumers. It may also help to address conflicting objectives that arise from Government ownership (for example, trying to maximise profits from government business enterprises while also seeking to achieve social objectives). Greater private sector involvement in infrastructure also has the potential to reduce costs given that the private sector often has a greater incentive to operate more efficiently than government.

The ERA has developed a set of criteria for the Government to apply in reviewing the reasons for ownership of a business or asset. These criteria are summarised in Figure 2.

The ERA has applied the criteria to selected government assets to assess their suitability for divestment (including Western Power, Synergy, the Water Corporation and the Port of Fremantle). This review is not considered to be comprehensive, but it does provide some guidance on how the criteria developed by the ERA could be applied.

A debate is needed about government ownership of assets and businesses, informed by periodic reviews guided by a framework. Such debate should lead to decisions that resolve conflicting objectives, provide appropriate commercial incentives to maximise net benefits to the community and, in the case of divestment, provide funds for retiring debt and/or investment in new infrastructure.

Figure 2 Criteria for Government ownership of a business



Addressing disincentives

The ERA examined how incentives in the Western Australian economy could be improved by reducing unnecessary regulation and ensuring taxes comply with the core principles of good tax design.

Reducing regulatory burden

Well-designed regulation is one of the tools that allow governments to achieve policy objectives such as promoting efficient markets, encouraging public health and ensuring responsible development. Good regulation should have net benefits and the benefits should be greater than the benefits of other possible interventions.

However, regulation results in a burden on citizens and businesses when it is unnecessary, obsolete, or poorly designed. It imposes a net cost on society, can raise the price of goods and services, and discourages entrepreneurs from establishing new and innovative businesses and business practices.

The State Government has responded to public concerns about regulatory burden through a number of initiatives in recent years (including the Red Tape Reduction Group and Repeal Week). These initiatives have had a considerable impact, but there is still scope for reducing regulatory burden.

The ERA has made recommendations in the Final Report that aim to further reduce existing regulatory burden and to prevent the introduction of poorly designed regulation in the future.

Addressing existing regulatory burden

To reduce the existing regulatory burden in Western Australia, the Government needs to improve co-operation between different government agencies, make better use of technology to improve service delivery, and pinpoint the recurring problems faced by users of government services.

The ERA considers that this can be done by establishing a State-wide regulatory reform programme to continue the good work that has already been done in this area. It also recommends that:

- the Government establish a division to assist departments in using technology to provide online services and information;
- government departments be required to report publicly on how well they have met their customer service standards each year; and
- key performance indicators be applied to senior government officials relating to their success in removing regulatory burden, and the degree to which their department has met its customer service standards.

The ERA also considers it essential that the Government frequently reports on the progress of the reform programme, and that it ensures that citizens and businesses are closely involved throughout the process.

Safeguards against future regulatory burden

The Government currently uses a process called Regulatory Impact Assessment to vet proposed new laws and policies and protect against the introduction of further regulatory burden. The process is a tool that helps the Government make better decisions by considering the likely consequences of a proposal, and any practical alternatives.

Western Australia's Regulatory Impact Assessment guidelines are similar to those used internationally, and throughout Australia. Unfortunately, while the guidelines themselves are good, the State's process suffers from significant weaknesses in practice.

A major concern is that it is potentially relatively easy for new regulations to escape scrutiny. Exemptions are available for election commitments and the Minister for Finance can also exempt any other regulation from scrutiny at any point in the decision-making process. There is no requirement to advise the public of the reason for an exemption, or even that an exemption has been granted. The Government does not publish enough information to determine how often these options are used, but the fact that these exemptions are available reduces confidence in the ability of the process to provide genuine protection.

The role of public consultation in the process could also be significantly improved through better disclosure of information, and by ensuring stakeholders have sufficient time to comment. This would help ensure the Regulatory Impact Assessment process is used to genuinely improve policies rather than being used as a final ‘ticking the boxes’ exercise for decisions that have already been made.

The ERA considers that the best approach in preventing future regulatory burden is to retain the current process and take steps to strengthen it. This includes passing legislation to give legal force to the existing guidelines, significantly reducing the Government’s ability to grant exemptions, substantially improving public disclosure of relevant documents and findings at all stages of the process, and directing the Office of the Auditor General to undertake periodic reviews of the implementation of the process.

It is also important to recognise that appropriate and effective regulation that has been scrutinised may still become inappropriate or obsolete over time. This can be done by establishing a set of guidelines to assist the Government in identifying laws that require a periodic review.

Reform of State taxes

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 2014/15.¹³

However, State taxes impose significant efficiency costs on the Western Australian economy by distorting the decisions that taxpayers make because of those taxes. The ERA’s consultant has estimated that the efficiency costs arising from three of Western Australia’s largest taxes (payroll tax, residential transfer duty and land tax) to be in the order of \$1 billion per annum.¹⁴

In general, an efficient tax is one that minimises changes in behaviour (including incentives to work, save, invest or consume).¹⁵ 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.

Businesses have the incentive and the opportunity to invest time and effort into activities to avoid or minimise the amount of tax they pay when a tax is applied at high rates with a large

¹³ Western Australian Treasury, *Budget Paper: Volume 3 Economic and Fiscal Outlook*, 2014, p. 88.

¹⁴ Synergies Economic Consulting calculated this figure by 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. Source: KPMG Econtech, CGE Analysis of the Current Australian Tax System, 2010 p.2 and Western Australian Department of Treasury, *2013/14 Overview of State Taxes and Royalties*, , 2014, p. 10.

¹⁵ The main caveat to this being taxes that are deliberately designed to change behaviour (for example, when externalities are present).

number of exempt activities. The following are distortions available for businesses 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).
- Sending parts of their operations off-shore, where wages and tax liabilities are lower. The Chamber of Commerce and Industry of Western Australia (**CCIWA**) advises 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.
- 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 cent¹⁶ 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.

The ERA has examined two main options for reforming payroll tax, residential transfer duty and land tax in Western Australia in order to reduce the efficiency costs. Both reform options are revenue neutral for the State Government.

- **Broaden the base and lower the rate of all three taxes to increase their efficiency.** This option 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*; ¹⁷ and

¹⁶ Western Australian Department of Treasury, *2013/14 Overview of State Taxes and Royalties*, 2010 p. 10.

¹⁷ Significantly reducing the payroll tax free threshold has similarities to the arrangements that applied when the States were granted the payroll tax base from the Commonwealth in 1971. The tax free threshold at that time was \$20,800.

- lowering the rate for payroll tax, transfer duty and land tax, such that the revenue raised by each tax stays the same.
- **Increase reliance on efficient taxes and reduce or abolish the inefficient taxes.**
This option involves:
 - 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.

Any reforms to the taxation system that are revenue neutral for the Government will result in winners and losers. This is because a reduction in the taxation liability of an individual or business will have to be paid for by an increase in the liabilities of others.

However, the ERA considers that there are strong advantages of proceeding with reform of State taxes, notwithstanding that it will result in winners and losers, because of the significant efficiency gains that are expected to accrue from reform.

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 per annum 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. However, the immediate impact on losers from the taxation reforms can be softened by adopting a staged-approach to the implementation of any reform measures. For example, the Australian Capital Territory Government has commenced phasing out transfer duties on conveyance over a 20 year period and adopting General Rates as a broad based land tax for revenue replacement.¹⁸

Reforming State taxes will 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 Final Report are worthy of more detailed consideration.

Removing barriers to competition

Over the years, successive state governments have put in place regulations that stop competition in various markets. These regulations result in situations whereby some groups are subsidising the incomes of other groups, and are ultimately costing society overall. Regulations also result in consumers having less choice (for example, choices about when

¹⁸ ACT Department of Treasury, 2012-13 Budget Paper No. 3: Taxation Reform, 2012.

and where they can shop, choice about the variety of potatoes they can purchase) and paying higher prices (for example, higher taxi fares).

Such barriers to competition are now the exception rather than the norm, as many restrictions have been addressed. The ERA considers that there is a need to address the few remaining barriers to competition that have persisted.

Retail trading hours

Retail trading hours in Western Australia have been extended in recent years, but continue to be some of the most restrictive in Australia.¹⁹

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.²⁰

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. For example:

- Changes to the composition, and working hours, of households (such as the greater prevalence of dual income and single parent households and the increase in fly-in fly-out workers) make it more difficult for households to shop within restricted retail trading hours.
- Regulation of retail trading hours disadvantages 'bricks and mortar' shops relative to on-line retailers, which 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 regulation of retail trading hours primarily benefits small retailers, which have few or no restrictions on their trading hours by protecting them, to some extent, from competition from retailers with more restricted trading hours. Protection of small business suggests that they are inherently preferable to large retail businesses. The ERA found no justification for this restriction on competition, a fact that has been consistently supported by other independent reviews of retail trading hours.

Rather than being of benefit, regulation of trading hours imposes considerable costs on customers and those retailers with restricted trading hours.

Regulation of retail trading hours reduces the choice and convenience of customers by preventing people from shopping when and where they choose. People, for various reasons, want to shop at times and places that are currently unavailable.

Data collected by the ERA demonstrates the extent to which customer behaviour is limited by the existing retail trading hours. On weekends in particular, there is a clear spike in shopping activity immediately after shops open and a significant drop in shopping activity immediately prior to shops closing. These sudden changes demonstrate that retailers are being forced to close during times when there is considerable customer demand. These

¹⁹ Productivity Commission, *Relative Costs of Doing Business in Australia: Retail Trade*, Productivity Commission Interim Report, 2014, p. 89.

²⁰ National Competition Council, *Assessment of Governments' Progress in Implementing the National Competition Policy and Related Reforms*, 2001, p. 21.

abrupt changes also contrast greatly with the behaviour observed in the deregulated trading markets of Victoria and New South Wales. Customers have greater choice about when they shop in jurisdictions with deregulated trading, and this is reflected in more gradual increases and decreases in shopping activity over a 24 hour period.

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 closing when it is not. Deregulation of retail trading hours will generally not result in shops being open 24 hours a day, seven days a week, although a small number of retailers may choose to if it is profitable to do so.

Restrictions on retail trading hours imposes costs on retailers with restricted hours. These costs include: lost sales from being required to close when it may be profitable to be open; greater capital costs due to the need to have extra capacity to deal with greater peaks in customer activity; and compliance costs from needing to deal with complex retail trading regulations.

The regulation of retail trading hours also distorts the manner in which some businesses grow. Many small businesses 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 unrestricted trading hours), some retailers choose not to grow, or to grow in a distorted manner that ensures they retain the ability to enjoy unrestricted trading hours.

The ERA recognises that deregulation of retail trading hours will disadvantage some retailers, particularly existing small retailers, which have enjoyed a degree of protection from competition. The greater competition will be most harmful 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.

Furthermore, small 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 and Good Friday. This is similar to the models implemented in Victoria and Tasmania.

The taxi industry

The taxi industry in Western Australia is highly regulated. Regulations administered by the Department of Transport determine: the number of taxi license plates on issue in Western Australia;²¹ the maximum price that may be charged for taxi services; and the vehicle standards and driver behaviour and aptitude standards that must be met.

The ERA has concluded that standards for taxi vehicles and driver aptitude and behaviour have a net benefit, while the restrictions on the number of taxis have a clear net cost. Caps on maximum fares appear to be necessary when there is a restriction on the number of

²¹ Taxi plates give the owner of the plate, or their agent, the right to operate a taxi. The Department of Transport restricts the number of taxis permitted to operate in Western Australia by limiting the number of taxi license plates on issue. The practical outcome of this is that there are fewer taxis operating in Perth than there would be in the absence of this restriction.

taxis operating to prevent the abuse of market power. The need for caps on fares would diminish if restrictions on the number of taxis were removed.

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 have resulted in taxi services in Western Australia being: over-priced by around 16 per cent; and under-supplied and unreliable, with booked taxis in Perth being 15 minutes late or longer on 115,000 occasions in 2013.

The ERA estimates that the benefit to taxi passengers of lower fares and reduced waiting times as a result of removing the restrictions on the quantity of taxis would be in the order of \$70 million per annum. Of this, \$18 million would be at the expense of private taxi plate owners (who are generally not drivers) in the form of income foregone.

Taxi drivers will generally be unaffected by the reforms and may in fact benefit from greater opportunities to own and operate their own taxi businesses, rather than working for a plate owner. Drivers may also benefit from more job opportunities, with demand for taxi services expected to increase by between 4 and 10 per cent as fare prices fall.

However, around 1,000 taxi drivers who lease their plates from the Government would lose a portion of their income, estimated to be around \$4,000 per driver per year. These drivers have enjoyed an advantage over drivers that lease from private plate owners under the current arrangements.

The ERA estimates that the net benefit to the Perth community of removing quantity restrictions would be between \$13.6 million and \$38.5 million per year. In practical terms, removing restrictions on the number of taxis will mean that: there are more taxis available, with shorter waiting times and more reliable services; cheaper fares; and more innovative and competitive services (such as alternative ways of booking and paying for taxis).

Opponents of deregulation of the taxi industry argue that many of the jurisdictions that have removed supply restrictions experienced a decline in the quality and safety of taxi services. The ERA notes regulations restricting the number of taxi are not designed to achieve quality and safety standards. The Government should ensure that quality and safety standards are maintained through regulations specifically designed to achieve the desired outcomes and ensuring that these regulations are enforced.

The development of smart phone technology is starting to have a profound effect on the way passengers purchase taxi and related services. Smart phone technology has the potential to generate significant benefits for passengers and drivers, and as such these technologies should be welcomed rather than discouraged. However, the full potential benefits of smart phone technology will only be realised if the Government removes quantity restrictions on the taxi industry and removes the barriers that prevent small charter vehicles from competing with taxis (including minimum fares).

Technological advances mean that it is no longer practical to maintain the current protections of the taxi industry. Most notably, the launch of Uber in Perth has started to facilitate greater competition between the taxi industry and the small charter vehicle industry. The ERA considers that it would be better for the Government to be proactive and to adjust regulations in a planned and orderly manner, rather than try to respond when there is no choice other than to deregulate.

Reflecting these considerations, the ERA recommends that the Government establish a process to: effect the complete removal of quantity restrictions on the number of taxis

operating in Western Australia; and remove the restrictions that prevent small charter vehicles from competing directly with the taxi industry.

Ideally, once the reform model has been agreed, removal of quantity restrictions in the taxi industry would occur completely and in a single stage. This will result in the greatest and earliest benefits to taxi passengers in the form of lower prices and will reduce opportunities for the deregulation process to be derailed by interest groups. The ERA does not consider that restrictions on the number of taxis should be removed slowly over time; a long transition process is not needed to allow the industry to adapt because this is already occurring in response to new technology.

Some additional regulations of Small Charter Vehicles (**SCVs**) may be required if they are to be permitted to pick up rank and hail passengers, to ensure the safety of both passengers and drivers. For example, some form of external signage would be important to allow passengers to easily differentiate between registered taxis and private vehicles so they do not inadvertently accept a ride from a driver that is not part of that industry. SCVs may also need to include in-vehicle cameras and GPS, as is currently required for taxis.

Removing restrictions on the number of taxis that are permitted to operate will erode the value of taxi licence plates and the ability of plate owners to generate an income from these plates in the form of lease fees. However, the ERA recommends that the Government does not compensate owners of taxi license plates for the loss of value of income, including for the following reasons.

- Plate holders have been able to reap windfall gains from past government policy choices without these being taken back, so it is reasonable to expect plate owners to bear windfall losses without compensation.
- New technologies are likely to erode the value of plates, irrespective of whether or not the Government removes quantity restrictions, and so there is no case for compensation to be provided by the Government.
- The risk that the Government may remove the restriction at some point in the future should already be incorporated into taxi plate prices.

The potato marketing industry

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 to control price levels. Virtually every other agricultural industry has since been deregulated, with the Western Australian ware potato market being one of only two regulated agricultural industries remaining in Australia.²²

The Potato Marketing Corporation undertakes a number of functions under *Marketing of Potatoes Act 1946 (the Act)* that restrict competition in the market for ware potatoes. These functions (among others) include determining the quantity and the colour²³ of potatoes produced, issuing licences (Domestic Market Entitlements) to grow potatoes, setting the

²² The New South Wales Rice Board being the other (Australian Bureau of Agricultural and Resource Sciences, *Australian Agricultural Productivity Growth: Past Reforms and Future Opportunities*, 2014, pp.14-15).

²³ Potato varieties are grouped into colours such as whites, blues, reds and yellows.

price that growers will receive, licensing 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.²⁴ The Potato Marketing Corporation²⁵ and Australian Venture Consultants²⁶ note that these are arcane powers that have not been used for many years. Nevertheless, the Potato Marketing Corporation can and has taken legal action against potato growers that have failed to comply with legislation.²⁷

The ERA considers that restrictions on potato marketing have raised the incomes of potato growers in Western Australia. However, this has been at the expense of Western Australian consumers, who have paid higher prices than would otherwise have been the case, have had limited choice of potato varieties and have endured poor product quality.²⁸ The restrictions have also limited productivity growth in the industry. The ERA estimates that approximately \$87 per tonne would be passed through to consumers in the form of lower prices should the industry be deregulated.

The Potato Marketing Corporation argues that its activities simply counter-act the market power of Coles and Woolworths in the purchase of wholesale potatoes in Western Australia. In doing so, the Potato Marketing Corporation argues that it is merely redistributing some of the monopoly rents²⁹ earned by the supermarkets to potato growers. The ERA disagrees. The ERA found that there is substantial, but not perfect, competition in the wholesale purchase of ware potatoes and that, if farm-gate prices for potatoes fell, most of the price reduction would be passed through to consumers. However, the extent to which any falls in the price of Class 1 potatoes (of which Coles and Woolworths purchase a significant share) would be passed on to consumers is likely to be less than the average for the total ware potato market.

The main reason why consumers in Western Australia have a limited choice of varieties relative to their counterparts in eastern Australia is that the Potato Marketing Corporation has not been as effective as a free market in meeting the demands of consumers. For example, the Potato Marketing Corporation is only now planning to shift a large proportion of the State's Domestic Market Entitlements from white to yellow varieties³⁰. However, yellow varieties have been a large share of consumption for some time in eastern Australia. The ERA considers that a free market will always respond more quickly to consumer demand than a regulated market.

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

²⁴ Marketing of Potatoes Act 1946, http://www.austlii.edu.au/au/legis/wa/consol_act/mopa1946232/

²⁵ Potato Marketing Corporation (8 May 2014)

²⁶ Australian Venture Consultants (on behalf of the Potato Growers' Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, pp.4-5.

²⁷ B. Thompson, 'Tony Galati potato charges dropped', *The West Australian*, July 18 2013, <http://au.news.yahoo.com/thewest/a/18042008/tony-galati-potato-charges-dropped/> (accessed 23 June 2014).

²⁸ McKinna et al, *Strategic Analysis of the Western Australian Ware Potato Supply Chain: Final Report*, 2011, p.iv.

²⁹ 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.

³⁰ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.22.

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 seed exporters are prevented from selling any seed tubers³¹ that cannot be exported on the domestic ware market unless the exporters have a Domestic Market Entitlement. This constraint reduces profitability and investment in the industry.

Overall, the ERA estimates that the restrictions on the Western Australian ware potato market have a net cost of \$4.1 million per annum. This equates to a present value of \$33.23 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.

Proponents of the regulation of the ware potato industry have put forward a number of arguments in favour of retaining the restrictions and have made a number of criticisms of the ERA's analysis. The ERA has addressed all of these comments in this Final Report and does not consider that there are any substantive arguments in favour of retaining the regulations.

The ERA concludes that the existing regulations on the potato market are holding back the industry and are not serving the Western Australian public well. As such, the ERA recommends that the *Marketing of Potatoes Act 1946* and *Marketing of Potatoes Regulations 1987* be repealed.

Domestic gas reservation policy

In October 2006, the Government of Western Australia adopted the Western Australian 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.³² 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”.³³

The ERA notes that other issues, such as the joint marketing arrangements of domestic gas supply and retention leases may also affect the domestic gas market in Western Australia, but has particularly focussed on the DGR policy.

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. However, after careful consideration of the current gas market, the ERA is of the view that the DGR policy is not required; indeed, the DGR policy is likely to inhibit development of the Western Australian gas market in the long term.

³¹ The tuber is the part of the potato plant that is eaten.

³² 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.

³³ Department of Premier and Cabinet, *Western Australian Government Policy on Securing Domestic Gas Supplies*, 2006.

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.

However, introducing a policy that artificially restrains price rises does not necessarily provide a sustainable approach to achieving efficient outcomes. Rather, removing barriers and providing incentives for more investors to enter the market is more likely to achieve an efficient and sustainable market to the long term benefit of consumers in Western Australia.

The ERA also notes that Fortescue Metals Group, which is a major gas user, has recently called for a transition away from the DGR policy to a transparent and rigorous “use it or lose it” approach to retention leases.³⁴

The ERA believes that the DGR policy should be rescinded as soon as practical. 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, the DGR policy has the following negative consequences:

- 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.
- 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 inhibits dynamic efficiency and technological innovation. For example, the policy artificially depresses domestic prices, which discourages domestic gas users from investing in technologies to lower or substitute their gas consumption.
- It increases reliance on subsidised gas prices, leading to over consumption of the resource.

The ERA acknowledges that rescinding the reservation policy may involve some structural adjustments in the domestic market. Gas will go to its highest market 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 housing sector

The Housing Authority is tasked with increasing the range of affordable housing options available in Western Australia guided by the Affordable Housing Strategy 2010-2020. The Housing Authority applies a number of policy instruments to increase the availability of affordable rental and home ownership opportunities, including land and housing developments, shared-equity arrangements and loans for rental bonds and the purchase of a property.

³⁴ This was a result of research done by Deloitte Access Economics on behalf of Fortescue Metals Group into Western Australia’s gas sector. For more information see *Deloitte Access Economics, Fortescue Metals Group: Western Australia gas sector analysis, 2014 and Fortescue Metals Group Ltd, Australia must maximise its natural gas advantage, 2014.*

The Housing Authority is active in a number of commercial markets in order to deliver these policy instruments, exposing the State Government to financial risk. Major risk areas include the market risk associated with completing housing developments and the credit risk associated with Keystart Loans Limited (**Keystart**), the Government's low deposit home loan scheme. The ERA expressed concerns about these risks in its Draft Report and recommended greater transparency and accountability in the Housing Authority's development activities and the abolition of Keystart.

In response to the Draft Report, the ERA received 19 submissions opposing its recommendation to abolish Keystart. Submitters disputed the ERA's assertion about the risk that is posed by Keystart and were of the view that Keystart helped households transition from public housing to home ownership.

Notwithstanding these submissions, the ERA considers that it is unlikely that Keystart is having a net impact on the level of home ownership amongst low income households. The reason why the ERA holds this view is because the housing market in Western Australia has a supply constraint – it is therefore likely that when a Keystart client is successful in making a purchase, another buyer is unsuccessful. In addition, by adding to demand in a market with constrained supply, Keystart may be inadvertently increasing housing prices.

Further, the ERA considers that there is no compelling reason why Keystart should be publicly owned if all the risks are accounted for in Keystart's current business process, as the private sector could replicate this model. Accordingly, the ERA recommends that the Government explore options for the divestment of Keystart.

In the Draft Report, the ERA expressed concerns that the Housing Authority's development activities expose the Government to significant risk and could lead to significant financial losses for Government. The ERA received one submission disputing its analysis of the Housing Authority's development activities. A key concern was the lack of consideration given to the mandate and strategy that governs the activities of the Housing Authority and the analysis of the One on Aberdeen project.

The issues raised about the activities of the Housing Authority have been responded to in this Final Report. Further consultation with the Housing Authority indicates that it has obtained returns on its development activities that are consistent with the returns that would be expected by the private sector.

However, the ERA observes that direct investment in infrastructure may not always be the most efficient way for the Government to achieve policy objectives. For example, the Housing Authority's range of development activities are designed to respond to the fact that affordable dwellings are not typically built by the private sector. This may in part be caused by other Government policies (such as State and local government regulations that increase the cost of housing developments and encourage the development of higher cost dwellings). Addressing regulatory burden could help to improve the supply of affordable housing without the cost and risk to Government that is associated with development activities. Reflecting this, the ERA considers that a review into State and local government regulation of dwelling construction and residential land development should be undertaken.

The ERA considers that the Housing Authority's current activities in increasing the supply of affordable housing should be temporary (given the current market conditions and the apparent lack of incentive for the private sector to construct an adequate supply of affordable housing) and, ideally, the Housing Authority's activities would be restricted to the demonstration of new and innovative designs.

Overall, the ERA has concerns about the effectiveness of the policy instruments that the Housing Authority applies to improve housing affordability and the risk that some of its activities pose to Government finances. The ERA considers that these issues warrant further investigation by the Government, reflecting the complexity of housing affordability issues and the policy response of the Housing Authority.

Compensation

The ERA notes that while the implementation of the recommendations contained in the Final Report would be beneficial to the economy overall, in many 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 main areas of this Final 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 is discussed in the specific chapters relating to each of these three areas.

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 licences³⁵ (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.

³⁵ 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.

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.³⁶ 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. The ERA considers that there are no established practices in Australia for compensation following policy reforms and governments have acted on a case-by-case basis, reflecting the particular circumstances of the industry concerned.³⁷ Nevertheless, the Government may consider that compensation is appropriate in particular circumstances.

Potential areas of reform for further consideration

The Terms of Reference for the Inquiry 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. 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 separate investigation. These areas include: health; education; procurement, IT and communications; occupational licensing; and water and wastewater services.
- Areas that were examined by the ERA as part of this Inquiry but which would warrant further examination. These areas include: reform of State taxes; policy responses to ensure availability of affordable housing; restructuring electricity tariffs; government ownership of assets; and innovative sources of funding such as more extensive use of user charges and developer charges.
- Areas that were identified in public submissions or during the course of the Inquiry, that are worthwhile areas of examination but were unable to be included in this Inquiry due to the need to prioritise areas with the greatest potential benefits, or due to time and resourcing constraints. These areas include the forestry sector, bulk handling of grain, operations and expenditures of government, liquor licensing, waste management, government expenditures on safety, the Western Australian industrial relations system, and regional air routes.

³⁶ 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.

³⁷ Taxi Service Commission, *Final Report: Customers First – Service, Safety, Choice*, 2012, p.238.

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 Proactively manage the Royalties for Regions' annual expenditure limit.
- 5 Ensure Royalties for Regions' governance measures are adhered to, and review the effectiveness of these measures periodically.
- 6 Establish a trial congestion charging scheme for vehicles entering the CBD during peak periods. The trial should be supported by comprehensive technical and cost benefit analysis, and should take into account:
 - a. the most appropriate timing for the trial, particularly with regard to any anticipated increases in public transport capacity;
 - b. the most cost effective approach to increase public transport capacity to the level needed to support the trial;
 - c. the length of trial that would be necessary to recoup the Government's initial investment;
 - d. the appropriateness of retaining the Perth Parking Levy;
 - e. the appropriate boundaries, fee structure, and electronic equipment required; and
 - f. the measures to be used to assess the effectiveness of the scheme at the end of the trial period.
- 7 Progress be made towards implementing fully cost-reflective electricity tariffs for households and small businesses.
- 8 Investigate the feasibility of introducing flexible electricity charging schemes such as time-of-use and critical peak pricing.
- 9 Expand the use and scope of Public Private Partnerships to procure public infrastructure, particularly in cases that will result in core services being delivered for better value for money.
- 10 Develop a process and guidelines for considering unsolicited infrastructure proposals from the private sector.

- 11 Conduct a full investigation into the divestment of assets that pass the threshold criteria for private ownership.

Reducing the cost of complying with regulation

- 12 Appoint a lead reform agency (either the Department of Premier and Cabinet, or alternatively the Department of Finance, or a combination of the two) to work closely with senior departmental staff across all areas of the Government to develop regulatory reform targets and monitor, enforce, and publish performance against the targets.
- 13 Set Key Performance Indicators for regulatory reform targets for senior departmental staff, including Directors General and Chief Executive Officers.
- 14 Establish an Information and Communications Technology (ICT) office within Government (ideally within the Department of Premier and Cabinet) 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.
- 15 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. The findings of this assessment should be made publically available.
- 16 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.

- 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 from individual agencies 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 Require that all regulatory proposals submitted to Cabinet and the Executive Council be accompanied by the relevant Preliminary Impact Assessment documents.
- 21 Amend the Guidelines (or their legislated replacement) to:
 - a. limit applications for 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; and
 - d. require timely publication of the reasons for all exemptions granted.

- 22 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.
- 23 Determine and mandate an appropriate minimum consultation period for Regulatory Impact Assessments, in cases where consultation is undertaken as a part of the Regulatory Impact Assessment process.
- 24 Empower the Regulatory Gatekeeping Unit to require, review, and publish post-implementation reviews for all non-legislative proposals that have been subject to a Regulatory Impact Assessment.
- 25 Direct the Regulatory Gatekeeping Unit to perform an audit of legislation overdue for review, report the results of the review to Cabinet, and to make the findings available to the public. Where legislation is overdue for review, the relevant Minister should direct the appropriate department or review body to conduct the review as soon as practicable.
- 26 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 Department 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.
- 27 Request that the Department of Finance's Economic Reform division deliver a response paper and implementation plan to Cabinet, giving regard to:
 - a. the timing and prioritisation of reforms; and
 - b. the levels of funding and resourcing required to implement the ERA's recommendations.

State taxes

- 28 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

29 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 filling stations and retailers that employ eighteen (or fewer) staff may open.

Taxi industry

30 Establish a process to effect the removal of all quantity restrictions on the taxi industry in Western Australia in a single stage.

31 Reduce taxi lease fees such that they reflect the cost of issuing the licence.

32 Remove the restrictions on small charter vehicles that prevent them from competing directly with the taxi industry including the regulations that:

- a. establish different vehicles standards for taxis and small charter vehicles;
- b. require small charter vehicles to charge a minimum fare price; and
- c. require small charter vehicle services to be pre-booked.

33 Equalise safety requirements for taxis and small charter vehicles, including requiring small charter vehicles to be fitted with a security camera and a global positioning device.

34 Do not compensate owners of taxi license plates for the loss of any fall in taxi plate values.

35 Require all taxis and small charter vehicles to display their fare schedule such that it may be easily observed by passengers from outside the vehicle and within the vehicle.

36 Require all taxi and small charter vehicle companies to lodge their maximum fare schedules with the Department of Transport 24 hours prior to implementation.

37 Equalise the driver training requirements between taxis and small charter vehicles.

38 Remove the mandatory dispatch network affiliation requirements for taxi vehicles.

39 Make the Department of Transport guidelines on fatigue management compulsory.

- 40 Maintain maximum price regulation in the short-term and keep a watching brief on price behaviour to determine whether maximum price regulation can be removed.

Potato marketing

- 41 Repeal the *Marketing of Potatoes Act 1946* and *Marketing of Potatoes Regulations 1987*.

Domestic gas reservation policy

- 42 Rescind the domestic gas reservation policy as soon as practicable.
- 43 Ensure the renewal of retention leases process is open and transparent so that it is not used to warehouse acreage.

The housing sector

- 44 Explore options for the potential divestment of Keystart.
- 45 Conduct a review of State and local government regulation of dwelling construction and residential land development.
- 46 Conduct a review of housing affordability and the effectiveness of the current policy response.

1 Introduction

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 Inquiry was referred to the ERA under section 38(1)(a) of the *Economic Regulation Authority Act 2003*, which provides for the Treasurer to refer to the ERA inquiries on any matter relating to an industry that is not a regulated industry.

1.1 Terms of Reference

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 was 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.

A copy of the Terms of Reference is provided in Appendix 1.

1.2 Review Process

The findings of this Inquiry have been informed by the ERA's own internal research and analysis, a public consultation process and the receipt of technical advice from consultants engaged by the ERA.

The ERA sought to consult extensively with the public in undertaking this Inquiry and developing its recommendations. All public submissions are available on the ERA's [website](#).

The ERA released an Issues Paper on 9 August 2013 and sought feedback on issues relevant to microeconomic reform in Western Australia. Fifty seven submissions were received from a broad cross-section of the Western Australian community in response to the Issues Paper.

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 departments in response to the Issues Paper. A further 27 submissions were received from the Western Australian community in response to the Discussion Paper.

The ERA published its Draft Report on 11 April 2014. The ERA sought feedback on its analysis and draft recommendations contained in the Draft Report. Eighty submissions were received in response to the Draft Report. The views expressed in the submissions have informed the development of this Final Report.

The ERA presented this Final Report to the Treasurer on 30 June 2014. The Treasurer has 28 days to table the Final Report in Parliament.

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.³⁸

The purpose of this chapter is to provide: a high level description of productivity and its importance.

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.

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 openness³⁹ of the economy. In order to compete, businesses

³⁸ Forsyth, P. 'A Perspective on Microeconomic Reform', in Forsyth, P. (ed) *Microeconomic Reform in Australia*, Sydney, Allen and Unwin, 1992.

³⁹ 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.

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.⁴⁰

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 that there has been a shift in focus since the reforms of the 1990's away from incentives and towards enablers.⁴¹ 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 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

⁴⁰ Hilmer, F., Competition Policy from 1992 to 2014, *Presentation to the Business Council of Australia on 13 February 2014*, 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 (accessed 25 March 2014).

⁴¹ Hilmer, F., Competition Policy from 1992 to 2014, *Presentation to the Business Council of Australia on 13 February 2014*, 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 (accessed 25 March 2014).

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 and heavily regulated non-traded services. But we had a bipartisan consensus” [on the need for reform].⁴² 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”.⁴³ 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.

⁴² Hilmer, F., Competition Policy from 1992 to 2014, *Presentation to the Business Council of Australia on 13 February 2014*, 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 (accessed 25 March 2014).

⁴³ Hilmer, F., Competition Policy from 1992 to 2014, *Presentation to the Business Council of Australia on 13 February 2014*, 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 (accessed 25 March 2014).

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 experiences.

This Chapter provides information about the current and forecast performance of the Western Australian economy, providing context to subsequent sections of this Final 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 2012/13.⁴⁴

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 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

⁴⁴ Western Australian Department of Treasury, *Mid-year Economic and Fiscal Outlook 2013-14*, 2013, p. 56.

in the resources sector has a limited lifespan, and has increased Western Australia's vulnerability to international economic conditions.

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 2014/15 Budget, the State Government noted that Western Australia is likely to see more modest economic growth rates in coming years, after growth of 7.3 per cent in 2011/12 and 5.1 per cent in 2012/13.^{45,46} Other recent forecasts have also anticipated slowing economic growth in the coming year, both in Western Australia and across the country.^{47,48}

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.⁴⁹

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 prioritise spending more effectively. 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 Final 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 Final Report are aimed at improving productivity by increasing the outputs that are generated using existing labour and capital,

⁴⁵ Western Australian Department of Treasury, *Mid-year Economic and Fiscal Outlook 2013-14*, 2013, p. 3.

⁴⁶ 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.

⁴⁷ Western Australian Department of Treasury, *Mid-year Economic and Fiscal Outlook 2013-14*, 2013, p. 3.

⁴⁸ Reserve Bank of Australia, *Statement on Monetary Policy – February 2014*, 2014, p. 60.

⁴⁹ Department of State Development, 2014, *Western Australian Economic Profile – March 2014*, p. 1.

leading to further increases in income and wealth. With this higher income, all else remaining constant, the average standard of living⁵⁰ of individuals increases.⁵¹

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;⁵² 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.⁵³

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.⁵⁴ The growth rate of Western Australia GSP is expected to remain below the 4.9 per cent Western Australian 10 year average rate until 2017/18, but is projected, on average, to remain above the Australian growth rate.⁵⁵ This trend can be seen in Figure 3.

⁵⁰ *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.

⁵¹ 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.

⁵² Australian Bureau of Statistics, Productivity Glossary, 2010.

⁵³ Australian Bureau of Statistics, Productivity Glossary, 2010.

⁵⁴ Australian Bureau of Statistics, Catalogues 5220 and 5206, <http://www.abs.gov.au/> (accessed 14 March 2014).

⁵⁵ Department of State Development, *Western Australia Economic Profile*, 2014, p. 1.

Figure 3 Western Australia GSP and Australia GDP growth rate, 1994/95 to 2017/18 (nominal \$)



Source: ABS Catalogue 5220 and 5206, Department of State Development, 2014, *Western Australia Economic Profile* and Australian Treasury, 2013, *Western Australian State Budget Paper No.3 2014/15*.

Note: Light blue bars represent forecast GSP.

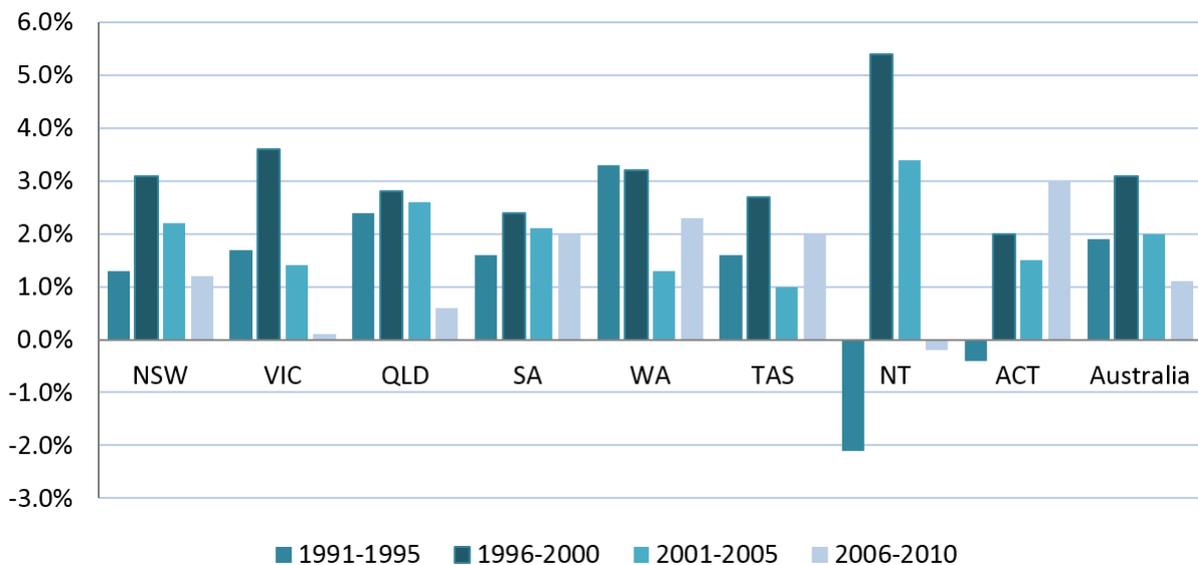
Over time, the difference between Western Australian and national economic growth rates has resulted in a substantial difference between Western Australia's GSP per capita and that of other States and Territories. For example, by 2012/13, the State's GSP per capita was 48 per cent higher than the national average.⁵⁶

Labour productivity in Western Australia

Figure 4 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 the 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.

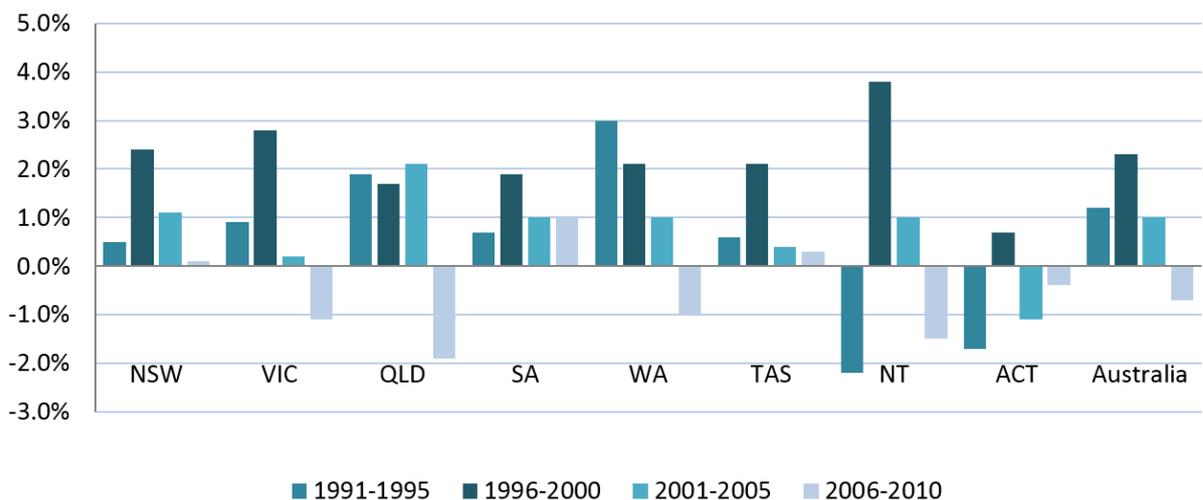
⁵⁶ Western Australian Department of State Development, *Western Australia Economic Profile - February 2014*, 2014.

Figure 4 Average annual labour productivity growth, States and Territories, 1991 to 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 5 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.

Figure 5 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's⁵⁷ and a general lack of new reforms

⁵⁷ For more detail, please see the ERA's *Microeconomic Reform in Western Australia Issues Paper*, 2013.

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.⁵⁸

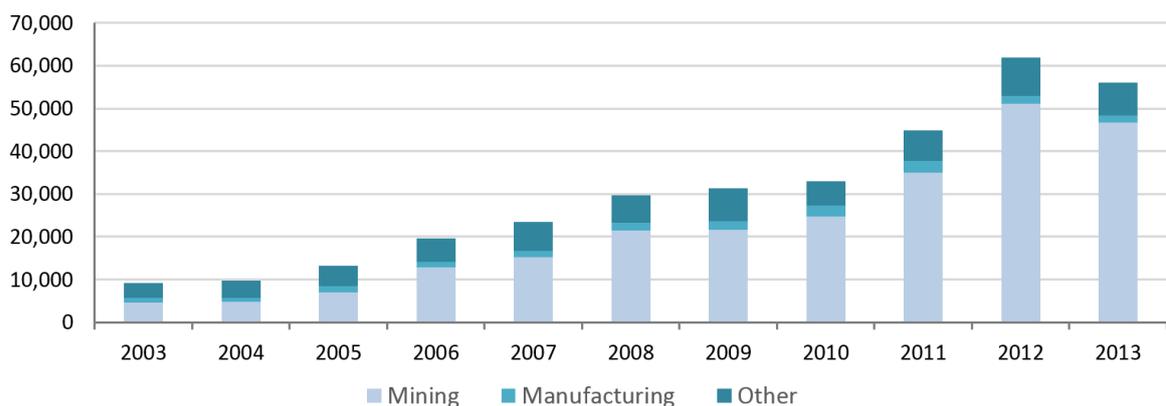
Increases in Western Australia's income have been largely driven by increases in capital investment⁵⁹ and growth of the labour force, rather than gains in MFP.

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 2012/2013.⁶⁰ 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.⁶¹

Western Australia's economic development has become increasingly dependent on mining and resources in recent decades.⁶² 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.⁶³ Recent falls in commodity prices have also resulted in a number of mining companies re-evaluating their investments in Western Australia.⁶⁴ These trends can be seen in Figure 6.

Figure 6 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 7 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

⁵⁸ Grattan Institute, *Australia's Productivity Challenge*, 2011, p. 4.

⁵⁹ Capital refers to any non-financial assets that are used in the production of goods and services.

⁶⁰ Western Australian Department of State Development, 2014, *op. cit.*

⁶¹ Western Australian Department of State Development, 2014, *op. cit.*

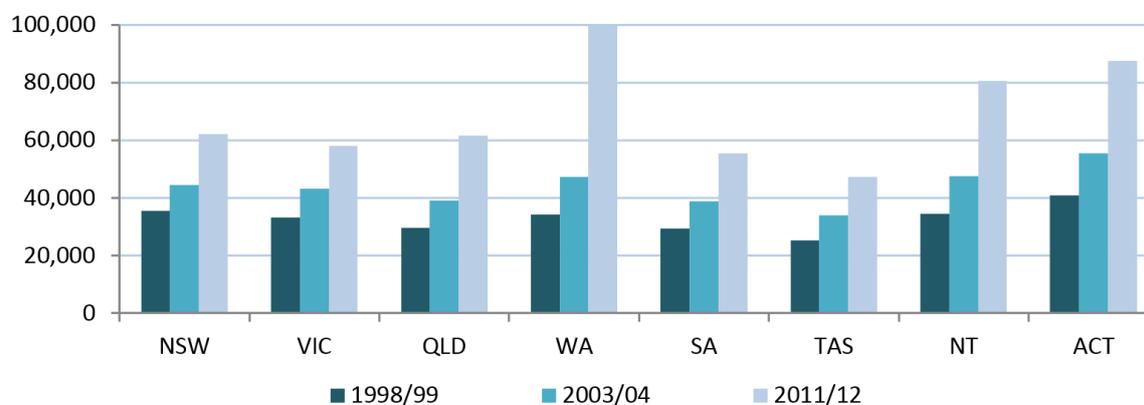
⁶² The mining and petroleum exports comprised of 89 per cent of the State's merchandise exports in 2012-13. Source: *Department of Mines and Petroleum, Western Australian Mineral and Petroleum Digest 2012-13*, 2013.

⁶³ Western Australian Department of Mines and Petroleum, *Western Australian Mineral and Petroleum Digest 2012-13*, 2013, p. 7.

⁶⁴ Western Australian Department of Mines and Petroleum, 2013, *Ibid.*

\$100,000. This indicates that Western Australia produces a greater value of goods and services per person than other States and Territories, and is consistent with the high value produced per hour of work performed seen in the State's labour productivity.

Figure 7 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,⁶⁵ 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, 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.⁶⁶

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

⁶⁵ KPMG and Chamber of Minerals and Energy, *Economic reach of the Western Australian Resources Sector*, 2013, p. 9.

⁶⁶ The Productivity Update provides some recent research on the state of productivity. Productivity Commission, *Productivity Update: May 2013*, Australia, 2013.

- 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.⁶⁷ 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 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.⁶⁸ The *Fiscal Action Plan* contained a range of expenditure and revenue measures designed to address weaknesses in the State's financial position. Based on the Department of 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 that were deemed not to provide value for money.⁶⁹

However, the Government withdrew support for two key measures of the *Fiscal Action Plan* within weeks of the Budget's release.⁷⁰ 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 2013,⁷¹ Standard and Poor's highlighted the State's exposure to the mining sector's cyclical 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 the State's

⁶⁷ Hon Troy Buswell MLA, Treasurer, *Rating agency warning spurs State Government budget resolve*, Ministerial Media Statement, 28 January 2009.

⁶⁸ 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: *Western Australian Department of Treasury, 2013-14 Budget Fact Sheet, 2014, p. 6.*

⁶⁹ Western Australian Department of Treasury, 2013-14 *Budget Paper No. 3, 2014.*

⁷⁰ Including tuition charges for the children of overseas 457 visa holders and solar power feed-in tariffs.

⁷¹ Standard and Poor's, *Supplementary Analysis: Western Australia (State of)*, 2013.

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 the Western Australian Government 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;
- 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 2014/15 State Budget, shows the 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.⁷²

⁷² Western Australian Department of Treasury, *2014-15 Budget Paper No.3*, 2014.

Table 1 Western Australian State Government financial target compliance, 2013/14 to 2017/18

2014-15 BUDGET FINANCIAL TARGET COMPLIANCE					
	2013-14 Estimated Actual	2014-15 Budget Estimate	2015-16 Forward Estimate	2016-17 Forward Estimate	2017-18 Forward Estimate
Ensure expense growth does not exceed revenue growth					
- Current estimate (revenue growth minus expense growth)	-0.3	-	-0.6	0.2	0.7
- Compliance	No	Yes	No	Yes	Yes
Maintain a cash surplus from operating activities for the general government sector of at least 50% of infrastructure spend					
- Current estimate	38.8	39.6	53.6	62.4	79.9
- Compliance	No	No	Yes	Yes	Yes
Maintain TNPS net debt at or below 55% of revenue					
- Current estimate	56.8	61.2	60.8	60.4	61.5
- Compliance	No	No	No	No	No
Maintain a TNPS cash operating surplus of at least 5% of receipts					
- Current estimate	5.1	5.3	5.4	5.3	5.7
- Compliance	Yes	Yes	Yes	Yes	Yes
Maintain the State's tax competitiveness					
- Compliance	Yes	Yes	Yes	Yes	Yes

Source: Western Australian Department of Treasury, 2014-15 State Budget Paper No.3, 2014.

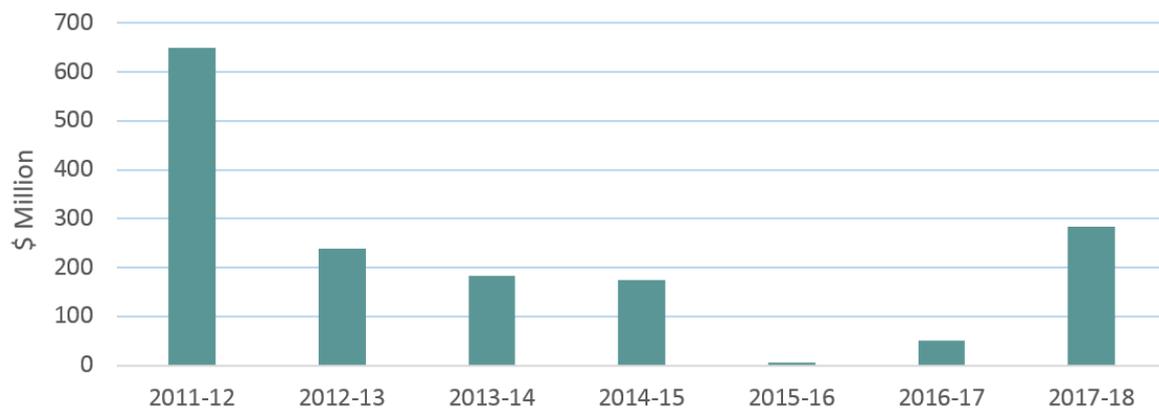
3.1.1.1 The Government's net operating balance

The Government's 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.

The Western Australia Department of Treasury has forecast a decline in the State's net operating balance in coming years. The 2014/15 State Budget forecasts an operating surplus of \$175 million for 2014/15, following a surplus of \$183 million in 2013/14, stating that *'at less than 1% of revenue, these operating surpluses provided a limited buffer against fluctuations in key revenue parameters such as the exchange rate or iron or price.'*⁷³ This illustrates how vital it is that the State Government plans to provide effective protections against any economic consequences arising from unforeseen circumstances.

Figure 8 shows the estimated net operating balance for 2011/12 to 2013/14, and forecast balances for the period until 2017/18.

⁷³ Department of Treasury Western Australia, 2014, *op. cit.*

Figure 8 State Government Net Operating Balance, 2011/12 to 2017/18

Source: Western Australian Department of Treasury, *State Budget Paper No.3 2014-15*

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.”⁷⁴ 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.

The 2014/15 Budget cautioned that full realisation of the *Fiscal Action Plan* was subject to a number of key risks, being:

- successfully limiting wage and conditions increases to projected growth in the CPI,
- related to the above point, agencies meeting the CPI cap on salaries expenditure; and
- achievement of planned savings from the program evaluation initiative announced in last year’s Budget.

The Budget also addressed the consequences of a failure to achieve the targeted savings, stating that:

“The projections contained in this Budget are based on the assumption that agencies will be able to deliver these savings measures. If agencies do not have the appropriate tools or strategies to fully achieve these savings, there will be a deterioration in the general government sector operating balance and net debt estimates contained in this Budget.”⁷⁵

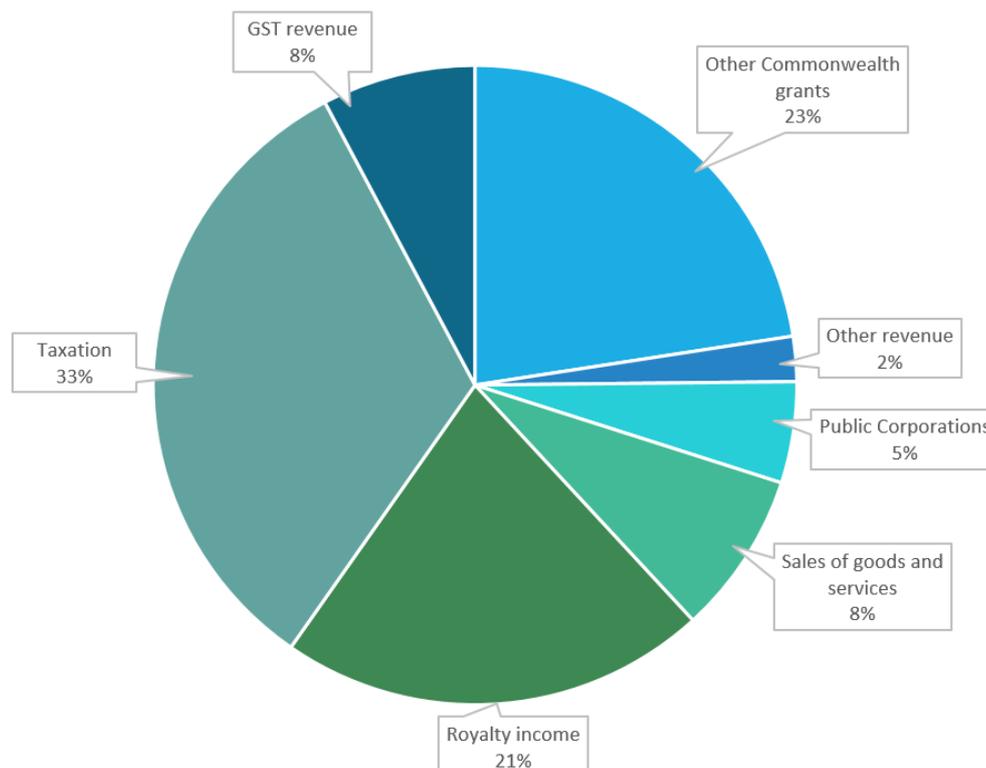
⁷⁴ The Government considers the significant challenges to be a moderation in economic growth, weaker tax forecasts, softening in commodity prices and continued deterioration in the State’s share of national GST revenue. Source: Western Australian Department of Treasury, *2013-14 Budget Fact Sheet: Fiscal Action Plan, 2014 p. 1.*

⁷⁵ Western Australian Department of Treasury, *2014-15 State Budget, 2014.*

3.1.1.2 General Government revenue

General Government revenue⁷⁶ refers to the income the Government earns from its investments and business, in addition to any Commonwealth grants it receives. The majority of the Western Australian Government's revenue comes from taxation, royalty income and other Commonwealth Grants. A breakdown of general Government revenue for 2014/15 is given in Figure 9.

Figure 9 Sources of general government revenue, 2014/15



Source: Source: Department of Treasury, State Budget Paper No.3 2014-15

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.⁷⁷ The rise in tax revenue was

⁷⁶ 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 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

⁷⁷ Western Australian Department of Treasury, 2012-13 Budget Fact Sheet, 2012, p. 2.

driven by strong labour market conditions and several large one-off stamp duty assessments of large commercial property transactions.⁷⁸ These gains were partially offset by a 7.9 per cent fall in Commonwealth Grants, most notably the GST revenue grant.⁷⁹ Further reductions to the State's Goods and Services Tax (**GST**) allocation were announced in in March 2014, reducing Western Australia's share to a record low.⁸⁰

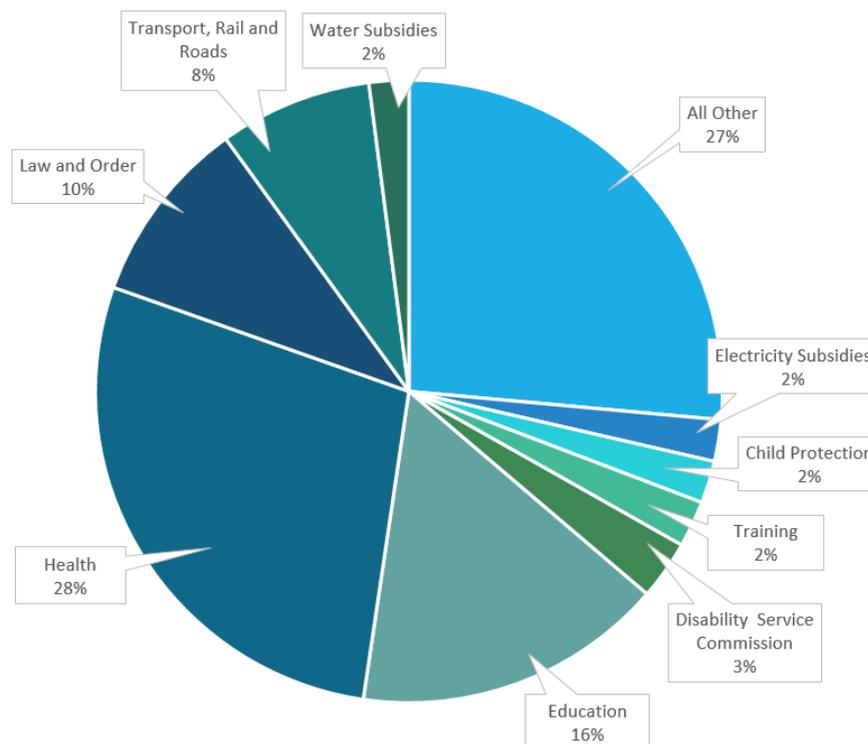
General Government revenue grew by 8.8 per cent in 2013/14, well above the 2 per cent growth recorded in 2012/13. The large increase in general Government revenue in 2013/14 was driven by an increase in the iron ore royalty rate to 7.5 per cent. However, this contrasts to overall revenue forecasts, with the Budget projecting growth of 2.6 per cent in 2014/15, and average growth of 3.5 per cent per annum to 2017/18.⁸¹ 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.

3.1.1.3 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 10 provides a breakdown of government expenses for 2014/15, with law and order, health, and education being the largest single areas of expenditure.

Figure 10 Sources of general government expenditure, 2014/15



Source: Western Australian Department of Treasury, 2014-15 State Budget Paper No.3, 2014.

⁷⁸ Western Australian State Department of Treasury, *2012-13 Annual Report on State Finances*, 2013, p. 3.

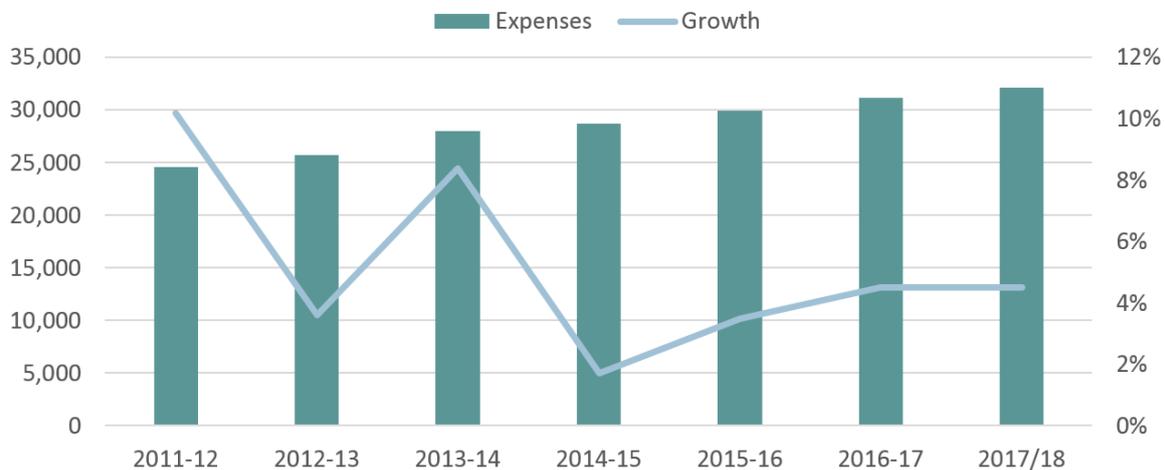
⁷⁹ Western Australian State Department of Treasury, *2012-13 Budget Fact Sheet*, 2012, p. 17.

⁸⁰ ABC News, *GST carve-up: WA's proportion slashed to record low as NSW receives largest share*, 2014, <http://www.abc.net.au/news/2014-03-28/was-share-of-gst-slashed-to-record-low/5352570>, (accessed 1 Apr 2014).

⁸¹ Western Australian Department of Treasury, *Government Mid-year Financial Projections Statement*, 2013, p. 12.

Figure 11 shows the Government's actual and estimated actual expenses for 2011/12 to 2013/14, and forecast government expenses for 2014/15 to 2017/18. Expenses increased 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 3.6 per cent per annum between 2015 and 2017.

Figure 11 General Government expenses, 2011/12 to 2017/18



Source: Department of Treasury, State Budget Paper No.3 2014-15

3.1.1.4 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 represented a substantial proportion of both current government assets, and of budgeted expenditure in 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 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 (\$m)	2014 Expenditure Budget (\$m)	Description of assets
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, <i>et cetera</i> .
Total	\$ 174,905	\$ 8,702*	

Source: Western Australian Department of Treasury, 2013-14 State Budget, 2013.

* 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.

This 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.⁸² 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 2011/12.⁸³

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

⁸² 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.

⁸³ 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.

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 the State's 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.

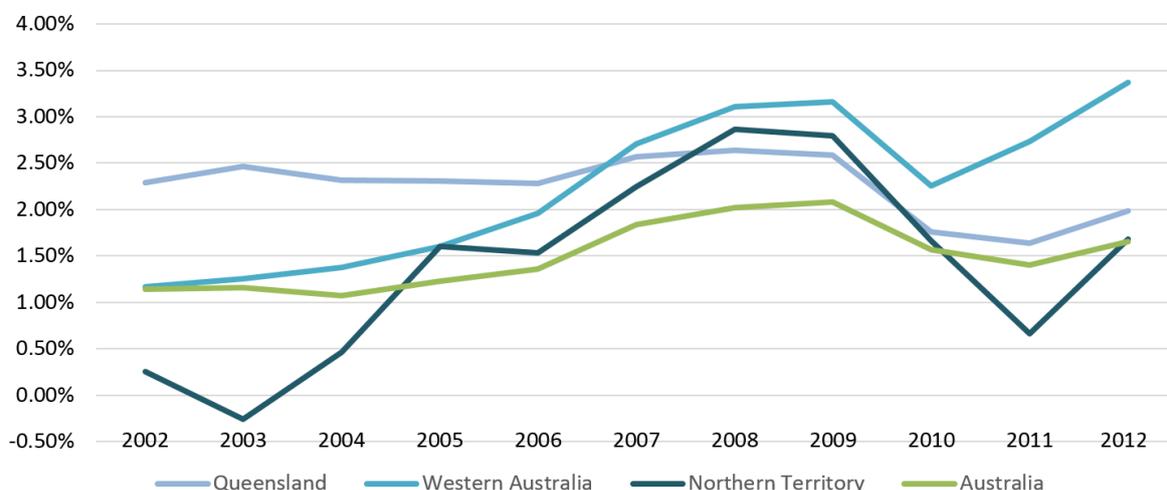
Employment increased across all sectors between 1999 and 2013, with the exception of the agriculture sector and the forestry and fishing sector, which contracted slightly.

3.5 Population Growth

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

Figure 12 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 demand for government goods and services such as infrastructure and utilities, and increasing the Government's income tax revenue.

Figure 12 Population growth in Western Australia and Australia, 2002 to 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 the Australian Bureau of Statistics projects it to rise to 12.2 per cent of Australia's total population by 2022/23.⁸⁴

The most recent Australian Bureau of Statistics (**ABS**) 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,

⁸⁴ Western Australian Department of State Development, 2014, *op. cit.*

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 km ²
Projected 2026	0.7 million	2.3 million	76%	345 persons per km ²
Projected 2056	0.9 million	3.4 million	79%	510 persons per km ²

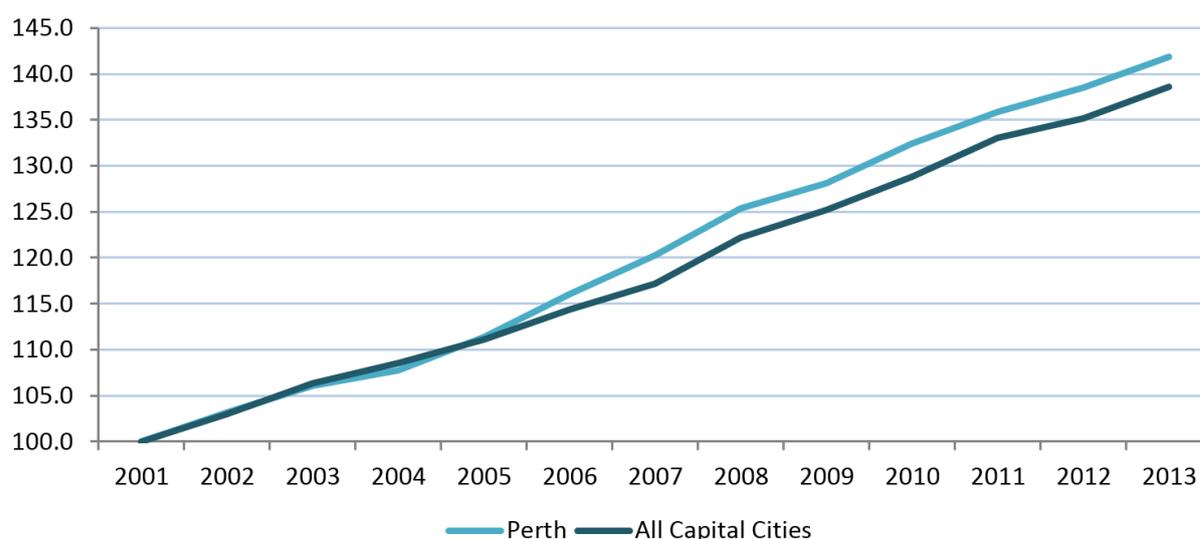
Source: ABS(midpoint projections, Series B), Catalogue 3222.0, Economic Regulation Authority.

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)⁸⁵ shown in Figure 13. 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 13 Perth and Australia Consumer Price Indices (CPI), 2001 to 2013



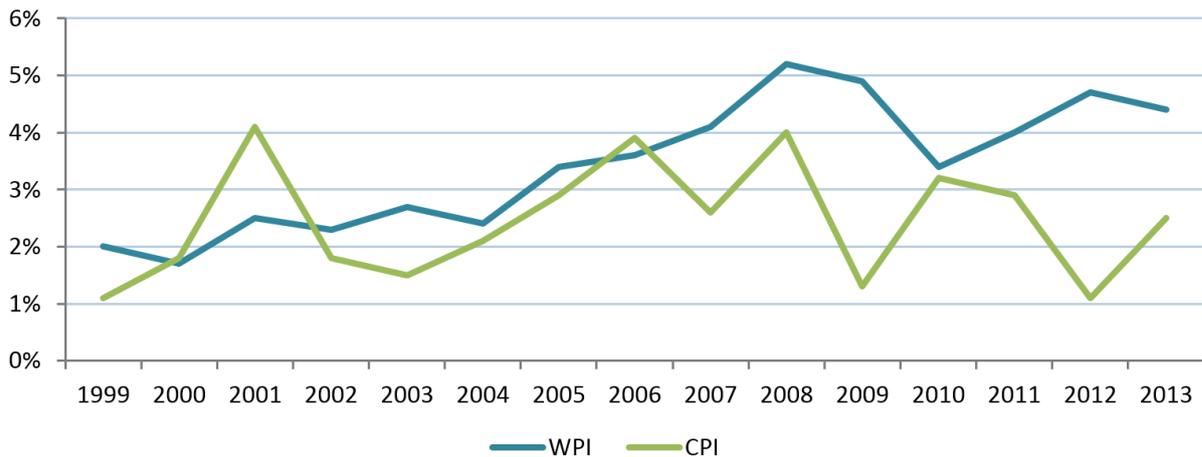
Source: Australian Bureau of Statistics, Consumer Price Index, Catalogue 6401.0.

⁸⁵ Growth in CPI is often used as a benchmark estimate of inflation. Source: Treasury of Western Australia, 2013, *Budget: Glossary*.

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.⁸⁶ The Western Australian WPI has averaged 4.3 per cent between 2006 and 2012. Figure 14 provides a comparison of the two indices.⁸⁷ 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.⁸⁸

Figure 14 Western Australia Wage Price Index growth and Perth Consumer Price Index growth, 1999 to 2013



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 (relating to 2013) 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 19 index points higher in the Pilbara, and 17 index points higher in the Kimberley, than in Perth.⁸⁹ This means that, for instance, the same basket of goods and services in the Pilbara costs 19 per cent more than it would in Perth.⁹⁰

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.

⁸⁶ 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*.

⁸⁷ Note that the WPI refers to the whole of Western Australia and the CPI refers only to Perth.

⁸⁸ 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.

⁸⁹ Western Australian Department of Regional Development, *Regional Price Index 2013*, Australia, 2014.

⁹⁰ This gap has closed reduced since the Department of Regional Development's last Regional Price Index in 2011, where the cost of living was 37 points higher in the Pilbara, and 20 points higher in the Kimberley, than in Perth

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:

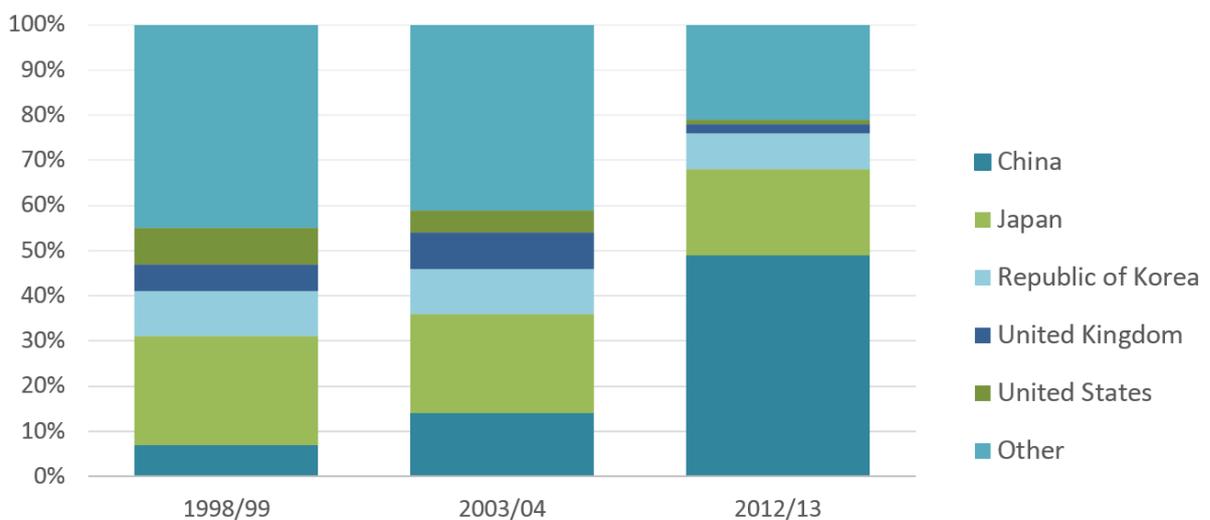
- Western Australia's international trade activities;
- the impact of Terms of Trade on Western Australia; and
- Australia's rankings in the Global Competitiveness Report, and what these mean for Western Australia.

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 significant portion of Australia's total exports, with the State contributing 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.⁹¹

As shown in Figure 15, 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 Western Australia's exports, while the proportion accounted for by the United States and United Kingdom has decreased significantly, as has the share exported to countries represented under "other" in Figure 15.

Figure 15 International export destinations, Western Australia (by \$ value)



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

⁹¹ Australian Bureau of Statistics, *State Accounts, Catalogue 5220.0*.

Chinese and South-East Asian imports into Western Australia have also become increasingly important to the State's economy, as shown in Figure 16. 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 15.

Figure 16 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 exports⁹² to the prices for its imports.

An increase in Australia's ToT directly raises living standards in Australia. An increase in Australia's ToT occurs 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."*⁹³

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.⁹⁴

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

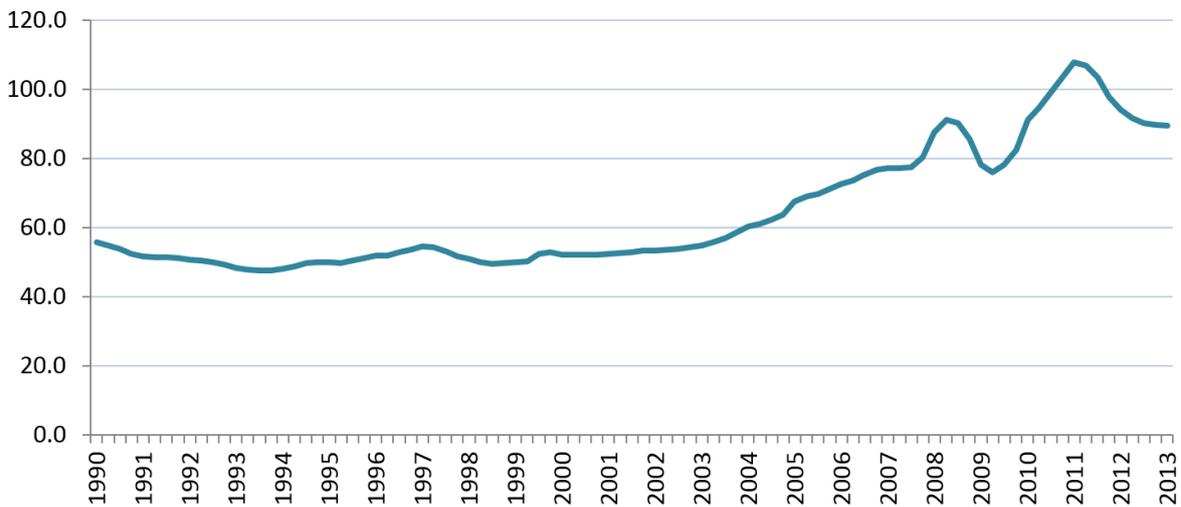
⁹² A comparable figure for Western Australia is not produced by the Australian Bureau of Statistics, as Western Australia trades with eastern Australia, for which there are no reliable data.

⁹³ 1350.0 - Australian Economic Indicators, Feature Article - The Terms of Trade and the National Accounts, 2005 <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/1350.0Feature%20Article500Apr%202005?open=document&tabname=Summary&prodno=1350.0&issue=Apr%202005&num=&view=>> (accessed 20 June 2014).

⁹⁴ 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.

upwards globally, indicating that mining-intensive economies, such as Western Australia's will be vulnerable to further falls in commodity prices.⁹⁵

Figure 17 Australian Terms of Trade Index, 1990 to 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 18 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.⁹⁶

Interest rates have also played a role in the increasing value of the AUD. 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.⁹⁷ This has attracted a higher level of foreign capital to Australian banks, which has also increased the value of the AUD.

⁹⁵ Deloitte Touche Tohmatsu, *Tracking the trends 2014: The top 10 issues mining companies will face in the coming year*, Canada, 2013.

⁹⁶ 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.

⁹⁷ 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, *Understanding the appreciation of the Australian dollar and its policy implications*, Australia, 2012, p. 47.

Figure 18 USD-AUD Exchange Rate, 1990 to 2013

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.⁹⁸

3.7.3 Global Competitiveness Report

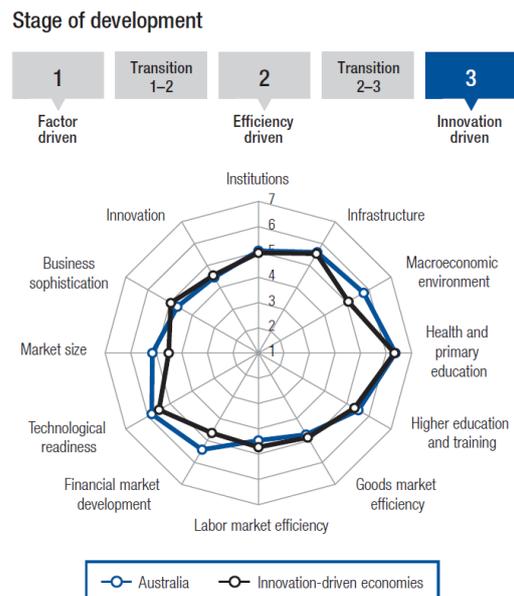
The Global Competitiveness Report by the World Economic Forum assesses the competitiveness of 148 countries, providing information regarding the drivers of the productivity and prosperity of each. The report allows countries to compare performance in terms of overall competitiveness as well as in specific areas. The report sources data from a variety of agencies, as well as 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 19 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.

⁹⁸ Plumb, Kent and Bishop, *Implications for the Australian Economy of Strong Growth in Asia*, 2012, p. 16.

Figure 19 Stage of development, Australia, 2013/14

	Rank (out of 148)	Score (1–7)
GCI 2013–2014	21	5.1
GCI 2012–2013 (out of 144).....	20.....	5.1
GCI 2011–2012 (out of 142).....	20.....	5.1
Basic requirements (20.0%)	17	5.7
Institutions.....	23.....	5.0
Infrastructure.....	18.....	5.6
Macroeconomic environment.....	25.....	5.8
Health and primary education.....	22.....	6.4
Efficiency enhancers (50.0%)	13	5.2
Higher education and training.....	15.....	5.5
Goods market efficiency.....	31.....	4.7
Labor market efficiency.....	54.....	4.5
Financial market development.....	7.....	5.4
Technological readiness.....	12.....	5.8
Market size.....	18.....	5.1
Innovation and sophistication factors (30.0%)	26	4.6
Business sophistication.....	30.....	4.7
Innovation.....	22.....	4.5

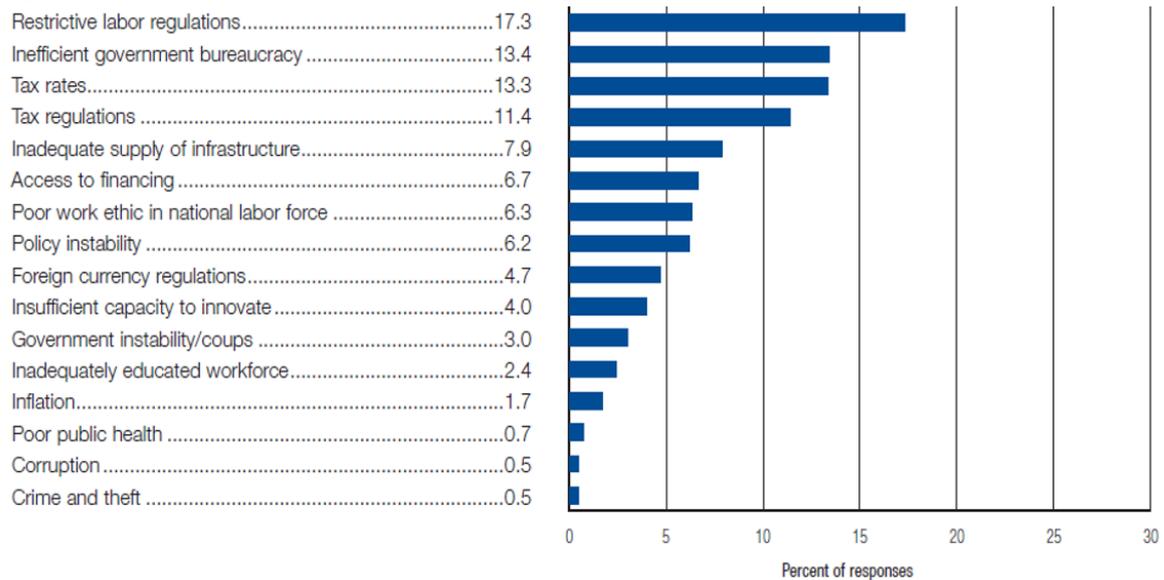


Source: World Economic Forum, World Competitiveness Report 2013-14, pg.110.

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 20. 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 20 Most problematic factors for doing business in Australia, 2013/14

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 Australian jurisdictions.

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 Final Report aim to ensure 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 (for instance, 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.⁹⁹ 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.¹⁰⁰

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

The public infrastructure section of this chapter considers both economic and social infrastructure (see Section 4.2). The section relates to capital expenditure in both categories.

This chapter also addresses a number of related issues, and is broadly structured as follows:

- a summary of infrastructure spending in Western Australia;
- a review of how the Government invests in infrastructure; and
- a review of which assets the Government should own and operate, including an assessment of which existing assets the ERA considers suitable for divestment.

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.¹⁰¹

In 2008, the Productivity Commission published an internal research memorandum on the link between infrastructure and productivity growth.¹⁰² The Productivity Commission

⁹⁹ Oxford University Press, Oxford Dictionaries Online: *Infrastructure*, 2014, <http://www.oxforddictionaries.com/definition/english/infrastructure> (accessed on 18 July 2014).

¹⁰⁰ Productivity Commission, *Public Infrastructure Draft Report*, Volume 1, 2013, p.47.

¹⁰¹ Matton R., *Infrastructure and State Economic Development: A survey of the issues*, *Emerging Challenges: New Insights on the Economy and Society*, 2004.

¹⁰² Productivity Commission, *Econometric Modelling of Infrastructure and Australia's Productivity*, 2008.

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.”*¹⁰³

What is certain is that infrastructure is an enabler of productivity. It increases the capacity of the economy, and provides the support that businesses and individuals need to work. Infrastructure is of particular importance at this point in time in Western Australia, as it needs to provide for the State’s growing population and resource-focused economy. However, without adequate incentives the benefits of infrastructure may not be maximised.

Infrastructure expenditure is best optimised by evaluating each project on a case-by-case basis.¹⁰⁴ That is, the potential of infrastructure expenditure to raise economic growth depends largely upon the ability of a government to implement good project evaluation processes.

4.1.2 Infrastructure spending in Western Australia

4.1.2.1 Current State Government infrastructure expenditure

Comparison of the various interstate Budget Papers for 2013-14 shows that capital expenditure in Western Australia is in line with other jurisdictions as a proportion of economic activity, but is significantly higher on a per capita basis (by 60 per cent). While 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 than other State Governments in a number of sectors of the State economy.

Table 4 shows that the allocation of infrastructure expenditure across the health, education, and water sectors in Western Australia is broadly consistent with allocations 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).

¹⁰³ Productivity Commission, *Econometric Modelling of Infrastructure and Australia’s Productivity*, 2008, p.11.

¹⁰⁴ Gramlich E., *Infrastructure Investment: a Review Essay*, *Journal of Economic Literature*, Vol. 32 (3), 1994, 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: Western Australian Department of Treasury, 2013-14 State Budget Paper No. 3: Economic and Fiscal Outlook, 2013 and equivalent budget papers from the Governments of New South Wales, Victoria, Queensland, and South Australia.

* 'Other agencies' includes investments in Finance, State Development, and Sport and Recreation.

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

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 by 689 per cent, and electricity expenditure by 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 having been allocated \$1.2 billion in the 2014-15 State Budget.¹⁰⁵ 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.

¹⁰⁵ Western Australian Department of Treasury, 2014-15 Budget Paper, Paper No. 2: Budget Statements Volume 2, 2014, p.810.

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: Western Australian Department of Treasury, 2013-14 State Budget Papers No. 3: Economic and Fiscal Outlook, 2003-2013.

* 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

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;¹⁰⁶ 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 is more accurately defined.¹⁰⁷

The reasons for cost overruns vary from project to project, reflecting individual circumstances. However, a survey of the academic literature indicates several recurring causes of cost overruns, which are also likely to have been present in Western Australia.¹⁰⁸ These include:

- lack of understanding of large or complex projects;
- under-costing and understatement of risk for large costs by project proponents; and
- premature announcements of large projects before full costing and analysis has been undertaken, such as announcements during an election campaign.¹⁰⁹

¹⁰⁶ Office of the Auditor General Western Australia, *Western Australian Auditor General's Report Major Capital Projects*, 2012, p. 8.

¹⁰⁷ Office of the Auditor General Western Australia, *Western Australian Auditor General's Report Major Capital Works*, 2012, p. 7.

¹⁰⁸ 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.

¹⁰⁹ 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 at its planned cost.

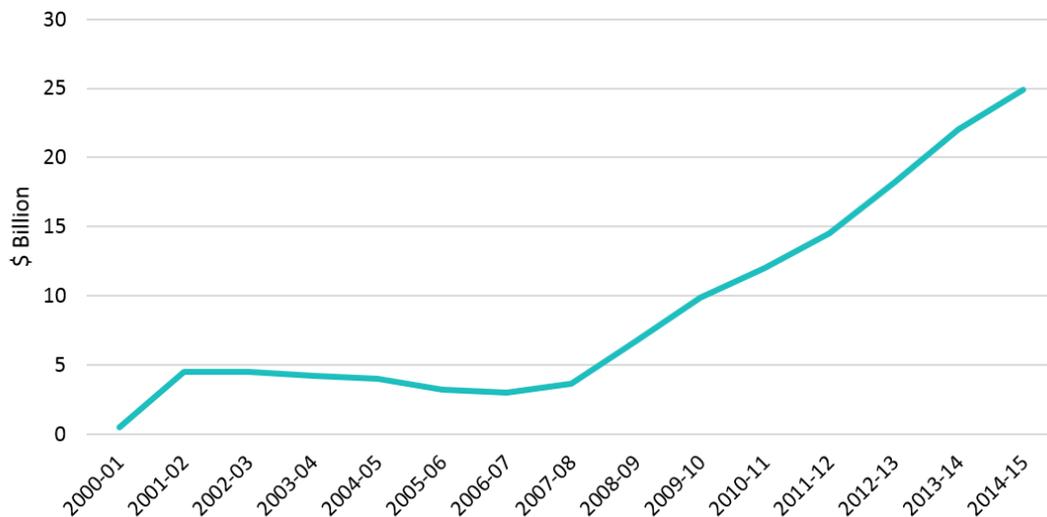
4.1.3 Current Government financial situation

Western Australia's current financial situation needs to be viewed within the context of the State's rapidly growing and ageing population, rapid economic growth, and geographical dispersion of the population. Additionally, the State's tax base is relatively limited and does not necessarily grow in line with the economy (see Chapter 6 on State Taxes).

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

Figure 21 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,¹¹⁰ are not consistent with maintaining a high credit rating. The State's net debt situation and the Government's focus on the credit rating will place more constraints on infrastructure funding in the future.

Figure 21 Net Debt – State of Western Australia (\$ Billion)



Source: Western Australian Department of Treasury, 2013-14 State Budget Paper No. 3: Economic and Fiscal Outlook, Years 2003 to 2014.

Credit ratings have practical implications for governments, in that they influence the interest rate paid in debt markets. More importantly however, credit ratings have an impact on business confidence, providing a signal to investors that the State is a stable, safe and low risk place to invest.¹¹¹

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:

¹¹⁰ Infrastructure expenditure has not been the only factor contributing to net debt. General increases in operating expenditure have also made a significant contribution.

¹¹¹ Ministerial Media Statement, Hon Troy Buswell MLA, Treasurer, Rating agency warning spurs State Government budget resolve, 2009 <http://www.wa.liberal.org.au/article/rating-agency-warning-spurs-state-government-budget-resolve> (accessed on 28 January 2014).

- 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 (TNPS) net debt to revenue ratio at or below 55 per cent.¹¹²

The Western Australian Treasury states that these financial targets are closely aligned with the criteria assessed by ratings agencies, and the outlook for these targets reflects the underlying causes of the negative assessment by both ratings agencies of the State's finances.¹¹³ As discussed in Chapter 3, the Western Australian Government is currently in the process of further reducing capital and operating expenditure in response to the downgrading of its credit rating by Standard and Poor's from AAA to AA+ in September 2013.

The *2014-15 State Budget* identifies the Government's most recent forecast of its expected performance in achieving financial targets. The Government expects to achieve one of the two infrastructure-related targets over the forward estimate period. Financial target compliance is given in Table 6.

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

	2013-14 Estimated Actual	2014-15 Estimate	2015-16 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	No	No	No

Source: Western Australian Department of Treasury, *2014-15 Budget Paper, Paper No. 3: Economic and Fiscal Outlook, 2014*, p. 65.

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. Further, a review of State-owned assets would be beneficial in identifying where the private sector can be utilised, either through divestment or participation in service provision, to increase the efficiency and productivity of Government 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 the 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 the Government's performance in infrastructure projects has guided selection of the reforms.

These priority reforms have been selected against a background of increased demand for infrastructure created by population and demographic pressures, and diminishing

¹¹² Western Australian Department of Treasury, *2014-15 Budget Paper, Paper No. 3: Economic and Fiscal Outlook, 2014*, p.65.

¹¹³ Western Australian Department of Treasury, *2013-14 Budget Paper, Paper No. 3: Economic and Fiscal Outlook, 2013*, p. 56.

Government capacity to fund projects as a result of the tightening budget situation, as discussed in Section 4.1.3.

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.
- **Review Royalties for Regions.** The hypothecation of substantial revenues for regional projects is reducing budget flexibility, inhibiting proper capital prioritisation.
- **Implement congestion charging.** Western Australians spend considerable time stuck in congested traffic during peak periods. Congestion charging can dramatically reduce congestion, and so decrease the productivity losses that are incurred.
- **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.
- **Develop innovative funding sources.** Innovating funding sources could include user charges on existing infrastructure, or increased use of developer charges.
- **Public Private Partnerships.** Benefits from contestability of government services may be delivered by 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.¹¹⁴ 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.

¹¹⁴ McKinsey Global Institute, *Infrastructure productivity: How to save \$1 trillion a year*, 2013.

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 process can be expensive and enduring.

In the Draft Report, the ERA recommended that the Government:

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 they are included in the State Budget; and
3. publish the outcomes of all major project evaluations.

The ERA has not altered its recommendations as all submissions received regarding the recommendations were supportive.

4.2.1.2 Submissions

The ERA received ten submissions in response to its recommendations in the Draft Report.

- The Association of Mining and Exploration Companies (**AMEC**) supports the general intent of the recommendations, which it suggests could result in more efficient planning and implementation of infrastructure solutions. Greater leadership, creativity and innovation are recommended in public policy settings, strategic planning and funding models. "Stranded asset" and collaborative funding models are suggested to encourage private capital.
- The Chamber of Commerce and Industry of Western Australia (**CCIWA**) believes a more robust framework for assessing major infrastructure projects, including transparent cost benefit analysis, will deliver a large net benefit for the State.
- The Chamber of Minerals and Energy of Western Australia (**CMEWA**) supports the recommendations that all election commitments be subjected to rigorous project evaluation and that the outcomes be published. Commitment to projects should be based on priority, financial capacity and net benefit. The identification of optimal projects requires a transparent process to ensure that State funds are spent effectively and efficiently.
- The Civil Contractors Federation WA (**CCFWA**) supports the draft recommendations on infrastructure planning processes, endorsing the view that the potential of infrastructure expenditure to raise economic growth depends largely upon the ability

of the Government to implement good infrastructure investment evaluation processes.

- The Committee for Perth supported the recommendations, adding that they could be strengthened by including requirements for evaluations for all projects in the current budget to be completed and published, establishing a prioritisation process and ensuring all financial alternatives are properly evaluated.
- Mr Martin Sheridan¹¹⁵ supports a review of how new infrastructure is selected, including formalised and de-politicised cost-benefit evaluation.
- The Master Builders Association of Western Australia (**MBAWA**) considers it crucial that the Government improve its decision making processes for major infrastructure investments. Particularly with respect to unreliable election commitments as the uncertainty created undermines the confidence of investors.
- The Property Council of Australia (**PCA**) strongly supports the recommendation to apply project evaluation processes, including cost benefit analysis, consistently and rigorously to all major infrastructure projects. It recommends that evaluations are made public and cost-benefit ratios ranked as part of a long term plan to prioritise infrastructure and provide a bi-partisan investment pipeline. Problems with uncertainty and politicising of infrastructure projects were highlighted in the context of holding costs incurred when the private sector cannot mobilise resources accordingly.

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 the 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 the 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 the Government receives quality information to make decisions.

There are currently fourteen documents in the SAMF series as detailed in Box 1. 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.¹¹⁶

¹¹⁵ Martin Sheridan is an infrastructure specialist.

¹¹⁶ Western Australian Department of Treasury, Strategic Asset Management Framework Guidance, 2010; Infrastructure Australia, National Public Private Partnership Policy Guidelines, 2008 and Government of Western Australia, Infrastructure Procurement Options Guide, 2010.

Box 1 The Strategic Asset Management Framework: Western Australian Department of 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: Western Australian Department of Treasury, *Strategic Asset Management Framework Guidance*, 2014.

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.

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 SAMF...to 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 including...the whole-of-government Strategic Asset Management Framework supporting the Economic Expenditure and Review Committee to Cabinet"

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

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 agencies¹¹⁷ compliant with SAMF or equivalent at 30 June 2013.

¹¹⁷ "Highest value agencies" as defined by Western Australian Department of Treasury includes six Government Trading Enterprises, for whom compliance is currently not mandatory

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

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

Source: Western Australian Department of Treasury, *Annual Report 2012-13, 2013*, 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 Cabinet¹¹⁸ and the Economic Expenditure Review Committee (**EERC**)¹¹⁹ 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.

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.

¹¹⁸ Department of Premier and Cabinet, *Cabinet Handbook 2013, 2013* p.26, http://www.dpc.wa.gov.au/RoleOfGovernment/Documents/Cabinet_Handbook_2013.pdf (accessed on 18 June 2014). “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.”

¹¹⁹ Department of Premier and Cabinet, *Economic and Expenditure Reform Committee Handbook, 2013* p.5, <http://www.dpc.wa.gov.au/RoleOfGovernment/Pages/EconomicandExpenditureReformCommitteeHandbook.aspx> (accessed on 18 June 2014). “Submissions to initiate projects for asset investment should comply with the Capital Investment Policy of the SAMF”.

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 SCI'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, 2009-2014.

In particular, in its October 2012 review of Major Capital Projects, the OAG 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.”¹²⁰

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 (**CBA**).

Agency Strategic 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, *The Banksia Hill Detention Centre Redevelopment Project*, 2013.

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

¹²⁰ Office of the Auditor General, *Major Capital Projects: October 2012, 2013* p.6.

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 Energy'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, Muja AB Project Assessment, 2013.

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

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.¹²¹

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 CBA:¹²²

- *“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 CBA 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.

¹²¹ Productivity Commission, Public Infrastructure Draft Report, 2014, p.75.

¹²² 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 Mid-year 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 stakeholders¹²³ under the unifying concept of economic efficiency.

In particular, the aim of CBA 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. CBA provides the quantitative tool by which this comparison can take place.

In Box 4, an example is given where CBA 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.

The Works Reform Program

The Western Australian Government embarked on the Works Reform Program in 2009. The objectives of the program included improving capabilities in Strategic Asset Management and business case development, eliminating project cost overruns and to strengthen project management capabilities.¹²⁴ The Works Reform Program led to a number of changes to the governance of infrastructure delivery. Two new entities, Building Management and Works (**BMW**) and the Office of Strategic Projects (**OSP**), were created within the Department of Finance to oversee infrastructure planning and delivery.

The OSP appears to have been instrumental in achieving an improvement in the cost and timeliness of project delivery. This is evidenced by a comparison of reviews of project delivery by the Auditor General before and after the commencement of the OSP arising from the involvement of the OSP in projects reviewed by the Auditor General. The ERA therefore considers that the OSP has an important ongoing role in improving infrastructure delivery.

¹²³ Government, the community, financial institutions and industry members are examples of stakeholders.

¹²⁴ Western Australian Department of Treasury and Finance, Works Reform Implementation Plan, 2009.

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.

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 the 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 project¹²⁵ would be delayed, while the Ellenbrook Bus Rapid Transit project¹²⁶ 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 did not receive any submissions regarding fit-for-purpose infrastructure. No changes have been made to the analysis or conclusions from the Draft Report.

4.2.2.3 ERA Analysis

Maximum delivery for minimum cost

In recent times there has been a tendency for the 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.

¹²⁵ 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.

¹²⁶ 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 notes:¹²⁷

“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. Western Australian Department of 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.

¹²⁷ Western Australian Auditor General, Fiona Stanley Hospital Project, 2010.

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.¹²⁸ These include Heavy Rail, Light Rail Transit (LRT) and Bus Rapid Transit (BRT).¹²⁹

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.¹³⁰ With regard to a current example, the Ellenbrook BRT had a cost of \$13.33 million/km¹³¹, the MAX Light Rail project has a total cost of \$86 million/km¹³², 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.¹³³ Both Heavy and Light Rail are also considered to be superior to BRT in inducing land use changes such as Transit Orientated Developments (TODs)¹³⁴ and are better for the environment.¹³⁵

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 pphpd.¹³⁶ Bogota covered 100 per cent of the city for the same cost as a railway covering 16 per cent of the city.

¹²⁸ Government of Western Australia, *Public Transport for Perth in 2031*, 2011, p7.

¹²⁹ Heavy Rail systems are those that run independently 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.

¹³⁰ Currie, *Bus Transit Oriented Development – Strengths and Challenges Relative to Rail*, 2005 and Gardner, *Decision making and large transport infrastructure projects*, 1996.

¹³¹ Department of Transport, *Perth in Focus – Perth Public Transport, Presented to Committee for Perth on 8 November 2012*, 2012 and Thirty-ninth Parliament of Western Australia, First Session, Parliamentary Debates: Legislative Council 17 October 2013, p. 5134, <http://www.parliament.wa.gov.au/WebCMS/WebCMS.nsf/index> (accessed 18 June 2014).

¹³² Western Australian Government, *Metro Area Express (MAX) Light Rail Project: An Overview*, 2013.

¹³³ Currie and Delbosc, *Exploring Comparative Ridership Drivers of Bus Rapid Transit and Light Rail Transit Routes*, 2013.

¹³⁴ TOD's are compact, typically walkable communities centred around high quality public transport systems.

¹³⁵ Currie, *Bus Transit Oriented Development – Strengths and Challenges Relative to Rail*, 2005 and Commissioner for Environmental Sustainability, *Public transport's role in reducing greenhouse emissions*, 2005.

¹³⁶ Public Transport Authority, data provided to the ERA upon request.

- 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.¹³⁷
- Buses can match light rail's environmental performance and in any case is much superior to car travel.
- LRT often shares space with traffic (for example, Melbourne Trams) and offer no substantial time savings over bus services.¹³⁸

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 (**BCRs**)¹³⁹. 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. The Productivity Commission noted 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"*¹⁴⁰

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.

¹³⁷ Henscher, *The imbalance between car and public transport use in urban Australia: why does it exist?* 1998.

¹³⁸ Infrastructure NSW, *First things first: The State Infrastructure Strategy 2012-2032*, 2011, p.96.

¹³⁹ 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.

¹⁴⁰ Productivity Commission, *Public Infrastructure Draft Report: Volume 1*, 2014, p.229.

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 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 Royalties for Regions

4.2.3.1 Issues

The *Royalties for Regions Act 2009 (the Act)* was proclaimed on 27 March 2010 to provide for the operation of the Royalties for Regions (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 for Regional Development, with the Treasurer's agreement, 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.¹⁴¹ The Act places a statutory limit of \$1 billion on the balance of the fund.¹⁴²

The RFR was established as a "hypothecated" fund. Hypothecation is the dedication of a specific source of revenue for a particular expenditure purpose. This is in contrast to the traditional approach of funding government expenditure from a consolidated fund depending on the Government's priorities. The objective of hypothecation is to increase transparency and create a stronger connection between the source of revenue and its expenditure.

The ERA concluded in the Draft Report that hypothecation of royalty income is not an ideal way to demonstrate the Government's commitment to regional development. Hypothecation results in an arbitrary annual allocation of total expenditure, rather than considering economic conditions, affordability, competing government priorities, or the quality of projects under consideration. It would be a coincidence if the amount allocated to regional projects under the program reflected the optimum level of expenditure.

The ERA also concluded that the budgetary impact of this hypothecation of royalty income has been compounded by the offsetting effect that royalty income has on the State's Goods and Services Tax (GST) revenue grants. This has resulted in the proportion of the budget available for regional expenditure being higher than anticipated. Lack of budget flexibility was a significant contributor to Standard & Poor's recent downgrade of the State's credit rating.¹⁴³

In the Draft Report, the ERA recommended that the RFR program be repealed, or restricted to an amount determined annually as part of the budget process.

The impact of the 2014-15 State Budget on Royalties for Regions

The 2014-15 State Budget (which was handed down after the release of the Draft Report) contained significant changes to the operation of the RFR program, substantially addressing the ERA's concerns.

In the Budget Speech delivered to Parliament, the Treasurer announced that, in addition to the (existing) legislative \$1 billion cap on the balance of the fund, there would also be an annual expenditure limit of \$1 billion. The Treasurer further stated that:

¹⁴¹ Western Australian Consolidated Acts, Royalties for Regions Act 2009, s.9, http://www.austlii.edu.au/au/legis/wa/consol_act/rfra2009252/ (accessed 18 June 2014).

¹⁴² Western Australian Consolidated Acts, Royalties for Regions Act 2009, s.6.3, 7.2 and 8, http://www.austlii.edu.au/au/legis/wa/consol_act/rfra2009252/ (accessed 18 June 2014).

¹⁴³ Standard and Poor's, *Rating on Western Australia Lowered to 'AA+' on Fiscal Pressures; Outlook Revised to Stable; 'A-1+' S-T Rating Affirmed*, 2013.

*“our decision to cap expenditure from the Fund is appropriate to ensure the State’s limited funds are spent where they are most needed”.*¹⁴⁴

Treasury estimates a \$2.7 billion reduction in gross borrowings will result from this expenditure cap¹⁴⁵ and proposes that the cap be reviewed annually.¹⁴⁶

This change in policy has several significant implications for the RFR program. The measures effectively remove \$3.1 billion from the funding available to the program, despite a \$749 million increase in forecast royalties for the three years projected in the current Budget. As a result, regional funding is forecast to average 14 per cent of royalty income over the budget period, as shown in the Table 10.

Table 10 2014-15 State Budget forecasts of royalties and the RFR program (\$m)

	2015	2016	2017	2018	Total
Forecast Royalties Income	6,176	6,978	7,393	7,665	28,212
Hypothecation Funding of 25%	1,544	1,745	1,848	1,916	7,053
Saving from \$1 billion cap	544	745	848	916	3,053
RFR Percentage of Royalties	16%	14%	14%	13%	14%

Source: Western Australian Department of Treasury, *2014-15 Budget Paper No. 3: Economic and Fiscal Outlook*, 2014, p.89.

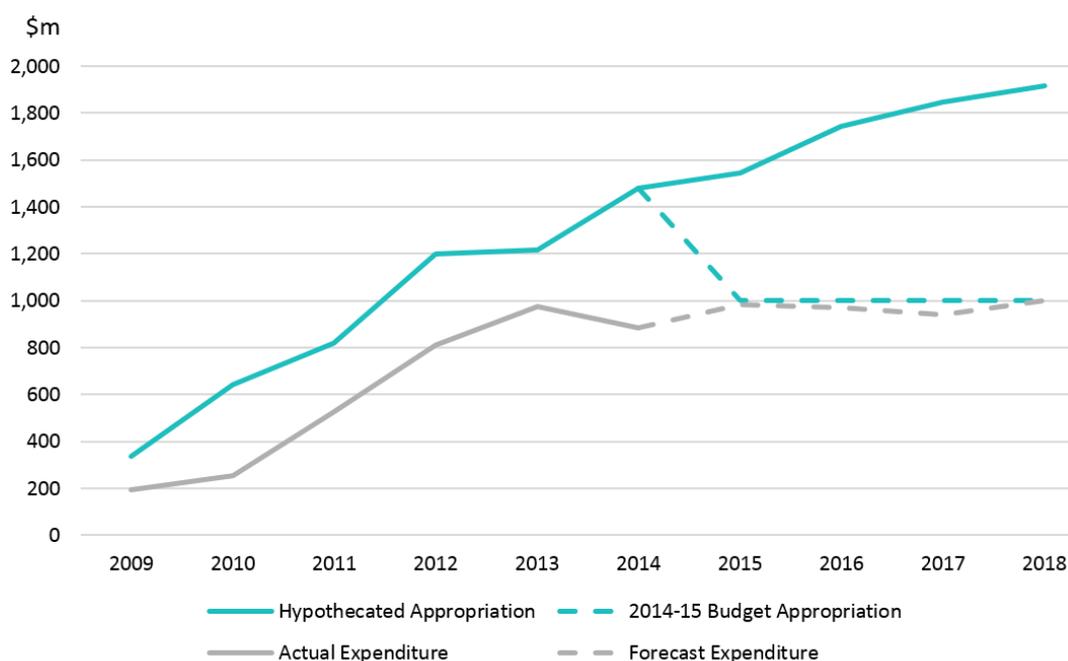
The effect of these budget measures on funding for the RFR program is illustrated in Figure 22. Funding has been capped at the level reached in 2011, while expenditure is forecast to be held at the level reached in 2013. This is because actual RFR expenditure to date has remained well below the hypothecated amount.

The expenditure cap will hold RFR expenditure to a level well below the amount that would otherwise be allocated, assuming that 25 per cent of royalty income is hypothecated to regional projects.

¹⁴⁴ Honourable Dr. Mike Nahan MLA, Treasurer, *2014-15 Budget Speech*, Thursday 8 May 2014, p.5.

¹⁴⁵ Western Australian Department of Treasury, *2014-15 Budget Paper No. 3: Economic and Fiscal Outlook*, 2014, p.3.

¹⁴⁶ Western Australian Department of Treasury, *2014-15 Budget Paper No. 3: Economic and Fiscal Outlook*, 2014, p.199.

Figure 22 Impact of 2014-15 Budget measures on Royalties for Regions

Source ERA Analysis and Western Australian Department of Treasury, 2014-15 Budget Paper No. 3: Economic and Fiscal Outlook and Budget Paper No.2: Volume 1, 2014.

So long as the forecast royalties remain above \$4 billion per annum,¹⁴⁷ the RFR fund will no longer have any effective characteristics of hypothecation. Royalties will remain a theoretical source of funding, but there will no longer be any substantive link between the funding source and its expenditure. In other words, the amount of royalty income will no longer dictate aggregate expenditure under the program.

Under these circumstances, the ERA considers that optimal expenditure on regional priorities can now be achieved under two conditions:

- if the expenditure cap is actively managed; and
- if good processes are followed in the selection of projects.

The ERA considers that the recommendation in the Draft Report to restrict regional funding has effectively been implemented with the introduction of the expenditure cap and a commitment to review that cap annually. However, the ERA notes that a recent review of the program by the Office of the Auditor General (OAG) has raised some concerns about the application of governance processes.¹⁴⁸

4.2.3.2 Submissions

The ERA received 35 submissions in response to its draft recommendation on the Royalties for Regions program. The majority of submissions (23 out of 35) originated from regional city and shire councils. These submissions¹⁴⁹ focussed on how the RFR had funded a

¹⁴⁷ Such that potential RFR funding remains above the \$1 billion expenditure cap.

¹⁴⁸ Office of the Auditor General, *Royalties for Regions – are the benefits being realised?*, Report 13, June 2014.

¹⁴⁹ These submissions were received from the Shires of Kondinin, Mingenew, Gnowangerup, Cue, Dardanup, Ashburton, Wandering, Collie, Bridgetown-Greenbushes, Capel, Jerramungup, Morawa, Cranbrook, Upper Gascoyne, Dalwallinu, Ashburton, Denmark, Wiluna and Plantagenet; the cities of Bunbury, Busselton and Greater Geraldton; the Central Country Zone of WALGA and Bunbury Wellington Economic Alliance; Katanning Furniture, and Parliamentary

substantial number of projects, and noted that funding to regional areas had been considerably lower prior to the introduction of the RFR program.

The submissions raised a number of further arguments in support of the program. These include that RFR:

- has allowed for a significant improvement in regional amenities, sport and recreational facilities, cultural events, transport, health, and community resources, relieving an infrastructure backlog in the regions created by historic under-funding;
- attracts (and retains) people to regional areas and benefits tourism;
- is equitable, as resource royalties originate from the regions;
- guarantees regional funding is not vulnerable to political processes or penalised for lower proportional representation in Parliament;
- ensures a fairer balance between expenditure on metropolitan and regional infrastructure and services, allowing regional communities to have services that are comparable to their metropolitan counterparts;
- ensures better decision making, since rural local governments are better placed to determine local priorities;
- encourages a population shift away from metropolitan centres, relieving infrastructure pressures in the State's urban areas;
- ensures the financial sustainability of local governments, promoting economic growth and social benefits;
- leverages off other sources of capability, finance and funding from the Commonwealth, not-for-profit, local government and private sectors;
- has the most comprehensive and rigorous administration, reporting and compliance of any State Government program; and
- addresses inequities created by a fly-in-fly-out workforce who require access to regional infrastructure and services, but do not contribute to local government income.

The Department of Regional Development submitted that there are robust governance processes in place to ensure rigorous evaluation and effective project selection. It provided a number of examples, including the Regional Investment Blueprints and Southern Investment Initiatives. It is further argued that RFR projects are the only government program subject to two separate Cabinet approval processes prior to the approval of expenditure.

The PCA expressed support for regional investment. However, it urged the Government to give the Department of Planning's Infrastructure Coordinating Committee a greater role in prioritising infrastructure needs for regional funding. It also questioned the effectiveness of

National Party of Australia (WA); the Western Australian Local Government Association; the West Australian Regional Development Trust; and the Department of Regional Development.

the Future Fund and RFR in addressing infrastructure bottlenecks, efficiency gains, and productivity improvements.

Submissions from the CCFWA and CMEWA both endorsed the view expressed in the Draft Report that regional projects should compete for funding with metropolitan projects. The CCFWA suggested that a weighting be given to cost benefit analysis to encourage regional projects. The CMEWA supported a review of the RFR framework, and increased competition for regional funding against other infrastructure priorities, noting that a more rigorous and transparent evaluation and prioritisation process should be established to ensure the efficient use of RFR funding.

4.2.3.3 ERA analysis

The ERA's main concern about Royalties for Regions in the Draft Report related to the hypothecation of a revenue source and the impact this had on the flexibility of the State budget. As discussed, this issue was largely addressed by the 2014/15 State Budget.

The ERA did not examine the project evaluation and selection processes undertaken as part of the RFR program in detail, as this was not its primary concern and because it was aware of the review being conducted by the Office of the Auditor General. Nevertheless, the ERA makes some high level observations on the RFR sub-funds and strategic funding allocations, and summarises the findings of the OAG on RFR funding approval processes.

Use of sub-funds

The RFR program distributes funds for investment in regional projects, infrastructure, and community services through a number of sub-funds. Currently these funds include the Country Local Government Fund, the Regional Community Services Fund, the Infrastructure and Headwork's Fund, and Regional State-wide initiatives.

Each RFR sub-fund has distinct objectives. For example, the primary objective of the Country Local Government Fund has been to address infrastructure needs across the country local government sector, while the Regional Community Services Fund aims to improve access to services in the regions.

Analysis of historical and forecast expenditure reveals that Government is pro-active in managing allocations to each sub-fund within the RFR program. This has been demonstrated by, for example, phasing out of the Country Local Government Fund over the current budget period, whilst simultaneously increasing the funding available to Regional State-wide Initiatives.

Pro-active management of the funding allocated to each RFR sub-fund encourages beneficial competition between RFR programs, while ensuring the continued relevance of each program within Government's policy framework.

The Department of Regional Development advises that:

"...the entire Fund's expenditure is reviewed by the Economic and Expenditure [Review] Committee and is part of normal reporting in the Budget Papers. The Fund is not isolated from 'normal' Government expenditure – in fact it is very much based on standard scrutiny, review, accounting and reporting practices."¹⁵⁰

¹⁵⁰ Communication with Mr Paul Rosair, Director General, Department of Regional Development, 26 June 2014.

Strategic Funding Allocation

In its submission, the Department of Regional Development highlights recent efforts of the Regional Investment Blueprint (**Blueprint**) to link regional investment with the Draft State Planning Strategy. The State Planning and Development Framework has been developed to connect priorities identified under the State Planning Strategy to regional and local government planning.¹⁵¹

The Blueprint initiative involves each Regional Development Commission preparing regional socio-economic development strategies. These Blueprints will outline regional growth and development aspirations, transformative strategies, priority implementation actions and investment opportunities.¹⁵² The Blueprints will outline how the regions can become competitive in taking the pressure off urban growth and provide alternatives for living in the regions.¹⁵³

The ERA considers that the Blueprint will likely improve infrastructure planning and has the potential to provide a stronger strategic foundation for future regional projects.¹⁵⁴

However, the ERA has been unable to assess the practical effectiveness of the Blueprints, as they are not due to be completed by mid-2014. Until the Blueprints are completed and the subsequent budget allocations have occurred, the effectiveness of these strategies cannot be determined.

The Royalties for Regions funding approval process

The approval process for RFR funding plays an important role in ensuring optimum outcomes in the allocation of funding to regional projects. As with other large Government programs¹⁵⁵, funding approval from Cabinet is a multi-staged process: the first approval considers the global allocation to the program each year (as part of the budget process), and the second (and subsequent) stages of approval require on-going Cabinet consideration of each specific business case.

In its submission, the Department of Regional Development provided a detailed description of the governance framework for the RFR program. Project selection is described as a consultative process including a Directors General Reference Group, comprising 21 heads of key State Government Agencies. Selected projects then require detailed business cases, which undergo due diligence in consultation with the Department of Treasury, before being submitted to Cabinet for approval.

The 2014-15 State Budget refers frequently to the requirement for business case approval. The successful submission of detailed business cases to support the future release of funding is required for: the Southern Investment Initiative; Regional Strategic Projects; Regional and State-wide Initiatives; and Regional Blueprints.¹⁵⁶ The Department of

¹⁵¹ Department of Regional Development, Submission to the Draft Report of Microeconomic Reform in Western Australia, 2014, pg. 6.

¹⁵² Western Australian Government, *2014-15 State Budget Paper No. 3*, 2014, p.200.

¹⁵³ Western Australian Regional Development Trust, *Submission to the Draft Report of Microeconomic Reform in Western Australia*, 2014, pg. 6.

¹⁵⁴ For more details on nationally recognised best practice in infrastructure planning, see Infrastructure Australia and Australian Academy of Technological Sciences and Engineering, April 2013, *Infrastructure Planning: Towards Best Practice*.

¹⁵⁵ In particular those involving the allocation of sports grants or Public Private Partnerships.

¹⁵⁶ Western Australian Government, *2014-15 Budget Paper No. 3*, 2014, see pp. 199- 201 & 208.

Regional Development's budget allocations for each program are uniquely referred to as "provisional", with reference to the requirement for the second-stage approval for funding.¹⁵⁷

The preparation of detailed, robust business cases provides a meaningful basis upon which to commit to a project. It provides reliable cost and timing information and allows better decision making by Government between competing priorities. The two-stage approval process is viewed as a vital mechanism for ensuring that expenditure is limited to projects that represent value for money relative to other proposals before Government.

However, the ERA notes that the OAG's June 2014 review of the program raised some issues with the program's current governance processes, finding that:¹⁵⁸

- various examples of projects submitted for approval did not clearly demonstrate the outcomes that would be delivered, or the sustainability of the projects in the longer term;
- the indicators intended to benchmark and measure the effectiveness of project funding have not been implemented to date;
- 140 projects worth approximately \$730 million were signed with non-Government entities before 1 July 2013 (when there was no requirement to demonstrate the long term sustainability of projects in business cases);
- only half of the business cases reviewed by the OAG complied with requirements to include specific and measurable outcomes;
- evaluation reports for projects only reported what was delivered, and not whether the projects met their intended outcomes; and
- there is no monitoring system in place to track project progress, nor the overall RFR programme. With over 3,500 projects approved to date, the OAG questioned the capacity of the Department of Regional Development to monitor and identify the potential issues, risks, and successes arising from the program.

The OAG provided five recommendations to the Department of Regional Development, intended to address these issues and strengthen the governance processes of the Department for the RFR program:¹⁵⁹

"The Department should:

- *review the appropriateness of its outcomes based Evaluation Framework. Specifically, whether some projects are best funded and later evaluated solely against the delivery of outputs.*
- *consistently apply its Evaluation Framework and ensure:*
 - *all project business cases clearly identify specific and measurable outcome (or if necessary output) measures*
 - *all business cases progressed by the Department to Cabinet for approval demonstrate alignment to the RfR objectives*
 - *it has a logical basis for selecting projects for evaluation.*
- *implement high level indicators for the six RfR objectives. These indicators should be used by the Department to align project outcomes to the RfR objectives as*

¹⁵⁷ Western Australian Government, 2014-15 Budget Paper No. 3, pp.123-133.

¹⁵⁸ Office of the Auditor General, 2014, *op. cit.*, p.6.

¹⁵⁹ Office of the Auditor General, 2014, *op. cit.*, pp.7-8.

part of its funding recommendations to Cabinet, and to measure progress towards achieving the RfR objectives.

- *ensure that all project business cases address project sustainability.*
- *implement a monitoring system that provides oversight of project progress and the program.”*

Conclusion

The ERA considers that its recommendation in the Draft Report to restrict regional funding has effectively been implemented with the introduction of the expenditure cap in the 2014-15 State Budget and annual reviews of this cap. The ERA supports this initiative but also stresses the need for stringent management of the expenditure.

The ERA has not reviewed the governance arrangements of the RFR program in detail. However, the ERA notes that the OAG’s June 2014 review of the program raised some issues with program’s current governance processes.

4.2.3.4 Recommendations

4. Proactively manage the Royalties for Regions’ annual expenditure limit.
5. Ensure Royalties for Regions’ governance measures are adhered to, and review the effectiveness of these measures periodically.

4.2.4 Congestion charging

4.2.4.1 Issue

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

Congestion also affects those who choose alternative modes of transport. For instance, it reduces the reliability and average speed of bus services, leading to less efficient use of the Government's public transport assets. It can also increase the incidence of accidents, which may involve cyclists and pedestrians as well as drivers.¹⁶⁰

In this section, the ERA examines international experiences of congestion charging as a solution to inner-city congestion, and considers the feasibility and likely impacts of a Perth congestion charging scheme. The ERA considers that congestion charging is a highly effective congestion management strategy. It also delivers environmental and safety benefits, as well as opportunities to develop efficient and sustainable public transport services.

Approaches to congestion management

The most publically acceptable method for combating congestion is generally the expansion of existing road capacity. However, increasing the capacity of roads has, at best, no long-term impact on congestion^{161,162} and may even lead to an increase in congestion over time.¹⁶³ Widening existing roads and building new ones merely provides commuters with further incentive to drive, with traffic levels continuing to rise until congestion returns. It also diverts funding from more effective long-term solutions (such as public transport investment) to build road infrastructure that is unlikely to resolve the problem.

Many urban economists agree that a form of congestion charge is the best method of combating congestion.¹⁶⁴ However, congestion charges often lack public support, since they require users to pay for something that they have previously received for free. Additionally, such charges can lack support when they are perceived as a 'revenue grab' by Government. The main objective of a congestion charging scheme is to change consumer behaviour, rather than simply to raise revenue, by providing an incentive for drivers to travel outside peak times and choose other modes of travel. This, in turn, improves the liveability and productivity of the city centre. The revenue that is earned through such a charge is secondary to the traffic management objectives, and may be used to make further improvements to transport infrastructure or other beneficial investments.

¹⁶⁰ Transport for London estimates that congestion charging has directly led to between 40 and 70 fewer personal injury road accidents in the charging zone per year. Source: Transport for London, *Central London Congestion Charging: Impacts Monitoring*, Fifth Annual Report, 2007, London.)

¹⁶¹ Downs.A., *Why Traffic Congestion is Here to Stay...and Will Get Worse*, 2004.

¹⁶² Gilles Duranton, Matthew A. Turner, The Fundamental Law of Road Congestion: Evidence from U.S. Cities, *American Economic Review*, Volume 101, Number 6, 2011, pp. 2616–2652, October 2011.

¹⁶³ Arnott and Small, The Economics of Traffic Congestion, *American Scientist*, Volume 82, 1994, pp. 446-455.

¹⁶⁴ Based on a study by Small and Gomez-Ibanez. (Small and Gomez-Ibanez, *Road pricing for congestion management: the transition from theory to policy*, 1998.)

Calls for congestion charging have gained momentum in recent times with transport experts¹⁶⁵ and economists¹⁶⁶ stating that a charge is necessary to ensure that Perth avoids the gridlock that plagues Sydney and Melbourne. The Productivity Commission has also encouraged State and Territory Governments to take advantage of developments in technology to trial direct user charging across road networks.¹⁶⁷ 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.

The ERA considers that the productivity losses resulting from traffic congestion in Perth are significant, and will continue to increase into the future, warranting an investigation into the implementation of a congestion charge. While current congestion levels are not yet as high as those seen in larger Australian and overseas cities, use of a congestion charge to manage traffic and improve public transport may prevent Perth from eventually facing the problems encountered elsewhere in the future.

4.2.4.2 Submissions

The ERA received seven public submissions in response to its draft recommendation on congestion charging. The majority of these submissions were broadly supportive of congestion charging, providing comments on key issues such as the most appropriate use of congestion charging revenue, and public transport capacity.

All of the submissions received on the topic supported further research into a variety of approaches to congestion management, but were largely undecided as to whether congestion charging was the best option. Those submissions were:

- The **(CCIWA)** supports a review of mechanisms aimed at combating congestion in the Perth CBD. CCIWA notes that the current Perth Parking Levy (**PPL**) is an indirect tax that is aimed at reducing congestion, but is largely ineffective due to a lack of transparency.
- The Civil Contractors Federation WA (**CCFWA**) supports further investigation into a Central Business District (**CBD**) congestion charge during peak periods. However, the CCFWA questions the practicality of expanding the public transport system's capacity sufficiently to cope with extra patronage resulting from a congestion charge.
- The PCA recommends abolishing the PPL, and undertaking investigation into more equitable congestion management strategies. The PCA would not support a trial of congestion charging on top of the existing PPL.
- The Western Australian Local Government Association (**WALGA**) acknowledges the need to address congestion issues in the CBD, and believes trialling a congestion charge could be worthwhile. However, WALGA considers that further investigation is required regarding exemptions, public transport access, parking capacity in bordering facilities (such as bus and train stations), the diversion of traffic onto local roads, and the impact of long and short term parking bays on CBD traffic.
- Riverpark Consulting considers that further investigation is required prior to the introduction of a congestion charge. This investigation should consider the current

¹⁶⁵ Moving People 2030 Taskforce, *Moving Australia 2030: A Transport Plan for a Productive and Active Australia*, 2013.

¹⁶⁶ CEDA, *Stifling Success: Congestion charges and infrastructure delivery*, 2012.

¹⁶⁷ Productivity Commission, *Public Infrastructure Draft Report: Volume 1*, 2014.

PPL, the inflexibility of work start times, the capacity and cost of providing public transport, and the impact of a congestion charge on the transport industry.

- The Committee for Perth opposes congestion charging, but considers other congestion mitigation strategies should be reviewed. The Committee for Perth states that:
 - it considers congestion charging a blunt instrument to address a system and region-wide issue; and
 - in the event such a scheme is introduced, there will be a need for a thorough review of the parameters and structure of the potential congestion charge, the capacity of the public transport system to meet increased demand, the availability of alternative modes of travel, and any potentially unintended consequences.
- Mr Sheridan does not comment on the appropriateness of a congestion charge, but stated that if one was to be implemented then:
 - the revenue earned should be hypothecated for investment in alternative transport solutions; and
 - consideration should also be given to the boundaries of the charging area, and the need for traffic to be able to be diverted around the charging area.

4.2.4.3 ERA analysis

What causes congestion?

Congestion generally occurs during peak times, when large numbers of commuters are travelling to work and school. This happens because, as the volume of traffic approaches the capacity of the road, a small disruption to traffic flow can have a large impact, causing traffic to slow or stop for long periods of time.

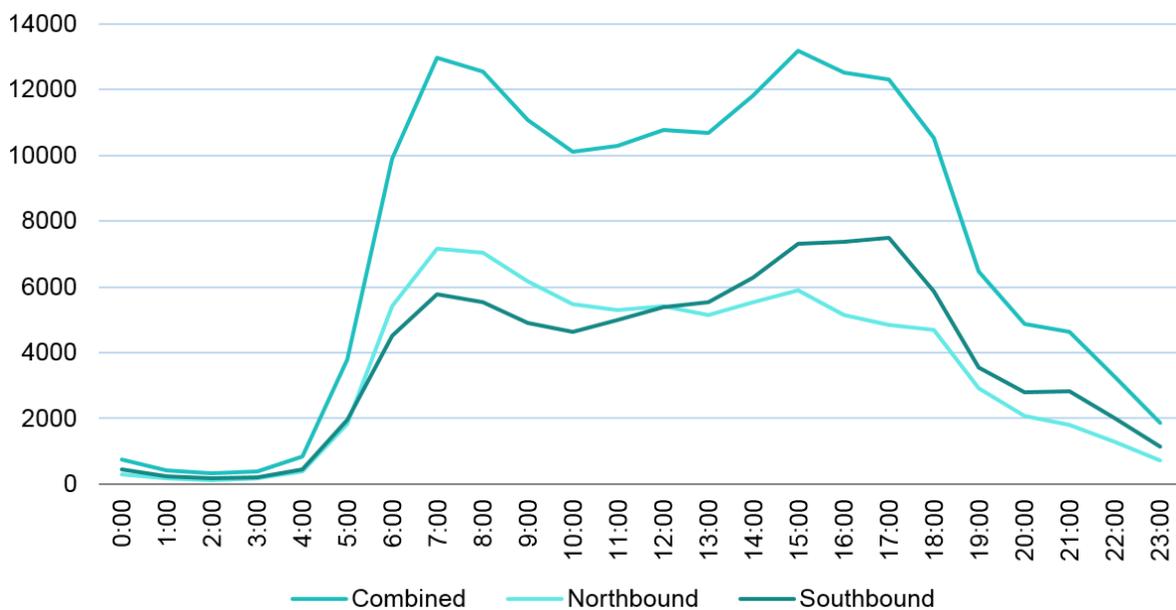
Events such as accidents or lane closures due to roadworks can interrupt traffic flow. Additionally, traffic engineers have found that even minor occurrences – for example, a single driver braking or changing lanes abruptly in heavy traffic – can be enough to trigger a traffic jam.¹⁶⁸ Such incidents are virtually unavoidable when large numbers of drivers are using the road.

Current congestion levels in Perth

Perth congestion is currently largely confined to morning and evening peak periods, as people commute to and from work and school. Figure 23 shows traffic volumes for the Kwinana Freeway, clearly illustrating the existence of morning and afternoon peak periods of travel. During these periods, traffic is around 30 per cent higher than during the shoulder periods.¹⁶⁹

¹⁶⁸ Ball, P, *Critical Mass*, New York, 2004.

¹⁶⁹ Shoulder periods refer to the periods of moderate traffic volume, immediately adjacent to peaks.

Figure 23 Kwinana Freeway traffic volume, daily average 2013¹⁷⁰

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

Reducing Perth's peak period traffic by as little as 5% may increase traffic speeds by as much as 30%

Perth traffic generally flows freely during the middle of the day (although specific bottlenecks do sometimes occur), even though there is only a small decrease in traffic volume from congested peak periods. This suggests that a relatively small decrease in peak traffic may 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.¹⁷¹

The costs of congestion

Congestion can have a large economic impact, costing Australia billions of dollars in lost productivity.¹⁷² When a driver enters a congested road, they not only face direct costs (such as fuel and their own time) but also impose costs on all of the drivers already on the road by further adding to the congestion.¹⁷³

The Bureau of Infrastructure, Transport and Regional Economics (**BITRE**) has identified four types of cost that arise as a result of congestion:

1. increased travel times;
2. increased uncertainty surrounding travel times (where drivers are unable to determine the length of delays arising from congestion, and so allocate more time to travel to avoid being late);

¹⁷⁰ 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.

¹⁷¹ Victoria Transport Policy Institute, *Congestion Reduction Strategies*, 2013.

¹⁷² Bureau of Infrastructure, Transport and Regional Economics, *Estimating urban traffic and congestion cost trends for Australian cities*, 2007.

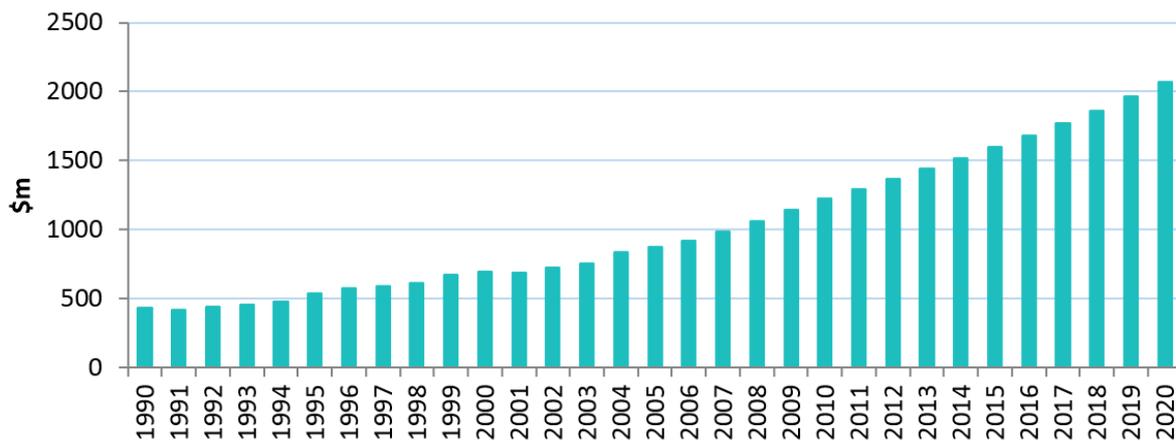
¹⁷³ In economic terms, congestion is considered a problem when the benefits derived by the additional driver from being on the road are less than the costs that that driver directly faces plus the costs that they impose on all other drivers.

3. increased fuel consumption; and
4. the environmental costs posed by pollution (vehicles under congestion emit more pollutants than those in free travelling conditions).

In 2005, BITRE estimated that the avoidable costs of congestion in Perth were as high as \$900 million.¹⁷⁴ As shown in Figure 24, BITRE forecasts that these costs will continue to rise, reaching \$1.6 billion in 2015 and over \$2 billion in 2020.¹⁷⁵

The cost of congestion in Perth is forecast to rise to \$1.6 billion in 2015, and over \$2 billion by 2020.

Figure 24 Avoidable costs of congestion, Perth 1990-2020



Source: BITRE¹⁷⁶

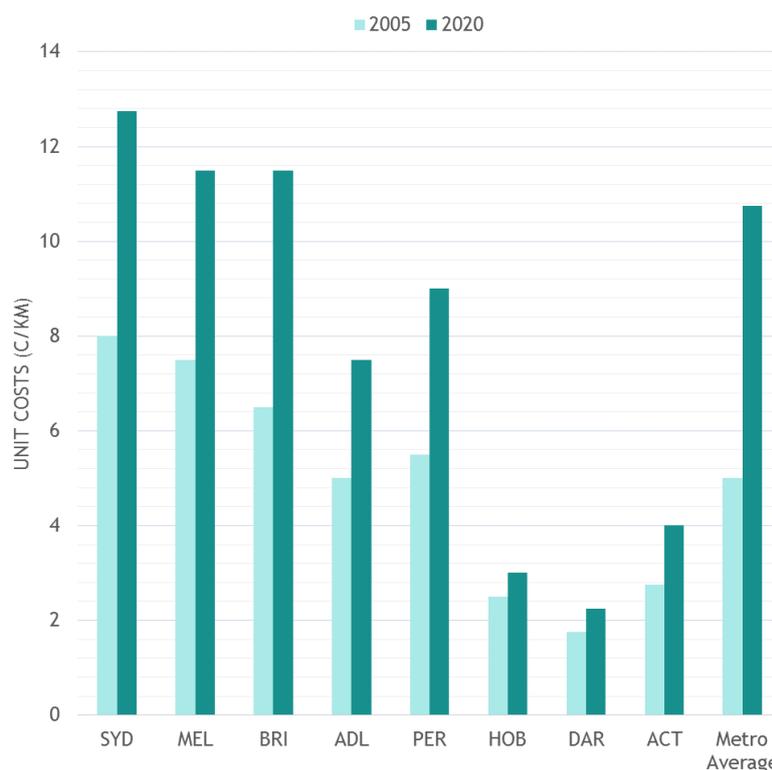
BITRE also compared this cost of congestion across Australian capital cities, calculating a cost of around 5.5 cents per kilometre travelled in Perth in 2005, as compared to a national average of between 6 and 7 cents per kilometre.

Figure 25 illustrates per-kilometre costs across all capital cities. It shows a forecast spike in the Perth per-kilometre cost of congestion by 2020, rising to around 9 cents / kilometre. This is in line with the estimated increase in the national average to between 10 and 11 cents per kilometre. The forecasts indicate that, without intervention, the costs of congestion – both overall and in per-kilometre terms – will only increase over time.

¹⁷⁴ The total costs of congestion can theoretically be measured as the difference in each cost category at current congestion levels, versus that during uncongested conditions. However, some level of congestion is practically unavoidable and it is not practicable (nor desirable on efficiency grounds) to reduce congestion to zero. Thus, the BITRE estimates are based on the avoidable costs of congestion (that is, costs that would be saved through appropriate intervention).

¹⁷⁵ Bureau of Infrastructure, Transport and Regional Economics, 2007, *Estimating urban traffic and congestion cost trends for Australian cities*, Canberra, 2007.

¹⁷⁶ Bureau of Infrastructure, Transport and Regional Economics, 2007, *op. cit.*

Figure 25 Congestion costs in Australian capital cities, 2005 and 2020 forecast

Source: Bureau of Infrastructure, Transport and Regional Economics, 2006, *Estimating urban traffic and congestion cost trends for Australian cities*, Working Paper 71, p. 16.

The ERA has also identified a number of other costs imposed by traffic congestion. The ERA has not attempted to quantify these costs, but notes that they include:

1. inefficient use of the State's public transport infrastructure, which is both an efficiency loss for Government, and imposes time costs on public transport users as a result of delays and unreliability caused by congestion (for example, where buses are slower and less reliable than they would otherwise be in uncongested conditions);
2. the costs of road expansion needed to accommodate unnecessarily high peak demand (as roads are generally constructed to manage peak load, they are underutilised throughout the rest of day);
3. the costs resulting from additional traffic accidents that occur as a result of congestion; and
4. disincentives to choose active transportation alternatives that deliver health benefits (such as walking and cycling) due to pollution, perceived risk of accidents, or the difficulty of navigating congested traffic. (A 2011 Western Australian RAC survey found that 91 per cent of respondents citing fear of traffic as a disincentive to cycle.¹⁷⁷) However, this cost may be offset to some degree by commuters who find cycling or walking preferable to driving in congested traffic.

¹⁷⁷ RAC Media Release, 22 August 2011, <http://rac.com.au/news-community/news-and-reports/media-releases/media-releases-2011/RAC-cycling-survey-results-revealed>, (accessed 4 June 2014).

Congestion can also impose social costs, diminishing the well-being of individuals and families due to stress and lost time. For instance, the average Perth commuter spent 73 hours (equivalent to almost two weeks of annual leave) delayed in traffic in 2013.¹⁷⁸

The average Perth commuter spent 73 hours delayed in traffic in 2013.

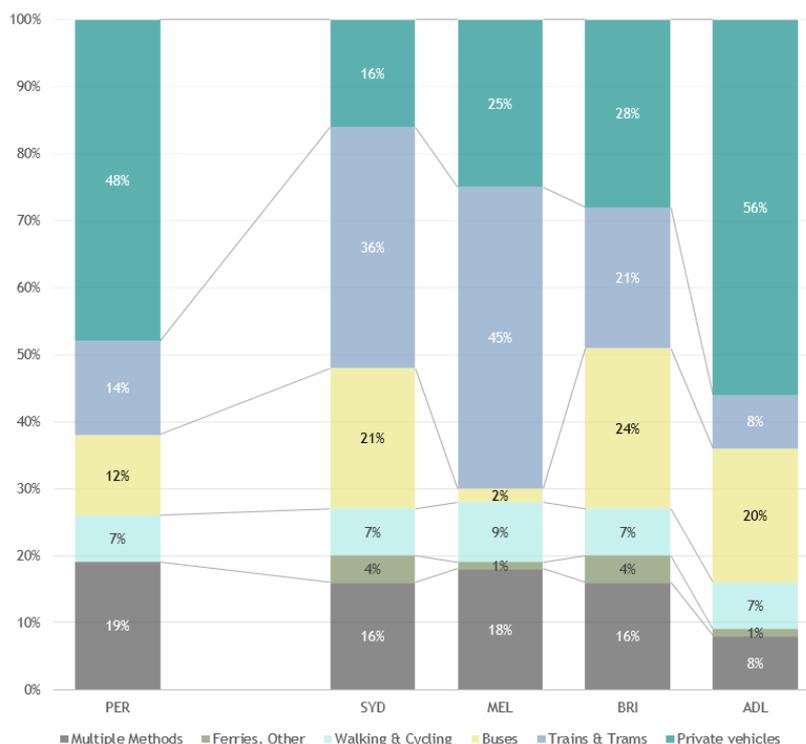
Royal Automobile Club (**RAC**) surveys indicate that this extra travel time has a significant negative impact on commuters.¹⁷⁹ Almost three quarters of the surveyed drivers reported increased stress as a result of congestion. A substantial number also stated that extra time spent driving was impacting their leisure activities, and time that they would otherwise spend with their families. Respondents also raised other areas of concern, including and risks caused by dangerous driving in congested conditions.

Travel choices in Perth

Perth commuters rely heavily on cars, even when travelling into the CBD, with nearly half choosing to use a car over other forms of transport. Of the five capital cities shown in Figure 26, Adelaide is the only capital in which commuters show a similar preference for car travel.

As Perth's population continues to grow, if the percentage of car users remains static at 48 per cent, this will come to represent an increasingly large number of people and vehicles entering the CBD each day.

Figure 26 Modal share travelling into the CBD: Perth and other Australian capital cities



Source: Australian Bureau of Statistics, 2011. *Census of Housing and Population – Method of Travel to Work and Statistical Local Area, Canberra.*

¹⁷⁸ Synergies Economic Consulting, *Public Transport Investment: The Value of Action versus the Cost of Inaction*, 2014.

¹⁷⁹ RAC, 2013, *Congestion cutting into family time*, <http://rac.com.au/news-community/news-and-reports/publications/rac-enevs/rac-enevs-2013/perth-congestion-cutting-into-family-time> (accessed 4 June 2014).

How congestion charging works

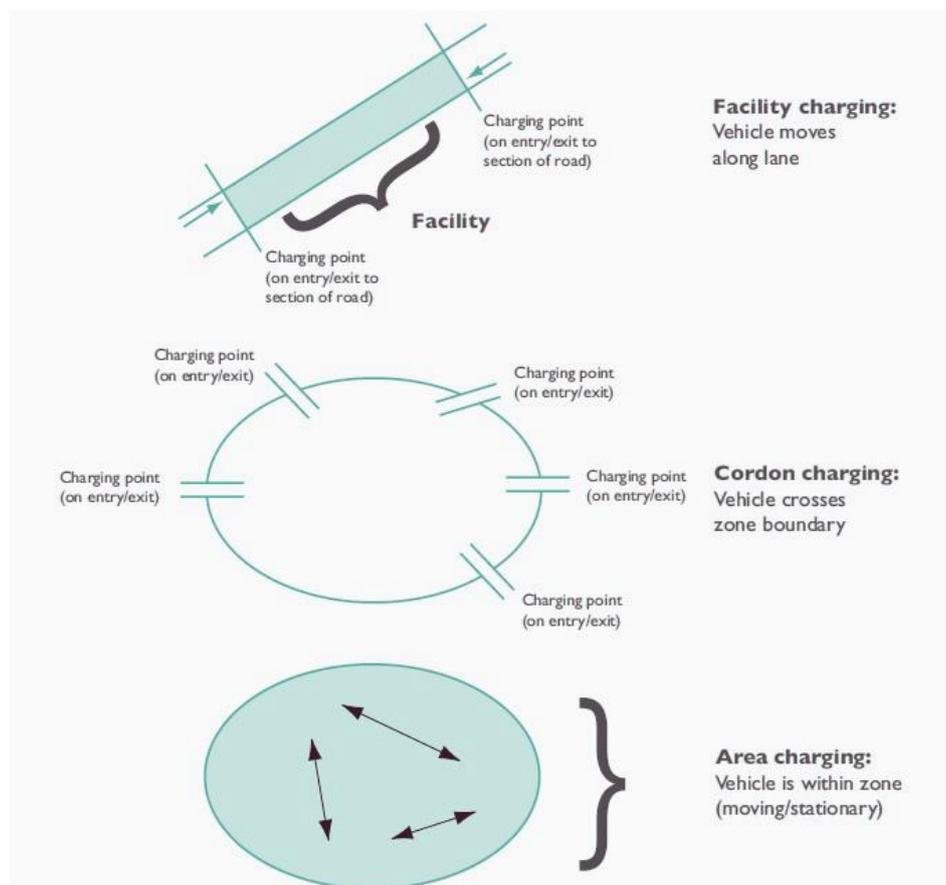
Congestion charging comes in three major forms: area charging; cordon; and facility charging (for example, toll roads), as explained in Table 11 and Figure 27.

The details of charging schemes vary considerably from city to city. For example, charging schemes may feature exemptions for certain types of vehicle, subsidisation of alternative modes of transport, discounted charges for electronic payment, or pricing schedules that vary according to time-of-day or current traffic speeds. However, as discussed further below, congestion charging has been effective wherever it has been implemented, regardless of the specific features of each scheme.

Table 11 Comparison of congestion charging models

Scheme	Operation
Area charging	Drivers are charged for operating a vehicle within a defined area.
Cordon charging	Drivers are charged for crossing a boundary into or out of a defined area. (Cordon charging schemes charge either on entry or on exit, with some applying a daily cap to these charges.)
Facility charging	Drivers are charged for using a selected route (a toll road).

Figure 27 Types of congestion charging



Source: Bureau of Infrastructure, Transport and Regional Economics 2008, *Moving urban Australia: can congestion charging unclog our roads? Working paper 74, BITRE, Canberra.*

The ERA's analysis in this chapter focuses on cordon and area schemes. These schemes are best applied to contained geographies such as city centres, and have a greater potential than toll roads to deliver congestion reduction and environmental benefits.¹⁸⁰

Implementing a congestion charging scheme: the costs and revenues

Congestion charging schemes are primarily designed to broadly influence the behaviour of commuters, leading to an overall reduction in inner-city congestion. Schemes require an initial capital investment (for instance, the cost of electronic monitoring equipment and setting up a billing system), and the ongoing operating costs of the scheme (for instance, equipment maintenance and customer service).

The initial investment required to set up a congestion charging scheme can vary significantly from city to city, depending on the area covered, technology selected, and geography of the city centre. However, international experience indicates that charging schemes are typically designed to generate sufficient revenue to recover the initial investment, cover operational costs, and provide a surplus that can be used to improve public transport. Table 12 gives an overview of the congestion charging revenues and expenses reported in other jurisdictions, as well as the surplus revenue generated.

Table 12 Costs and revenues of selected congestion schemes (\$A)

City	Capital investment	Annual operating costs	Annual gross revenue	Surplus revenue A\$ and % of total
London	\$200-300m	\$250m in 2008	\$500m in 2008	\$250m in 2008 (50%)
Stockholm	\$250-300m	\$50m in 2009	\$140m in 2009	\$90m in 2009 (65%)
Milan	\$10m	\$10m in 2012	\$30m in 2012	\$20m in 2012 (65%)
Singapore	\$200m	\$20m in 2009	\$110m in 2009	\$90m in 2009 (80%)
Trondheim	\$80m	\$5m in 2009	\$25m in 2009	\$20m in 2009 (80%)

Sources: Ernst & Young¹⁸¹, Comune de Milano¹⁸², and Arnold *et al.*¹⁸³

Is congestion charging an effective solution?

Congestion charging has proved to be a consistently effective solution to inner-city traffic congestion across the world, both in large cities and in smaller regional towns. Table 13 shows the resulting reduction in traffic observed in nine jurisdictions, after the introduction of congestion charging.

¹⁸⁰ Brunnan, Ben, 2014. For Whom the Road Tolls: The prospect of high occupancy toll lanes in Calgary, Calgary.

¹⁸¹ Ernst & Young, 2012. Communauté métropolitaine de Montréal: Portrait des expériences de tarification routière en milieu urbain, Montreal.

¹⁸² Comune de Milano, 2014, *Bilancio Economico Area C*, http://www.comune.milano.it/portale/wps/portal/CDM?WCM_GLOBAL_CONTEXT=/wps/wcm/connect/contentlibra/Elenco+Siti+tematici/Elenco+Siti+tematici/Area+C/Bilancio+Economico/, (accessed 4 June 2014).

¹⁸³ Arnold, R, Smith, V.C., Doan, J.Q., Barry, R.N, Blakesley, J.L., DeCorla-Souza, P.T., Muriello, M.F., Murthy, G.N., Rubstello, P.K., Thompson, N.A., 2010. *Reducing Congestion and Funding Transportation Using Road Pricing In Europe and Singapore*, Washington D.C.

Table 13 Aims and outcomes of area and cordon-based charging schemes

City	Stated Objectives	Traffic Decrease
Schemes primarily designed to decrease congestion		
London (United Kingdom)	Reduce congestion, improve public transport.	15-20%
Stockholm (Sweden)	Reduce congestion, decrease emissions, improve public transport.	18-29%
Gothenburg (Sweden)	Reduce peak traffic.	15-20%
Milan (Italy)	Reduce congestion, raise revenue for new infrastructure.	14-23%
Valetta (Malta)	Reduce congestion, decrease emissions.	22%
Singapore	Reduce congestion, optimise the use of road infrastructure, improve public transport.	15-31%
Median decrease in traffic		15-26%
Schemes primarily designed to reduce traffic in heritage or pedestrianized areas		
Rome (Italy)	Reduce traffic in heritage areas, increase public transport use.	15-20%
Durham (United Kingdom)	Reduce traffic in heritage area and pedestrianised areas.	85-90%
Znojmo (Czech Republic)	Reduce traffic in heritage area.	65%
Median decrease in traffic		65%

Source: Ernst & Young¹⁸⁴, ELITS¹⁸⁵, EMPOMM¹⁸⁶, Button¹⁸⁷.

A reduction in traffic has even occurred in cities where a charge has been designed for purposes other than congestion management. For example, Oslo, Trondheim, and Bergen have implemented cordon schemes primarily designed to raise revenue to fund new roads, with entry and exit points placed to most efficiently meet this goal. Nevertheless, these schemes also resulted in traffic decreases of between 4 and 11 per cent in each city.^{188,189,190}

¹⁸⁴ Ernst & Young, 2012, *op. cit.*

¹⁸⁵ ELTIS Urban Mobility Portal, Traffic Reduction Data, <http://eltis.org/index.php>, (accessed 4 June 2014).

¹⁸⁶ European Platform on Mobility Management, 2014. *Durham City: First Road User Charging Scheme in the UK*, http://www.epomm.eu/index.php?id=2771&lang1=en&study_id=169, (accessed 4 June 2014).

¹⁸⁷ Button, K., 2007. *The Economics Behind Transport Congestion*, Mercatus Center Seminar, Washington D.C.

¹⁸⁸ Ernst & Young, 2012, *op. cit.*

¹⁸⁹ ELTIS Urban Mobility Portal, *op. cit.*

¹⁹⁰ Button, K., 2007, *op. cit.*

Public perceptions of congestion charging

Congestion schemes tend to be viewed unfavourably by the public prior to implementation, but often have majority support after they have been introduced.

A 2003 study from the University of Gothenburg reviewed six schemes, five of which were subject to public opposition prior to introduction, as detailed in Table 14. In all cases, opposition decreased after the scheme had been shown to be effective, with congestion charging gaining majority public support in most instances.¹⁹¹

Table 14 Public perception of congestion charging schemes

City	Before introduction	After introduction
London	Majority against	Majority in favour (Muz, 2013)
Stockholm	Majority against	Majority in favour (Muz, 2013)
Milan (new 2012 scheme, replacing existing scheme)	Majority in favour	Majority in favour (Muz, 2013)
Oslo	Majority against	Decrease in opposition (Muz, 2013) Opposition decreased from 70% to 64% (Odeck & Bråthen, 2001)
Trondheim	Majority against	Majority in favour (Muz, 2013) Opposition decreased from 72% to 48% (Odeck & Bråthen, 2001)
Bergen	Majority against	Decrease in opposition (Muz, 2013) Opposition decreased from 54% to 37% (Odeck & Bråthen, 2001)

Sources: Muz¹⁹²; Odeck & Bråthen¹⁹³

Given the evidence from other jurisdictions, it is reasonable to expect that a successful trial or implementation of congestion charging in Perth will result in increased public support. However, a trial or implementation will require adequate funding, and investment in supporting public transport infrastructure to be successful. A poorly-implemented or underfunded scheme is not likely to provide evidence for the effectiveness of congestion charging, nor increase support for congestion charging.

¹⁹¹ Muz, I., *Why the Attitude? An analysis of attitudes towards the congestion charge in Gothenburg prior to implementation*, 2013.

¹⁹² Muz, I., 2013, *op. cit.*

¹⁹³ Odeck, J. and Bråthen, S., *Toll financing of roads – The Norwegian experiences*, 14th Congress of the International Road Federation, Paris, 2001.

Interaction with public transport

In order to ensure the effectiveness of a congestion charge, commuters must be given a viable alternative to private vehicles. International charges have been most effective when combined with increased public transport to facilitate a shift to public transit. For instance, Stockholm, Singapore and London invest a portion of funds raised to invest in improved public transport. London, for instance, introduced a charge in combination with the deployment of 300 new buses.¹⁹⁴

There are many public transport improvements that can complement a congestion charge. Major projects (for instance, the construction of additional train lines or introduction of light rail) have a role in improving the capacity and convenience of public transport. However, smaller interventions also play an important part. These may include the introduction of express bus lanes during peak hours, the strategic placement of park and ride facilities, the subsidisation of park and ride facilities, or the deployment of extra train carriages.

Impacts on business

Some businesses have claimed that the introduction of congestion charging in a jurisdiction has had a negative impact on retail sales.^{195,196} However, large-scale studies have refuted these claims, noting that retail sales tend to be far more sensitive to other economic conditions than to congestion charging, and that the majority of businesses in the congestion charging zone are generally supportive of the charge.¹⁹⁷

Detailed reviews of the impact of London's congestion charging scheme have identified that the outcomes have ranged from neutral through to beneficial for businesses within and around the charging zone.^{198,199} These include:

- Analysis of indicators of economic performance (such as business population and turnover, profitability, retail sales, and property market trends) did not show any evidence that the charge had significantly affected businesses in the area.
- Shops in the charging zone saw an improvement in rental values after the scheme was introduced.
- A 2005 study showed that business performance in the charging zone remained significantly better than that in the rest of London.

Business surveys also showed that businesses recognised that decongestion had 'created a more pleasant working environment and easier journeys for employees using public transport for work'.²⁰⁰

¹⁹⁴ Albalade and Bel, *What Local Policy Makers Should Know about Urban Road Charging: Lessons from Worldwide Experience*, 2009.

¹⁹⁵ Transport for London, *Central London Congestion Charging: Impacts Monitoring*, Fourth Annual Report, 2006, London.

¹⁹⁶ Daunfeldt, S., Rudholm, N, Ramme, U., *Congestion charging and retail revenues: Results from the Stockholm road pricing trial*, *Transport Research Part A*, Vol. 43, 2009, pp.306-309.

¹⁹⁷ Transport for London, *op. cit.*

¹⁹⁸ Ernst & Young, 2006. Review of Transport for London's Assessment of the Business and Economic Impacts of the Congestion Charge in Chapter 6 of *Impacts Monitoring – Third Annual Report 2005*, Final Report. London.

¹⁹⁹ Transport for London, *op. cit.*

²⁰⁰ Ernst & Young, 2006. Review of Transport for London's Assessment of the Business and Economic Impacts of the Congestion Charge in Chapter 6 of *Impacts Monitoring – Third Annual Report 2005*, Final Report. London.

How might a congestion scheme work in Perth?

The specifics of congestion charging schemes in other cities vary considerably. For example, schemes may apply a variable charge depending on the time of day, apply flat charges (either daily, monthly or annually) and may offer a wide variety of exemptions²⁰¹.

Under a cordon charging scheme, commuters would pay upon entering the charging area during charging hours, with the fee generally varying according to the time of day. Some schemes also specify a maximum daily charge, so that vehicles that repeatedly enter and exit the charging zone during the day are only charged up to that limit.

Alternatively, under an area charging scheme, commuters would pay a flat charge for driving a vehicle within the congestion charging area within designated charging hours. For example, London drivers are charged £10 per day for operating a vehicle within the city's Congestion Charging Zone at any time between 7am and 6pm on weekdays.

The consistent success of congestion charging schemes, in spite of their differences, suggests that congestion charging is generally effective regardless of the pricing model and exemptions applied. This suggests that a Perth congestion charging scheme could be designed to accommodate the specific needs and concerns of residents (and address equity concerns, such as for low-income commuters) while remaining effective.

Pricing

Economic and traffic modelling would generally be used to set congestion charges for a particular city. However, the ERA's benchmarking has indicated that international charges tend to fall within a fairly consistent range, as shown in Table 15.

In a study of ten cities, congestion charges during peak and shoulder periods had a median minimum charge of A\$1.50 and median maximum charge of A\$3.00. The median daily cap for the four cities where a cap had been implemented was around A\$10.00.

The cities in the study represent a wide variety of urban centres, with populations from as few as 7,000 (Valetta) to more than 8 million (London). The geographic areas covered by the schemes also vary from around one square kilometre to as much as 50 square kilometres.

While economic and traffic analysis would be necessary to determine a range of charges for Perth, the ERA considers that – given the consistency of charges elsewhere – the charges in Table 15 are indicative of the prices Perth commuters could expect to pay.

²⁰¹ For instance, London provides discounts and exemptions for residents, two-wheeled vehicles, vehicles with nine or more seats, vehicles meeting an Ultra-Low Emission Discount criterion, some tourist and visitor traffic, and various service and community sector vehicles.

Table 15 Comparison of congestion charging prices (A\$)

City	Minimum charge	Maximum charge	Daily Cap
AREA			
London	-	-	\$18.00
CORDON			
Stockholm	\$1.50	\$3.00	\$10.00
Gothenburg	\$1.50	\$3.00	\$10.00
Milan	\$3.00	\$7.50	-
Singapore	\$0.25	\$6.00	-
Durham	\$3.50	\$3.50	-
Znojmo	\$1.50	\$1.50	-
Valletta	\$1.25	\$1.25	\$9.00
Oslo	\$2.25	\$2.25	-
Trondheim	\$2.75	\$2.75	-
Median charge	\$1.50	\$3.00	\$10.00

Source: Ernst & Young²⁰², EMPOMM²⁰³, Button²⁰⁴, CVA Malta²⁰⁵, Transport for London²⁰⁶.

Coverage

As with pricing levels, setting an appropriate boundary for a Perth congestion charging area will require economic and traffic analysis. However, the Narrows Bridge, Swan River, and Mitchell Freeway have been suggested as suitable boundaries, since they form a clear ring around the city centre.²⁰⁷ There are a number of options for a northern boundary, including the railway line, and the Newcastle Street boundary that currently defines the northern limit of the Perth Parking Management Area. The limited number of possible entry roads into the Perth CBD would minimise the infrastructure costs of implementing the scheme.

As shown in Table 16, the area covered by various congestion schemes varies considerably, as does the number of control points required to manage the scheme. These factors tend to be specific to the geography and density of each city.

While the Perth Metropolitan Region covers an area of over 6,000 square kilometres, the city centre is relatively small, with the City of Perth covering an area of around 8 square kilometres. A congestion charging area falling within the boundaries of the City of Perth (and so covering an area of less than 8 square kilometres) would be comparable with the size of the charging zones adopted in other cities.

²⁰² Ernst & Young, 2012, *op. cit.*

²⁰³ European Platform on Mobility Management, *Inner city access restriction for sustainable mobility for inhabitants and tourists (Znojmo, Czech Republic)*, 2014.

²⁰⁴ Button, K., 2007, *op. cit.*

²⁰⁵ CVA Malta, *Access Tariffs and Penalties*, 2014, http://www.cva.gov.mt/en/access_tariffs_and_penalties.asp, (accessed 4 June 2014).

²⁰⁶ Transport for London, *Paying the Congestion Charge*, 2014, <http://www.tfl.gov.uk/modes/driving/congestion-charge/paying-the-congestion-charge>, (accessed 4 June 2014).

²⁰⁷ Committee for the Economic Development of Australia, *Stifling Success: Congestion charging and infrastructure delivery*, Melbourne, 2012.

Table 16 Comparison of scheme coverage in selected cities*

City	Metropolitan Population	Metropolitan Area (km ²)	Number of Control Points	Restricted Area (km ²)
London	8,300,000	1,600	348	22**
Singapore	5,300,000	700	80	7
Rome	2,600,000	1,300	22	4
Milan	1,300,000	180	43	8
Stockholm	900,000	190	18	35
Riga	650,000	300	5	< 1
Gothenburg	500,000	450	37	16
Durham	90,000	200	1	< 1
Znojmo	35,000	65	2	< 1
Valletta	6,000	1	14	1

Source – Metropolitan populations and areas: Office for National Statistics (UK), Eurostat, Statistics Sweden, Statistics Singapore, Istat (Spain), Statistisk Sentralbyrå (Norway), OECD, Latvijas Statistika (Latvia), City of Znojmo, Valetta Local Council Administration Source. Congestion scheme information: Ernst & Young²⁰⁸, ELTIS²⁰⁹, Swanson²¹⁰, Erlandson²¹¹, World ITS Directory²¹², Martino²¹³.

* The definition and conventions of statistical boundaries vary from country to country. The ERA has attempted to use the most relevant and comparable definitions in compiling this data.

** Original area; since expanded

How would drivers be charged?

Congestion charging has become an increasingly practical and affordable option in recent years, with the introduction of new and more cost-effective technologies. These technologies provide information to drivers, detect and classify vehicles, and manage payments.

Earlier congestion charging schemes were relatively inefficient, relying on manual payment stations at entry points, display of permits, and the use of bollards. These approaches have been largely replaced by electronic models such as automatic licence plate recognition, in-car transponders, mobile phone-based systems, and even Global Positioning Systems (GPS).²¹⁴

Such systems aim to provide an automated, real-time service requiring minimal input from drivers. However, the associated monitoring and data collection can raise privacy concerns for users. There are a range of options available to address these concerns. For example, Singapore has adopted a smart card based system that removes the need to monitor and record the movement of individual commuters.

²⁰⁸ Ernst & Young, 2012, *op. cit.*

²⁰⁹ ELTIS Urban Mobility Portal, *Traffic Reduction Data*, <http://eltis.org/index.php>, (accessed 4 June 2014).

²¹⁰ Swanson, J., *Gaining Public Support for Congestion Charging: Notes from Europe on the Implementation of Bold Transport Policies*, 2009.

²¹¹ Erlandson, M., *Road Tolling in Sweden*, presentation at the Transportation Finance and Mileage-Based User Fee Symposium 2013, Philadelphia, 2013.

²¹² World ITS Directory, *Jornadas sobre ITS en las autopistas de peaje: Consideraciones sobre el peaje*, presentation, 2013.

²¹³ Martino, A., *Milano: from pollution charge to congestion charge*, TRT Transporti e Territorio presentation, 2007.

²¹⁴ These are similar to Perth's SmartRider cards.

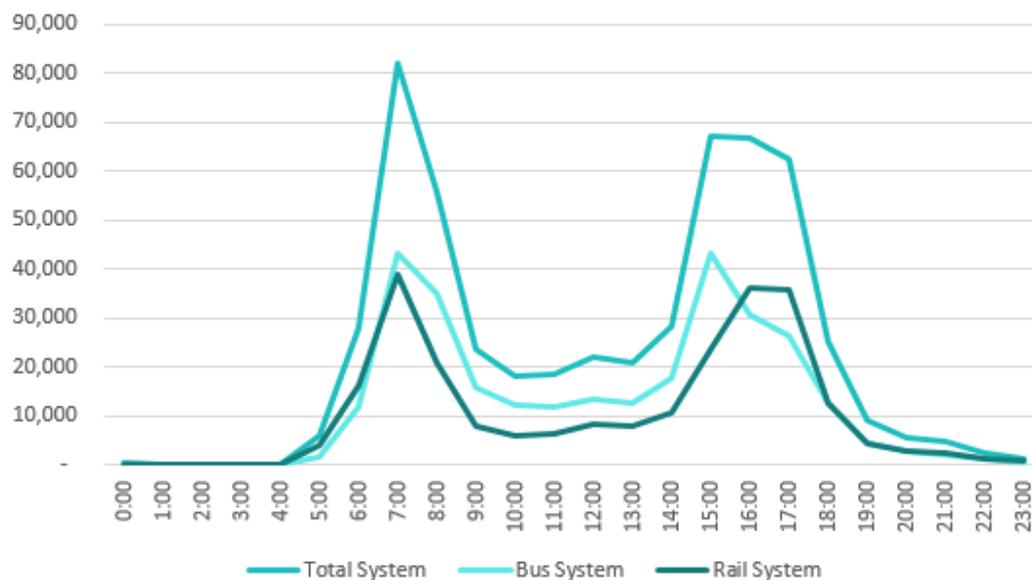
The Singaporean system uses a combination of in-vehicle units and anonymous smart cards that can also be used for parking and public transport.²¹⁵ The in-vehicle units communicate with overhead gantries (electronic control points), and automatically debit the driver's smart card when the vehicle passes underneath. As a result, no personal information is collected where vehicles contain a valid in-vehicle unit and smart card, and only vehicles without a unit or card are photographed, so a fine can be issued.

Congestion charging and public transport

Providing a viable public transport alternative is critical to implementing a successful charging scheme. While some drivers will change their commuting hours in response to the scheme, many more will decide to use public transport. However, if the public transport system is already at capacity or overburdened, these commuters are likely to prefer paying a congestion charge than use Perth's train and bus networks.

In the event that a congestion charge is introduced, Perth's public transport system would need to be capable of absorbing extra patronage during peak periods. The current daily patronage of the public transport system in Perth is shown in Figure 28.

Figure 28 Average daily public transport patronage, Perth, March 2013



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

Public transport usage follows a similar pattern to CBD road congestion, with a substantial increase in patronage during peak periods.

²¹⁵ US Department of Transportation: Federal Highway Administration, *Technologies That Enable Congestion Pricing: A Primer*, Washington DC, 2008.

This peak period management presents a challenge for public transport operators, since vehicles and carriages that are required to service the high volume of commuters may remain idle during off-peak periods. Any increase in the number of peak period commuters using public transport services will increase the capacity required during those times, as is likely to happen if a congestion charging scheme is introduced.

To some extent, the need to provide infrastructure that can cater to peak period demand is an unavoidable part of public transport system management, with increases in peak demand requiring additional infrastructure investment. However, the pressure placed on the public transport system from increases in demand can also be mitigated with non-infrastructure based solutions. For example, Melbourne commuters enjoy free train travel before 7am under the city's 'Early Bird' scheme.²¹⁶ This helps relieve peak period demand by encouraging some commuters to travel to work earlier in the day. A similar initiative may relieve some of the pressure a congestion charge would place on Perth's public transport network.

Additionally, a number of government projects are currently planned that will expand the capacity and efficiency of Perth's public transport facilities, and provide commuters with improved public transport alternatives. These include:

- Butler Extension Project (due for completion in late 2014);
- Transport package to Perth Stadium (due for completion in late 2017);
- Airport Link (due for completion in late 2020);
- MAX Light Rail (due for completion in 2022); and
- New and upgraded stations: CityLink bus station, Aubin Grove train station, and Edgewater station multi-story car park.

While these projects will provide enhanced capacity in the medium to long term, the trial and implementation of a congestion charging scheme may require more immediate interventions to improve public transport into the CBD. There are a variety of short term measures that can increase the capacity of a public transport system. Many of these measures have been successfully applied in the wider Perth area. They include:

- increases to peak hour bus services on key routes (for example, the recently introduced 950 'Superbus', Perth's highest frequency service, linking Morley and the CBD to the QEII Medical Centre and the University of Western Australia);
- bus express lanes and clearways during peak hours (currently in place on the Kwinana Freeway and within the CBD, and under consideration for other arterial roads);
- increased free or subsidised public transport within the charging zone (for example, Perth's CAT buses and Free Transit Zone);
- deployment of more train carriages during peak hours (the most recent State Budget confirms that the Government will add 66 new rail cars to its fleet by the end of

²¹⁶ Public Transport Victoria, *Myki Money*, <http://ptv.vic.gov.au/tickets/myki/myki-money/> (accessed 12 June 2014).

2016²¹⁷, which will go some way to alleviating overcrowding and delivering the necessary capacity improvements).

Managing increased demand for public transport is also an important consideration for short term congestion charging trials. If the Government elected to operate a congestion charging trial (rather than immediately introducing a permanent scheme), it would still need to look to current public transport deployment, scheduling, and routing for opportunities to increase short-term capacity at a minimal cost. This is discussed further in the section ‘*Would a trial period be worthwhile?*’ below.

Investing congestion charging revenue effectively

An effective Perth congestion charging scheme would not only reduce traffic, but provide funding to develop sustainable alternatives to private vehicle travel. In other cities, the revenue raised from congestion charges has been used to fund public transport, walking and cycling infrastructure, public safety, and delivery vehicle management.

Table 17 shows a range of investments made by other cities, aimed at making the best use of congestion charging revenue.

Table 17 Use of congestion charging revenue in other jurisdictions

City	Investments
London	78.5% bus infrastructure, 10.5% safety improvements, 4.3% cycle path infrastructure, remainder other improvements.
Milan	Public transport infrastructure, pollution reduction, cycling and pedestrian infrastructure, process engineering to improve the distribution of goods in the zone.
Stockholm	Public transport infrastructure, some road upgrades.
Gothenburg	Additional rail carriages, new bus lanes, higher frequency services, road and tramway bridges and tunnels, new railway lines, station upgrades.
Durham	Subsidised town-centre bus, accessibility services & assistance.

Source: Ernst & Young²¹⁸, Muz²¹⁹, Comune di Milano²²⁰, ELTIS²²¹

Congestion charging will not only reduce congestion within the CBD, but will deliver revenue that can be used to assist in delivering infrastructure that has already been planned. The Government has prepared a number of transport plans in recent years, including the *Moving People Network Plan*, *In Motion: A 20-Year Public Transport Plan for Perth and Peel*, the *CBD Transport Plan to 2016*, and the *Public Transport Plan 2031*. These plans outline a number of major initiatives, including new heavy rail lines, road development, and a light

²¹⁷ Media Statement by the Hon. Mike Nahan, Treasurer, 8 May 2014.

²¹⁸ Ernst & Young, 2012, *op. cit.*

²¹⁹ Muz, I., 2013, *op. cit.*

²²⁰ Comune di Milano, 2013. Area C: Intuita la congestione charge definitiva, <http://www.comune.milano.it/dseserver/webcity/comunicati.nsf/webball/02715EEE0A5B23ADC1257B3B0065658E>, (accessed 4 June 2014).

²²¹ ELTIS Urban Mobility Portal, *Traffic Reduction Data*, <http://eltis.org/index.php>, (accessed 4 June 2014).

rail network. Where these large infrastructure projects will deliver a net benefit, they could be funded in part by congestion charging revenue.

Would a trial period be worthwhile?

Conducting a congestion charging trial in Perth would provide an alternative to the immediate introduction of a permanent scheme. The set-up costs of a trial are not likely to be significantly less than those that would be incurred in establishing a permanent scheme, and a trial would still require at least some short term increases to public transport capacity. However, it would provide a practical demonstration of the effectiveness of congestion charging, facilitate informed public consultation at the end of the trial period, and provide an indication of public transport improvements that may be required in the longer term.

While trials have been implemented successfully in other jurisdictions, a number of key questions would need to be considered:

- How much would it cost to implement the equipment and systems necessary for a trial? Would the revenue raised during the trial period cover these costs?
- Does Perth's public transport network have enough capacity to absorb additional commuters? What low-cost interventions may help increase capacity?

While detailed costing and analysis is necessary to answer these questions, the experiences of other cities suggests that a trial is likely to be worthwhile. The operating expenses of congestion charging schemes are generally minimal compared to the revenue raised, and decreases in the cost of technology have reduced the capital investment needed to set up control points.

As noted above, the expansion of Perth's rail fleet, and the potential re-engineering of existing services may improve capacity with a minimum of additional capital investment. Other short-term interventions such as bus express lanes, and even moderate investment in train carriages and buses will also continue to be of benefit whether or not a permanent congestion charging scheme is adopted at the end of the trial period.

The following case study examines the successful congestion charging trial that was implemented in Stockholm in 2006. The greater Stockholm region is comparable to Perth in area and population, although the cities differ in terms of Stockholm's more extensive public transport network, and its denser inner city core.²²²

²²² The greater Stockholm region has an area 6,519 square kilometres (Perth is 6,418 square kilometres), and a population of 2,100,000 (Perth's being 1,970,000). However, this does capture a substantial regional population, and Stockholm's urban population of 1,400,000 is possibly more comparable to that of the Perth Metropolitan Area. (*Australian Bureau of Statistics, City of Perth, Statistics Sweden*)

Box 7 Case Study: Stockholm's congestion charging trial^{223,224}

In 2003, the Stockholm City Council adopted a proposal to conduct congestion charging trials, and began work on developing a congestion scheme for the city centre. The trial was ultimately a success, with a majority of residents voting to retain the congestion charge at the end of the trial period. This case study outlines the journey from proposal to trial, and finally on to a permanent congestion charging scheme.

The Timeline

The Stockholm trial took two years to plan and to pass the necessary legislation, with the notably short trial period itself lasting less than one year. After the trial, a referendum was held to determine whether the charge should be retained.

June 2003	Proposal to conduct trial passed by Stockholm City Council
June 2004	Congestion charging legislation passes through Parliament
August 2005	Congestion trials begin
July 2006	Congestion trials complete; evaluation conducted
September 2006	Stockholm residents vote to retain congestion charge
August 2007	Permanent congestion charge comes into effect

The up-front investment in Stockholm's congesting charging trial was significant, and the short trial period did not provide enough time to recoup the investment. This exposed the Government to a material financial risk, having invested up to A\$300 million in congestion charging infrastructure for a scheme that could have been rejected at a referendum. However, given that the initial investment was to be recovered within three to five years, a somewhat longer trial period could have fully recouped the cost of setting up the trial.

The Cost Benefit Analysis

Investment prior to the start of operations:	~ A\$170 million
Total initial investment:	~ A\$250 to A\$300 million
Anticipated recovery period for initial investment:	3 to 5 years
Financial surplus generated per year:	~ A\$90 million/year
Total net economic benefit per year	~ A\$120 million

The initial investment included the cost of extensive testing prior to the launch of the trial, as well as the cost of the electronic charging equipment. Given the short trial period, it was critical for the system to run smoothly from day one, demonstrating the efficiency and effectiveness of congestion charging.

²²³ Eliasson, J., A cost-benefit analysis of the Stockholm congestion charging system, *Transportation Research Part A*, Vol 43(4), 2006, pp.468-480.

²²⁴ Ernst & Young, 2012, *op. cit.*

Managing the risks associated with a trial period

The major risk associated with a congestion charging trial is that it will require substantial a up-front investment that may be wasted if the scheme is discontinued after the trial period. However, there are a number of ways in which this risk can be minimised. These include:

- setting a timeframe that will allow revenue from congestion charges to recoup the initial investment;
- investing in supporting infrastructure that will continue to benefit business and the community, whether or not the scheme continues past the trial date;
- timing a trial to coincide with public transport expansions that have already been planned; and
- ensuring the scheme is effective and problem-free from the first day of operations.

Setting an appropriate timeframe for the trial

The Stockholm trial discussed in the case study was conducted in under one year, and so the surplus revenue generated in that period did not cover the cost of the initial investment required for the trial. However, as shown in Table 18, payback periods for investment in congestion charging infrastructure are typically short, falling between 0.5 and 4 years in the cases provided.

Table 18 Capital investment and estimated payback periods for selected schemes

City	Capital investment	Surplus revenue A\$	Estimated payback period
London	\$200-300m	\$250m/pa	1 year
Stockholm	\$250-300m	\$90m/pa	3 years
Milan	\$10m	\$20/pa	0.5 years
Trondheim	\$80m	\$20/pa	4 years

Sources: Ernst & Young²²⁵, Comune de Milano²²⁶, and Arnold *et al.*²²⁷

A longer trial period of, say, 2 to 3 years could allow the Government to recover most or all of its initial investment, regardless of whether the congestion charging scheme were retained.²²⁸

²²⁵ Ernst & Young, Communauté métropolitaine de Montréal: Portrait des expériences de tarification routière en milieu urbain, 2012l.

²²⁶ Comune de Milano, *Bilancio Economico Area C*, 2014, http://www.comune.milano.it/portale/wps/portal/CDM?WCM_GLOBAL_CONTEXT=/wps/wcm/connect/contentlibra/Elenco+Siti+tematici/Elenco+Siti+tematici/Area+C/Bilancio+Economico/, (accessed 4 June 2014).

²²⁷ Arnold, R, Smith, V.C., Doan, J.Q., Barry, R.N, Blakesley, J.L., DeCorla-Souza, P.T., Muriello, M.F., Murthy, G.N., Rubstello, P.K., Thompson, N.A., *Reducing Congestion and Funding Transportation Using Road Pricing In Europe and Singapore*, 2010.

²²⁸ In fact, support for congestion charging in Stockholm continued to increase after permanent implementation, suggesting that a longer trial period may have been even more effective in terms of gaining widespread support prior to the referendum. Eliasson, J. *So you're considering congestion charging? Here's what you need to know*, Round Table Paper, International Transport Forum, 2010.

Strategic public transport investment and timing

Many of the transport supply interventions accompanying congestion charging schemes in other cities have provided infrastructure that would have been beneficial or even necessary, even in the absence of congestion charging.

Current government policies have already highlighted the need to manage public transport capacity, improve cycling facilities, upgrade stations, and expand heavy and light rail coverage. These interventions will increase the effectiveness of a congestion charging trial, providing commuters with well-developed alternatives to private vehicle use, but will also cater to Perth's growing transport requirements, regardless of whether congestion charging continues.

Since this infrastructure expenditure is already scheduled, the Government has an opportunity to trial congestion charging without necessarily requiring substantial extra investment in transport alternatives to support the scheme. The most affordable approach may be to set a launch date for a congestion charging trial that coincides with new public transport capacity coming online.

Any additional expenditure that will be required to meet an increase in public transport demand could potentially be recouped via congestion charging revenue. Estimating the scale of the investment that may be required will need detailed technical and financial analysis. However, based on the other experiences of other cities, it may be possible to recoup this cost relatively quickly. For instance, Stockholm's congestion charging scheme required AUD\$250 to AUD\$300 million to establish, and the city invested a further AUD\$160 million in public transport to support the scheme.²²⁹ With the scheme raising annual net revenue of around AUD\$90 million, this meant that the direct set-up costs of the scheme (that is, the AUD\$250 to AUD\$300 million spent on charging equipment, computer systems, and testing) were recovered in around 3 years, and the additional expenditure to improve public transport (AUD\$160 million) was recovered in a further 1.5 to 2 years.

Ensuring the scheme works from day one

In the case of the Stockholm trial, the Government focused on ensuring that the scheme launched smoothly, causing minimal disruption for commuters.^{230,231} This was considered to be a critical factor in gaining public support for congestion charging, reducing the risk that a scheme would be discontinued after the trial period.

To address this concern, the Government made substantial investments in both pre-implementation testing, and the equipment used to operate the scheme. The service level requirements for the scheme were far higher than those adopted by any other scheme in operation at the time, resulting in some criticism of the costs that were incurred. However, administrators regarded these costs as not only an infrastructure investment, but also an investment in establishing widespread public support for the scheme.²³²

²²⁹ Ernst & Young, Communauté métropolitaine de Montréal: Portrait des expériences de tarification routière en milieu urbain, Montreal, 2012, http://pmad.ca/fileadmin/user_upload/pmad2012/documentation/20120501_etudeTarificationRoutiere.pdf (accessed 18 June 2014).

²³⁰ Söderholm, G., 2009. Representative of Stockholm City. Interviewed live on 27 October, sound recorded. 1 hr 12 minutes, Stockholm.

²³¹ Höök, B., 2009. Representative of the Road Administration. Interviewed live. 23 October, sound recorded, 47 minutes, Stockholm.

²³² Hamilton, C., Revisiting the cost of the Stockholm congestion charging system, Working Paper, 2010, <http://www.sciencedirect.com/science/article/pii/S0967070X11000795> (accessed on 18 June 2014).

Similarly, in planning a congestion charging trial for Perth, it is important that the costs of diminishing public support (and subsequent discontinuation of the scheme) be weighed against equipment and set-up costs. The Swedish experience suggests that some degree of additional expenditure may be an effective approach to managing the risks associated with a loss of public support.

Other approaches to congestion management

There many approaches to congestion management. These approaches fall into three broad types; policy measures (for example, road charges and parking management), service measures (for example, priority lanes and 'park and ride' facilities²³³), and infrastructure measures (for example, new rail lines).

While these are sometimes presented as 'alternatives' to congestion charging, most actually complement congestion charging schemes by increasing its effectiveness. Consequently, a well-designed Perth congestion charging scheme would also incorporate service and infrastructure measures.

Perth Parking Levy

The Perth Parking Levy is one of the current congestion management strategies in place in the city centre. It is a component of the Perth Parking Policy, which restricts the levels and placement of private parking in the city. Revenues raised by the levy are used to provide free public transport within the CBD and surrounding areas.

The State Government introduced the Perth Parking Policy, with the goals of reducing the volume of traffic travelling in and out of the CBD, and improving air quality in the area. The Perth Parking Management Area covers an area roughly similar to the congestion charging area proposed by the Committee for Economic Development of Australia (CEDA)²³⁴ in addition to the West Perth precinct, as seen in Figure 29.

²³³ The Authority notes that the Government will commence charging for park and ride facilities from July 2014, a decision that may push marginal commuters back onto CBD roads, and work against any current and future congestion management strategies.

²³⁴ Committee for the Economic Development of Australia, *op. cit.*

Figure 29 Perth Parking Management Area boundaries



Source: City of Perth

A 2007 review of the policy stated that traffic volumes had reduced by between ‘3 per cent and 20 per cent over the three years following the implementation of [the policy].’²³⁵ The broad range makes it difficult to assess the true impact of the policy, as does the opening of the Joondalup railway line within the three-year period.

Parking charges undoubtedly reduce traffic levels and change commuter behaviour to some extent. However, the ERA considers that congestion charging is a better option, for a number of reasons:

- Demand for parking is relatively ‘inelastic’ with respect to price, which means that demand for parking spaces will only increase or decrease slightly when the price goes up or down (even if the price change is substantial).²³⁶ This is particularly relevant in the CBD, since business users of parking are especially unresponsive to price changes²³⁷, and the availability of employer-paid parking leads to an increase in the number of employees driving to work alone, since there is no incentive to carpool.²³⁸ Consequently, a parking levy is not necessarily an efficient tool for changing commuter behaviour.²³⁹

²³⁵ SKM, *Review of Perth Parking Policy*, Perth, 2007.

²³⁶ Farber, M. and Weld, E., *Econometric Analysis of Public Parking Price Elasticity in Eugene*, 2013.

²³⁷ Clinch, J.P., and Kelly, J.A., *Temporal Variance of Revealed Preference On-Street Parking Price Elasticity*, Working Paper, Dublin, 2004.

²³⁸ Shoup, D.C., and Willson, R.W., *Commuting, Congestion, and Pollution: The Employer-Paid Parking Connection*, Working Paper, Berkeley, 1992.

²³⁹ Intuitively, it seems that the same argument should apply to congestion charging, and that peak period road use should be relatively inelastic in the face of a congestion charge. However, given the immediate and substantial reductions in congestion seen in cities that have introduced a congestion charging scheme, it is evident that this is not the case. This is likely the result of a range of factors, but may be in part due to the fact that the day-to-day

- Parking levies have no impact on through-traffic; that is, drivers who pass through the city on their way to another destination, or travel through the city to drop off a passenger.²⁴⁰
- Commuters generally respond to congestion charges in one of four ways:
 1. choosing an alternative mode of transport (public transport, walking, or cycling);
 2. changing the time of day they commute;
 3. choosing not to enter the congestion charging area at all; or
 4. choosing to pay the congestion charge.

Similarly, parking levies also encourage responses one (alternative transport choices) and three (decisions not to enter the controlled area). However, unless parking levies incorporate a surcharge for peak hour arrivals and departures, they have no impact on the time commuters choose to travel. This means that they do not deliver the efficient road use that can be achieved with congestion charging.

Should the Perth Parking Levy be retained if a congestion charging scheme is introduced?

The potential interaction between the PPL and a congestion charge will be an important consideration in the event that a congestion charging scheme is introduced. It is possible that retaining the PPL alongside the congestion charge will result in greater reductions to congestion, as compared to a congestion charge alone.

However, the ERA is mindful that if the primary goals of both the PPL and the congestion charging scheme are to reduce congestion, rather than raise revenue, commuters should only be charged the minimum required to reduce congestion to an acceptable level. That is to say, if the congestion charging scheme alone is sufficiently effective, then there is little reason to retain the PPL for any purpose other than revenue raising.

ERA conclusion

Western Australia's sustained prosperity and population growth has placed increasing pressure on Perth's transport system, leading to an increase in traffic congestion. As a result, the costs imposed by congestion have risen substantially. Combating congestion has the potential to not only decrease these costs, but also reduce the need for capital expenditure on road capacity expansions.

As discussed in this chapter, increasing road capacity is not a long term solution to congestion. Similarly, the Perth Parking Levy – while effective to some degree – is not a particularly efficient solution. Considering this, congestion charging appears to be the most effective method for alleviating both current and future traffic congestion in Perth. Successful congestion charging schemes are generally accompanied by improvements to public transport, cycling, and pedestrian infrastructure, and by creating more attractive and sustainable alternatives to private vehicles.

visibility of the scheme for a driver entering and exiting the city is more likely to affect behavioural change, than is a parking levy.

²⁴⁰ This can have a significant impact. Transport for London estimated that 20 to 30 per cent of commuters chose to divert around the charging zone after the introduction of the congestion charge. Transport for London, *Central London Congestion Charging: Impacts Monitoring*, Second Annual Report, 2004.

The ERA considers that there is strong evidence for the effectiveness of congestion charging, and that the introduction of such a charge will improve Perth's liveability and productivity. The benefits of a congestion charging scheme are likely to outweigh initial set-up and public transport capacity management costs, facilitating traffic management and transport investment well into the future.

The establishment of a congestion charging scheme, whether on a permanent or a trial basis, will require significant upfront investment, and is likely to require additional public transport expenditure to manage increases in demand. However, international experience suggests that the typical payback period for a congestion charging scheme, including both direct set-up costs and supporting public transport infrastructure, may be no more than five years. Consequently, the ERA considers that the expense of introducing a congestion charge is likely to be manageable, in part due to the typically short payback period for most schemes, and also the fact that public transport improvements will continue to be of use regardless of whether congestion charging continues at the end of a trial period.

The temporary nature of a congestion charging trial does pose a number of risks in terms of both the Government expenditure that would be required to establish the trial, and the possibility that the scheme will not gain public support. However, the ERA considers these risks to be manageable. Given the potential benefits, the ERA considers that congestion charging in Perth should be given detailed and serious consideration.

4.2.4.4 Recommendations

6. Establish a trial congestion charging scheme for vehicles entering the CBD during peak periods. The trial should be supported by comprehensive technical and cost benefit analysis, and should take into account:
 - a. the most appropriate timing for the trial, particularly with regard to any anticipated increases in public transport capacity;
 - b. the most cost effective approach to increase public transport capacity to the level needed to support the trial;
 - c. the length of trial that would be necessary to recoup the Government's initial investment;
 - d. the appropriateness of retaining the Perth Parking Levy;
 - e. the appropriate boundaries, fee structure, and electronic equipment required; and
 - f. the measures to be used to assess the effectiveness of the scheme at the end of the trial period.

4.2.5 Cost-reflective time-of-use electricity charges

4.2.5.1 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 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**).

4.2.5.2 Submissions

All of the seven submissions²⁴¹ received by the ERA that discussed electricity pricing were supportive of cost reflective tariffs and of the implementation of TOU pricing. The issues raised by submitters regarding electricity pricing include:

- The CCIWA, CMEWA and Riverpark see the recommendations as encouraging greater competition in the electricity market.
- CMEWA and Riverpark considers that cost-reflective tariffs and TOU charging should be implemented to provide electricity customers appropriate price signals and incentivise private sector investment in infrastructure.
- Riverpark believes that cost reflective tariffs would need to be balanced by targeted subsidies to low income earners. In regard to TOU charging, Riverpark considers that with appropriate metering in place the structure of pricing should be left to competitive retailers.

²⁴¹ The submissions were received from CCIWA, CMEWA, CCFWA, the Committee for Perth, Riverpark Consulting, Mr Sheridan and UDIA.

- Mr Sheridan considers that a flat rate tariff should apply to ensure equity at an initial level of consumption, after which point TOU charging would apply.
- The Urban Development Institute of Australia (**UDIA**) considers that implementation of TOU pricing must be carefully considered to avoid shocks to the market. UDIA also states that full cost reflectivity should be coupled with enhanced identification and monitoring of efficiencies.

4.2.5.3 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**)²⁴², was budgeted to be \$420 million in 2013/14 and total nearly \$1.5 billion over the period 2013/14 to 2016/17.²⁴³

Cost-reflective tariffs were further examined in the ERA's inquiry into the efficiency of Synergy's costs and electricity tariffs.²⁴⁴ 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.

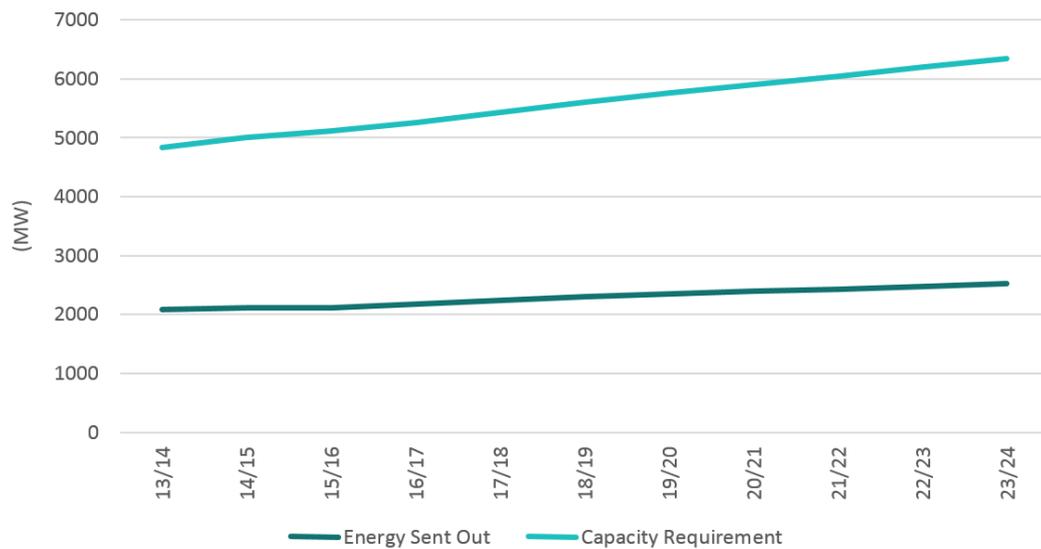
In addition to daily peaks, the generation and distribution network is built to accommodate peak periods of demand that only occur for a few days each year that can be further exacerbated by extreme weather (for example, during very high temperatures air conditioner use is dramatically higher). Additionally, excess capacity is required to provide a buffer for unforeseen operational constraints, like generator or network faults.

Figure 30 shows the forecast capacity requirement and expected average consumption from 2013-14 to 2023-24.

²⁴² The TEC is paid by Western Power's customers through 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.

²⁴³ Government of Western Australia, *2013-14 Budget Economic and Fiscal Outlook: Budget Paper No. 3*, 2013, p. 318.

²⁴⁴ Economic Regulation Authority, *Synergy's Costs and Electricity Tariffs: Final Report*, 2012.

Figure 30 Forecast capacity requirement and energy consumption (MW)

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

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 Commission²⁴⁵ and Australian Energy Market Commission²⁴⁶ 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.

²⁴⁵ The Productivity Commission, *Electricity Network Regulatory Frameworks: The Costs and Benefits of Demand management for households*, 2013.

²⁴⁶ AEMC, *Power of choice review – giving consumers options in the way they use electricity*, 2012.

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 customer's 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.

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 TOU. 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 19.

Table 19 Solar cities time-of-use tariff trials

Trial	Tariff Structure (prices in c/kWh)	Outcome	
Perth Solar City PowerShift ²⁴⁷ (Normally 25.91c/kWh)	Super-Peak (2pm-8pm) 40.15	8.9 per cent reduction in consumption during Super-Peak and 5.1 per cent reduction in overall consumption.	
	Peak (7am-2pm, 8pm-10pm) 23.08		
	Off-Peak (10am-7pm) 13.04		
Adelaide Solar City ^{248*} (Normally 32.37 c/kWh in summer and 30.73 c/kWh in winter)**	TOU Pricing		Shifted 7 per cent from peak to off-peak. Spikes in consumption seen in shoulder periods (11pm- 11:30pm and 6am-7am). Households saved \$139 per quarter on average.
	Peak (7am-9pm weekdays) 53.8		
	Off-Peak (9pm-7am weekdays, all weekend). 16.9		
	Critical Peak Pricing.		Participants decreased consumption by 14 per cent on average during critical peak periods.
	1 Dec- 31 March, 2pm-8pm weekdays. Up to 10 times per year. 390.4		
All other times 28.6			

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

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

** Tariffs increase for larger consumers.

Both trials resulted in significant reductions in total electricity consumption, in particular 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 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.

²⁴⁷ Perth Solar City, *Annual Report 2012*, 2012.

²⁴⁸ Adelaide Solar City, *Adelaide Solar City Final Report*, 2013.

Victoria began the roll-out of smart metering²⁴⁹ in 2009, with all meters fitted by the end of 2013. The process has largely been considered unsuccessful, with a 2011 CBA quantifying a net cost of \$319 million.²⁵⁰ 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:

1. *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.²⁵¹
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 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.

²⁴⁹ 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.

²⁵⁰ Deloitte Access Economics, *Advanced metering infrastructure cost benefit analysis*, 2011.

²⁵¹ Energy Safe Victoria, *Safety of Advanced Metering Infrastructure in Victoria Draft Report*, 2012.

4.2.5.4 Recommendations

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

4.2.6 Innovative sources of funding

4.2.6.1 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.

4.2.6.2 Submissions

The ERA did not receive any submissions regarding innovative sources of funding, as such there have been no changes to the analysis or conclusions from the Draft Report.

4.2.6.3 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.²⁵²

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 8 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.²⁵³ 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 20 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.

²⁵² Productivity Commission, *Public Infrastructure Draft Report*, 2014, p. 122.

²⁵³ Infrastructure Australia, *Report to Council of Australian Government and Assessments*, 2013, p.3.

If user charges are not charged at a cost reflective level²⁵⁴ 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 8 Case Study: Toll roads in New South Wales

New South Wales (NSW) 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 NSW.^{255 256}

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.²⁵⁷ 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.²⁵⁸

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 Queen Elizabeth II Medical Centre (QEII) Car Parking Project is provided below.

²⁵⁴ 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.

²⁵⁵ Ernst and Young, *The Economic Contribution of Sydney's Toll Roads to NSW and Australia*, 2007.

²⁵⁶ 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.

²⁵⁷ Infrastructure Australia, *Australian Infrastructure Progress and Action: A Report to the Council of Australian Governments*, 2012, p.53.

²⁵⁸ Infrastructure Australia, *Australian Infrastructure Progress and Action: A Report to the Council of Australian Governments*, 2012, p.53.

Box 9 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 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).²⁵⁹

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,²⁶⁰ 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.²⁶¹ 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 land²⁶², work-in-kind²⁶³ 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.

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

²⁵⁹ Government of Western Australia Department of Treasury, *Public Private Partnerships Queen Elizabeth II Medical Centre Car Parking Project- Project Summary*, 2012, pg.3.

²⁶⁰ The State Government made land available for the process however this will be returned to the Government after the lease expires.

²⁶¹ Western Australian Government Gazette, Friday 20 November 2009, *Planning and Development Act 2005 – State Planning Policy 3.6 Development Contributions for Infrastructure*, No.211.

²⁶² This is the transfer of land to the State Government or Local Authority by the developer for the site of the infrastructure.

²⁶³ This is when the developer constructs the infrastructure and gifts it to the relevant authority to maintain.

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.²⁶⁴ 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.²⁶⁵ 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.²⁶⁶ 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.²⁶⁷ There have been calls to expand developer charges in Western Australia to fund car parking and community service facilities within new development areas.²⁶⁸

4.2.6.4 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 developers should only be the incremental cost attributable to the development (or each property within the development) for the connection or provision to infrastructure.²⁶⁹

²⁶⁴ Western Australian Government Gazette, Friday 20 November 2009, *Planning and Development Act 2005 – State Planning Policy 3.6 Development Contributions for Infrastructure*, No.211.

²⁶⁵ Productivity Commission, *Public Infrastructure Draft Report*, 2014, pg. 148.

²⁶⁶ For example, connecting the development to a road network that is already existing is cheaper than establishing a new road network.

²⁶⁷ Department of Planning, *State Planning Policy 3.6: Development Contributions for Infrastructure*, 2009, pg.4692.

²⁶⁸ Department of Planning, *State Planning Policy 3.6: Development Contributions for Infrastructure*.

²⁶⁹ Productivity Commission, *Public Infrastructure Draft Report*, 2014, p. 149.

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.

4.2.7 Public Private Partnerships

4.2.7.1 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 of this on the Government's financial situation being 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 savings.²⁷⁰ Further, evidence on PPPs, both in Western Australia and in other jurisdictions, suggests that they represent an attractive mechanism 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:²⁷¹

"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."

The ERA agrees with the view expressed by the Productivity Commission, and recommends that the Government expand the use and scope of PPPs to procure public infrastructure, particularly in cases that will result in core services being delivered with better value for money.

4.2.7.2 Submissions

The ERA received support in all 9 submissions that addressed PPPs.²⁷² Other issues raised by submitters regarding PPPs include:

- AMEC considers innovative PPPs to be essential in remote regional locations where attracting investment is a major challenge.
- CMEWA questions the extent of projects with sufficient financial viability to attract private investors. CMEWA recommends the use of blended project delivery teams for PPPs, including an extended role for Treasury's Office of Strategic Projects.
- The City of Greater Geraldton notes the absence of legislative provisions allowing local governments to take advantage of the efficiencies available from PPPs.
- CCFWA gives qualified support to the use of PPPs, urging the consideration of a wider range of options to attract private financing. It argues that the PPP bidding process produces a misalignment of interest between parties to the bid, and so that alternative procurement processes may provide better value for money. CCFWA note that independent, apolitical, and evidence-based advice on this issue should be sought.

²⁷⁰ Productivity Commission, *Report on Government Services*, 2014.

²⁷¹ Productivity Commission, *Public Infrastructure Draft Report Volume 1*, 2014, p.9.

²⁷² Submissions that discussed PPPs were received from AMEC, BWEA, CCIWA, CMEWA, the City of Greater Geraldton, CCFWA, Mr Sheridan, the PCA and the Western Australian Regional Development Trust.

- Mr Sheridan considers that social infrastructure PPPs need to be flexible to accommodate changing demographics and demand patterns. Mr Sheridan also notes that Governments must take care in committing to long term obligations without having suitable options to modify or terminate the contract.
- The PCA addresses funding constraints and alternative capital structures, and proposes alternative procurement models such as the Urban Coalition and UK City Deals models.

4.2.7.3 ERA analysis

PPPs 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. These may include toll roads, airports and hospital car parks (for example, the QEII Car Park Project). This allows these projects to be moved off Government's balance sheet.
- **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 projects may incorporate designing, building, financing and maintaining the facility (such as the Eastern Goldfields Prison), while 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. This is generally 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 20.

Table 20 Types of PPPs

PPP Characteristics	Economic Infrastructure		Social Infrastructure			Traditional Procurement
	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 Responsibilities:						
Design, build	✓	✓	✓	✓	✓	✓
Privately finance	✓	✓	✓	×	×	×
Maintain	✓	✓	✓	✓	✓	×
Operational Services (e.g. custodial or clinical services)	✓	×	✓	✓	×	×
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.	Increases market competition through government 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: Western Australian Department of Treasury, 2011, *Public Private Partnerships – A Guide*

The advantages and disadvantages of PPP procurement are outlined in Box 10.

Box 10 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** – these can be 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 can 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** – the Government can generally borrow more cheaply than the private sector, resulting in higher interest rates built into availability charges where the private sector investor has been responsible for procuring financing.

- **“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 a number of recent, high-profile cases where demand risk has been transferred, overly optimistic demand projections have failed to materialise, and private project proponents have failed. In these cases, the 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, since financial leases are subject to the same accounting treatment as other forms 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.²⁷³ Table 21 shows Victoria and New South Wales have been more active in the use of PPPs than other states, entering three and four times more PPP contracts than Western Australia respectively. Additionally, there are some sectors (such as education and toll roads) where other States have invited much greater involvement from the private sector.

Table 21 Contracted PPPs, by procuring Government and sector, 2006 to 2011

	<i>Cwlth</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Total</i>
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, *Public Infrastructure Draft Report Volume 1, 2014*, p. 157.

The ERA has reviewed the use of PPPs in Western Australia and elsewhere, and has identified a number of 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 the bundling of low-value projects to provide greater economies of scale. For economic

²⁷³ Clayton Utz, *Improving the Outcomes of Public Private Partnerships*, 2013.

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 market failures in various forms. Where private sector competitive markets will provide more efficient outcomes, but government is currently the dominant provider of a service (or owner of assets/businesses), the introduction of a contestable market may be beneficial.

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 improvement, with further gains arising from greater choice and improved quality for consumers of government services. The report provided the example of the health care sector, where a 2006 study by the Productivity Commission estimated savings of \$3 billion nationally from the introduction of greater contestability.

This has major implications for infrastructure planning and delivery, since reforms that incorporate a greater role for the private sector in service delivery will, in most cases, materially alter Government's approach to the procurement of the underlying infrastructure.

Evidence from a number of sectors indicates that private sector involvement in the provision of government services can be more efficient without trading off service levels or the failing to meet the level of quality expected by 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 Appendix 4. For the purpose of this analysis, 36 efficiency measures for 17 services have been reported from six sectors of Government activity, and have been 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 Western Australia 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 being in the two least efficient categories. Of the least efficient services, the average efficiency difference between Western Australia and the national average is over 34 per cent.

While it is likely that some of this difference arises from Western Australia's relatively small population leading to reduced economies of scale, it is noted that Western Australia has more than 50 per cent greater population than South Australia, which was found to be 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 that material cost savings may be realised from 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 savings 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 Western Australian prison system (see Table 22).
- 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.

Experiences with prisons and hospitals provide examples where expanding the scope of PPP procurement to include core service delivery has led to successful outcomes, both in Western Australia and in other jurisdictions.

Private sector delivery of services – evidence from prisons and hospitals

In Table 22, the 2012 operational cost per prisoner per day is presented for the Western Australian 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 Western Australian experience with PPP prisons. For example, in Victoria the daily average cost of private prisons in 2008/09 was found to be 88 per cent of that of public prisons.²⁷⁴ 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 adoption of new technologies.²⁷⁵

²⁷⁴ Victorian Government, Public Accounts and Estimates Committee *Inquiry into budget estimates*, 2008.

²⁷⁵ United Kingdom Government, House of Commons Committee of Public Accounts – The operational performance of PFI prisons, 2003.

Table 22 Western Australian 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, Parliamentary Debates: Legislative Council* 14 August 2013 (Hansard) 2013, p. 3335.

It is important to note that cost efficiencies are not necessarily 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. These benchmarks align the financial interests of the private sector operator with the operational and social outcomes sought by Government. As a result of incentive mechanisms that reward operational outcomes, service level outcomes at Acacia Prison have consistently exceeded Government requirements, in addition to delivering ongoing and material cost efficiencies²⁷⁶.

In the case of hospitals, as shown in Table 23, 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 of all Australian jurisdictions between the public and private hospital sectors. The cost of standardised public hospital care in Western Australia was on average 22 per cent higher than equivalent services from a private hospital. In contrast, on a national level the cost of standardised public hospital care was on average only 3 per cent higher than that of the private sector.

It is reasonable to assume that this gap contributed to the profitability of the Australian Stock Exchange (**ASX**) listed provider of public health in Western Australia referred to above, where payment is benchmarked to the local public hospital cost base.

²⁷⁶ 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, delivered 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).

Over subsequent years, public hospital costs in Western Australia rose more significantly, and remained consistently higher, than those in other jurisdictions. The Productivity Commission's *2014 Report on Government Services* showed that recurrent public hospital costs in Western Australia remain more than 10 per cent above the national average.²⁷⁷

Table 23 Hospital costs, average per case (2008)

Cost Component	Western Australia			Australia		
	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, *Public and Private Hospitals*, 2009.

Efficiency gains from private sector provision of services are not limited to prisons and hospitals, with many other services being 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 Western Australia was ranked the most efficient in Australia.²⁷⁸

The role of PPPs in contestable markets for Government services in Western Australia

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 at the least financial risk to the state. Identification of a service as being the responsibility of Government does not necessarily imply that the Government should directly deliver that service.

There is substantial national and international evidence showing that privatised government enterprises operate more cost effectively when they are allowed to operate without government interference in the commercial decision-making processes.²⁷⁹

The role of the private sector in a PPP 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.

²⁷⁷ See Appendix 4 for a summary of efficiency measures from Productivity Commission 2014 Report on Government Services

²⁷⁸ Eburn, M., Bendall, J., The provision of ambulance services in Australia, *Australasian Journal of Paramedicine*, Volume 8, Issue 4, 2012.

²⁷⁹ See for example Infrastructure Australia, *Balance Sheet Impacts of Sell to Build*, 2013.

Some recent infrastructure projects have adopted the PPP procurement model with limited private sector involvement in 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 the broad evidence of private sector efficiencies in custodial services provided above imply that there are potential 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 but not in Western Australia, such as schools and social housing. In many cases, the requirement for size or scale to justify the use of PPPs. These efficiencies may not be available for a single project in isolation, but can be attained by bundling or packaging projects together, either within the one agency or spanning multiple agencies. For example:

- PPP schools are a common feature in Queensland, New South Wales, and Victoria where a number of schools are bundled together to provide a sufficient project scale.²⁸⁰
- PPP social housing has 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.²⁸¹

Another alternative approach to bundling projects that is being investigated by the Victorian Government is the streamlining of the PPP model to apply to smaller scale procurement.²⁸² Simplifying the procurement model will allow certain classes of infrastructure to be delivered more frequently while retaining many of the benefits of PPPs.

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 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 can encourage more efficient and more innovative service delivery, whether by the public sector or the private sector. The ERA considers that 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 potential gains from private operation of the assets being considered, in addition to the more traditional PPP roles of design, construction, maintenance, and finance.

With regard to the provision of social infrastructure the ERA recommends that, where possible, the scope of PPP projects under consideration be broadened to investigate options that include associated service delivery, 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.

²⁸⁰ 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.

²⁸¹ Homes and Communities Agency, *Housing PFI*, 2014.

²⁸² Victorian Department of Treasury and Finance, *Future direction for Victorian public private partnerships*, 2012.

With regard to economic infrastructure, the ERA recommends further identification of opportunities to provide infrastructure, off-balance sheet, through PPPs.

The ERA notes that contracting with the private sector may introduce significant commercial complexities and unique contractual situations in which the Government may lack prior experience or existing 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 PPPs.

4.2.7.4 Recommendation

9. Expand the use and scope of Public Private Partnerships to procure public infrastructure, particularly in cases that will result in core services being delivered for better value for money.

4.2.8 Unsolicited proposals

4.2.8.1 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 guidelines in place to deal with unsolicited proposals.

The establishment and promotion of a process to encourage private sector input to infrastructure planning and/or delivery may encourage innovation in infrastructure delivery, and deliver opportunities to alleviate funding pressures. The ERA recommends that the Government develop a process and guidelines for attracting and awarding unsolicited infrastructure proposals from the private sector.

Such guidelines should seek to balance the protection of private sector intellectual property with competitive procurement principles required by Government to deliver value for money.

4.2.8.2 Submissions

The ERA received support from all six submissions²⁸³ that discussed unsolicited proposals. The issues raised by submitters regarding unsolicited proposals were:

- CMEWA considers that the assessment of such proposals should be conducted in line with principles designed to maintain impartiality, accountability, transparency, confidentiality, manage conflicts of interest, and obtain value for money.
- Martin Sheridan considers that an independent “Investment Authority” is best placed to assess unsolicited proposals.
- WALGA cited transparency as a key consideration in the assessment process, and suggests a role for the Office of the Auditor General in this area. WALGA also considers that local governments could benefit from a broad range of unsolicited projects, particularly under a model of Council Controlled Organisations, which would allow for commercial partnerships with the private sector.
- CCFWA gave qualified support for unsolicited proposals, expressing concern over the level of exclusivity offered to certain proponents in some jurisdictions. While the CCFWA supported the encouragement of innovative ideas, the need for value for money to be achieved through competition means that there would be a need for an independent body to assess whether a proposal is sufficiently unique to justify exclusive negotiation.

4.2.8.3 ERA Analysis

The provision of social infrastructure is a core function of government, and considerable resources are invested across agencies and trading enterprises for planning and delivery of the facilities and systems required to deliver these government services. However, the Government is not the only source of infrastructure innovation, and in many instances there may be opportunities for the private sector to identify new approaches to all aspects of government service delivery, assets, and infrastructure management.

²⁸³ Submissions that discussed unsolicited proposals were received from CCIWA, CMEWA, CCFWA, Mr Sheridan, PCA and WALGA.

In its recent submission to the Productivity Commission's 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.”²⁸⁴

In addition to PPP's, as outlined in Section 4.2.7, unsolicited proposals provide a further mechanism by which the private sector can contribute to delivering beneficial infrastructure outcomes.

Unsolicited proposals in other jurisdictions

The first PPP undertaken in New South Wales – the Sydney Harbour Tunnel – resulted from an unsolicited proposal.²⁸⁵ In 1986, the Transfield-Kumagai joint venture approached the New South Wales Government with a proposal to build the Harbour Tunnel. The Government then engaged in this joint venture without conducting a tender process. Subsequent criticism of the outcomes from this project led to increased clarity around future unsolicited proposals, balancing value for money with the encouragement private sector innovation.

In January 2012, the New South Wales Government released a guide for the submission and assessment of unsolicited proposals.²⁸⁶ The introduction to the guide states:

“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.”²⁸⁷

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:

²⁸⁴ Office of the National Infrastructure Coordinator: Infrastructure Australia, *Submission to the Productivity Commission Inquiry into Public Infrastructure*, 2013, pgs.6-8.

²⁸⁵ NSW Parliamentary Research Service, *E-brief: Unsolicited proposals*, 2013.

²⁸⁶ NSW Government, *Unsolicited Proposals: Guide for Submission and Assessment*, 2012.

²⁸⁷ NSW Government, *Unsolicited Proposals: Guide for Submission and Assessment*, 2012.

- *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 New South Wales approach require unsolicited proposals to be assessed against criteria that establish unique benefits of the proposal, providing justification to directly negotiate including. These criteria include 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 the proponent to deliver the proposal, affordability, and appropriate risk allocation.

The New South Wales Government devotes a Budget Paper to Infrastructure, containing a summary of all unsolicited proposals under consideration. It states that:

“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.”²⁸⁸

In its first year of operation, the New South Wales Government received 36 unsolicited proposals with 85 per cent not proceeding past Stage 1. Box 11 details a number of successful and prospective unsolicited proposals from New South Wales, illustrating the range of possible applications.

Box 11 Unsolicited proposals to the New South Wales Government

- In March 2004, an unsolicited proposal from Westfield led to an agreement to design and construct new retail and 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 New South Wales Government finalised sale of the Queen Mary Building to the University of Sydney, to be converted to affordable student accommodation.
- The New South Wales Government is currently considering an unsolicited proposal from Brookfield Office Properties to combine a commercial/retail development that includes 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 redevelopment of under-utilised Government land between railway stations.²⁸⁹ The Government is yet to respond to the proposal.

Source: New South Wales Government, *Unsolicited Proposals: Premier’s Statement*, 2014.

At the Federal level, Infrastructure Australia’s *National Public Private Partnership Policy and Guidelines* (December 2008) contains a discussion 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

²⁸⁸ NSW Government, *Budget paper No. 4 Infrastructure Statement 2013-14*, 2013, p.2-6.

²⁸⁹ AspireSydney, *Central Park Estate and M4 East Development – An unsolicited proposal to the NSW Government*, 2013.

*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.*²⁹⁰

Similarly, Queensland includes an unsolicited proposal framework in its PPP guidance material. Unlike New South Wales, detailed records of unsolicited proposals are not provided. However the ERA understands that two unsolicited projects are reportedly being developed under "exclusive mandate" (being the 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, covering the criteria and process by which exclusive negotiations are established, and the necessary level of information disclosure. The process emphasises four key project criteria:

- 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 currently published on project outcomes.

Internationally, levels of guidance vary, with the United States and New Zealand federal governments providing unsolicited proposal guidelines, while Canada and the United Kingdom and Eurozone do not. In 2001, the United Nations released a legislative guide to privately financed infrastructure projects, providing 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 while maintaining competitive processes. The study outlined various systems in use around the world, offering varying levels of advantage to the project proponent:

- the **Bonus System** invites additional competition but gives a small advantage to the original bidder;
- the **Swiss Challenge** publishes the unsolicited bid, and offers are invited to beat it; and
- the **Best and Final Offer** model involves multiple rounds of tendering, with the original bidder being guaranteed participation in the final round.

Summary

An opportunity exists for Western Australia to actively promote greater private sector involvement in infrastructure provision, through the development and promotion of unsolicited proposal guidelines. The potential benefits include:

- the establishment of a mechanism by which private sector innovation and technological advancement can be introduced to infrastructure planning and provision;

²⁹⁰ Infrastructure Australia, *National Public Private Partnership Policy and Guidelines*, Volume 6, 2008, p.16.

- greater potential for alternative and innovative funding, financing, and charging mechanisms for infrastructure;
- consideration of asset sales that have not been addressed by government policy;
- reduction of demand for Government-owned infrastructure;
- opportunities for the alleviation of infrastructure funding pressures; and
- exposing Government Trading Enterprises to the policy may open routes by which industry procurement innovations occur where these would otherwise be opposed.

However, care needs to be taken to ensure the guidelines safeguard against vexatious private sector proposals, and projects that are not consistent with government policy. For example, it should be open to Government to exclude proposals of a certain nature from consideration, such as gambling or gaming proposals.²⁹¹

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 development, and may encourage greater private sector participation in the planning and delivery of infrastructure and related services.

The scope and/or focus of such guidelines could be extended to include specific policy areas such as asset sales, or specific problems or sectors, such as congestion, iconic developments, or transport interchanges.

4.2.8.4 Recommendations

10. Develop a process and guidelines for considering unsolicited infrastructure proposals from the private sector.

²⁹¹ The New South Wales Government is currently in 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 case-by-case basis and in the context of rigorous guidelines defining Government's view of "unique" benefits.

4.2.9 Infrastructure WA

4.2.9.1 Issue

A number of submissions to this Inquiry advocated a State infrastructure strategy and/or an independent infrastructure advisory board undertaking a role similar to that of Infrastructure Australia at the Federal level.

In the Draft Report, the ERA concluded that better infrastructure outcomes could be achieved by following good processes and by utilising current sources of advice available to Government. The ERA did not see merit in establishing an infrastructure advisory board in addition to these existing processes and advisory bodies.

The submissions received in response to the Draft Report also supported the implementation of an independent advisory board. However, these comments have not changed the ERA's opinion that an infrastructure advisory body is an unnecessary reform.

4.2.9.2 Submissions

The ERA received four submissions in response to its conclusion that it was unnecessary to establish an independent State infrastructure advisory body. These submissions made the following points:

- CMEWA supported the establishment of an arm's length body to advise on infrastructure strategies and improve co-ordination between Government and the private sector for longer term infrastructure planning. It stated that such a body would fill the "gap" in Western Australia's current planning and budgetary processes beyond the forward estimates period. It recommended a collaborative State infrastructure plan and a State economic infrastructure unit to provide specialised, centralised expertise in structuring complex financing and risk sharing models.
- CCFWA believes an independent statutory State Infrastructure agency would lead to greatly increased rigour and transparency around infrastructure project planning, procurement and delivery, and that the complexity of infrastructure planning and provision justifies obtaining the best quality independent advice, and implementing a high level of accountability.
- CCFWA also argued that, while a political element in infrastructure decisions is inevitable, it is imperative that processes are in place to de-politicise the process as much as possible.
- CCFWA does not consider it appropriate that Infrastructure Australia undertake a review role, as this serves to reinforce a policy of Commonwealth intervention in the State's areas of responsibility. The CCFWA highlights the commendation of the role of Infrastructure NSW in the Productivity Commission's *Inquiry into Public Infrastructure Draft Report* in preparing 5 and 20 year plans, reviewing proposals, funding models and risk.
- PCA endorses the development of a long term (15 to 20 year) infrastructure plan to support a transparent and bi-partisan pipeline of projects, to reduce uncertainty, attract private investment, and enable the private sector to better understand Government's reasoning and priorities. Under the plan, oversight for the delivery of strategic infrastructure should be the responsibility of a dedicated Minister who is held accountable for the infrastructure portfolio's performance, planning, funding, and delivery. The PCA considers that the Minister should be supported by an

independent body to coordinate infrastructure provision and ensure delivery of projects.

- Master Builders Association of Western Australia (**MBAWA**) favours the establishment of an independent infrastructure council to de-politicise infrastructure investment, arguing that politicians must relinquish some degree of control for the long term benefit of the community. The MBAWA provided a number of examples of regulatory bodies that work successfully independently of Government

4.2.9.3 ERA analysis

As outlined above, 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, mirroring 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 more rigorous, consistent, and transparent evaluation of projects, particularly for long-term projects that sit outside four-year budgetary and electoral cycles. The over-arching objective of this advice is to ensure that only the projects with the greatest net benefits 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 private 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.²⁹² This is similar in intent to the role of the Reserve Bank of Australia (**RBA**) undertakes in relation to monetary policy. The RBA's objective, under an agreement with the Australian Government, revolves around the objective of maintaining the Consumer Price Index (**CPI**) within a range of 2 to 3 per cent. This clear objective allows for transparency and accountability in decision making. As with 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 delivery are multiple, conflicting, and complex. Consequently, the argument against independent infrastructure advice is that politicians are best placed to exercise the degree of judgement required to assess and balance the objectives of infrastructure investments. In addition, politicians are held accountable for these decisions as part of the political process.

Further, there is a risk that members of the advisory board may represent vested interests and so will not represent the best interests of the Western Australian community.

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.”²⁹³

²⁹² See for example *NSW Infrastructure Strategy*, 2012 and *Infrastructure Australia Submission to Amendment Bill*, 2013.

²⁹³ Productivity Commission, *Inquiry into Public Infrastructure: Draft Report*, 2014, p228.

The ERA notes that proper evaluation of infrastructure projects is resource-intensive and requires considerable expertise. The operation of an independent advisory body would impose additional costs on Government, including difficulty and expense of obtaining and retaining sufficiently skilled staff.

Additionally, one of the primary benefits provided by an independent advisory body - providing access to an external peer-review process for project evaluation - has recently been made available to Western Australia by Infrastructure Australia, which provides external expertise and scrutiny of State agencies' proposals.

Given these circumstances, the ERA considers it doubtful that further benefit to rigorous project evaluation can be achieved by creating a State-based advisory board to perform a function that is largely delivered by Infrastructure Australia.

The ERA further notes the current debate surrounding the *Infrastructure Australia Amendment Bill 2013*, which underscores the difficulty facing infrastructure advisory bodies in terms of 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”²⁹⁴ 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 place 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 that the impact of a State based advisory body is 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 already plays an important role in the review of Government performance, and 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, Government already has access to 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 provide 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).

A number of longer term sector-specific strategic infrastructure plans developed in collaboration with the private sector through public submission provide further support to the information in the State Budget Papers. Examples of such plans 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 24.

²⁹⁴ Parliament of Australia, *Infrastructure Australia Amendment Bill 2013: Explanatory Memorandum*, 2013.

Table 24 Strategic Plans by sector

Sector	Sub-sector	Strategic planning	Department
Water	Drinking Water	<i>Water forever-50 year, 10 year, regional</i>	Water Corporation
	Wastewater	<i>Water forever- recycling and efficiency</i>	Water Corporation
Transport	Roads	<i>CBD Transport Plan</i>	Transport
	Public Transport	<i>Public Transport Plan 2031</i>	Transport
	Ports	<i>Ports Review 2012, Portlink</i>	Transport
	Airports	<i>State Aviation Strategy</i>	Transport
	Rail-freight	<i>Regional Freight Plan</i>	Transport
	Other	<i>WA Bicycle Network Plan, Alternative Transport, Parking</i>	Transport
Social Infrastructure	Health	<i>Clinical Service Framework 2010-2020</i>	Health
	Education	<i>State Budget</i>	Education
Other	State Planning	<i>State Planning Strategy (land use)</i>	WA Planning Commission
	Regional Infrastructure	<i>Regional Blueprints (in development)</i>	Regional Development Corporations
	Perth Infrastructure	<i>Directions 2031 and Beyond</i>	WA Planning Commission
	Funding	Under development	Transport

Source: Various Western Australian State Government Agencies

The ERA notes that past attempts to develop a coordinated State Infrastructure Strategy have been abandoned after considerable expenditure, in the face of a change of government²⁹⁵ and that it is expected that a new government will bring with it a new set of infrastructure priorities.

Further, these priorities may differ considerably from those of independent advisory bodies, undermining the integrity of the decision-making process. For example, Infrastructure NSW was not consulted regarding the most costly New South Wales Coalition election promise, the \$8.5 billion North West Rail Link, and other key infrastructure projects (for example, light rail in the CBD) were rejected by Government.

Likewise, at a Federal level Infrastructure Australia has maintained an infrastructure priority list for projects that reflects a nationwide infrastructure strategy²⁹⁶ that has at times differed from the Government's objectives. Infrastructure Australia categorises each project as "early state", "real potential", "threshold" or "ready to proceed", with project rankings reflecting the level of analysis and relative strategic and economic merit. However, the 2014-15 Commonwealth Budget released in May 2014 outlined \$50 billion in expenditure on roads over the next seven years, and of the extra road funding announced, none of the announced projects were identified on Infrastructure Australia's Priority List as "ready to proceed" or "threshold". In fact, many of the projects had not received any scrutiny from the advisory body at all.²⁹⁷

These examples demonstrate the inherent difficulty in establishing a truly independent infrastructure strategy that appropriately informs government decision making processes.

²⁹⁵ 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.

²⁹⁶ Infrastructure Australia, *Infrastructure Priority List Update- December 2013*, 2013.

²⁹⁷ Grattan Institute, *Changes help the budget but not the economy*, *News and Opinion*, 2014.

Regarding the argument that a State Infrastructure Strategy can produce a pipeline of committed projects, the ERA agrees with the Productivity Commission on that:

“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.”²⁹⁸

In summary, consistent with reforms outlined in Section 4.2.1, the ERA maintains that the most significant benefits to infrastructure outcomes will be delivered by a Government focus on good process, and on utilising the sources of advice already in place. This is likely to exceed any marginal benefits arising from changing the structure, source, or governance of infrastructure advice to the State Government.

4.2.9.4 ERA conclusion

The ERA does not support the establishment of a State infrastructure advisory board, on the basis that such a body will not yield significant additional benefits on top of those delivered by the application of good processes. The ERA considers that Auditor General should perform a periodic review of Government decision-making to ensure good process has in fact been followed.

²⁹⁸ Productivity Commission, *Inquiry into Public Infrastructure: Draft Report*, 2014, 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. 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.'²⁹⁹

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 well 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 arise in a variety of situations, as 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 the Government.

Reflecting this, the ERA recommended in the Draft Report that the Government conduct a full investigation into the divestment of assets that pass the threshold criteria for private ownership.

This section of the report begins with an overview of the public submissions received in response to the chapter on government ownership of assets in the Draft Report. These submissions have helped inform the ERA's views and approach to reviewing government ownership in Western Australia.

²⁹⁹ The Government of Western Australia, *2014-15 Budget at a Glance*, 2014.

The section examines why competition generally results in the best outcome for consumers, but also acknowledges the situations where competition is not possible or where 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, 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 to demonstrate how this process can be applied more generally to the Government's portfolio of assets.

4.3.2 Submissions

4.3.2.1 Submissions to the Draft Report

Of the nine submissions to the Draft Report that addressed the issue of government ownership six were in favour of reviewing the appropriateness of government ownership and three made comments regarding specific industries only.

Mr Porzig³⁰⁰ made the following general comments in support of retaining the Government's role as owner of assets and businesses:

- Western Australia has insufficient economies of scale to enable a number of competitors to enter the market; at best an oligopoly would occur, which would not help consumers.
- Private companies will be willing to provide services to profitable areas but may be unwilling to provide services to new development areas that may not be profitable. Taxpayers would have to pay for the services to unprofitable areas, which overall will cost taxpayers more.
- There is also a possibility that private sector entities can become bankrupt, or be taken over by non-locally based companies that would have less involvement in the State.

The following general comments were made in support of reviewing the State's role as an owner and divesting assets:

- CCFWA, CMEWA, CCIWA, Committee for Perth, Bunbury Wellington Economic Alliance (**BWEA**) and PCA support the ERA's recommendation to conduct a full investigation into the divestment of assets that pass the threshold criteria for private ownership.

³⁰⁰ Mr Porzig is an individual submitter.

- CCFWA and CMEWA agree that the private sector is better placed to meet consumers' needs, with some form of government intervention if required.
- The CMEWA stressed that an asset review should be undertaken in consultation with industry.
- Mr Sheridan considers that State Government ownership of infrastructure crowds out private sector investment and that competing State Government objectives prevent the State from operating as efficiently as the private sector.
- Mr Sheridan notes that Western Australia should use the proceeds from the sale of Government assets as a means to balance the budget.

The following comments were made regarding specific industries or utilities in Western Australia:

- **Power and water utilities**, Mr Porzig stated that:
 - the power and water utilities are too important to citizens to privatise.
- **Mining development**, AMEC stated that:
 - the Government should divest assets that are needed to develop mining areas in order to keep up with the development of mines, and ensure that the full economic, social and financial benefits of the mines are realised.
- **Government land and property**, the PCA stated that:
 - the State Government should announce an efficient process for identifying the land and property assets to be sold, and a timeframe for the disposal process as soon as possible; and
 - the investigation into divestment should begin with underutilised land and property assets, as disposal of these assets will not face significant public opposition.
- **Social and affordable housing**, the Community Housing Council of Western Australia (**CHCWA**) made the following points.
 - The public housing system in Western Australia is currently operating at a substantial loss and Western Australia has the highest cost per public housing dwelling of all the mainland states of Australia.³⁰¹
 - CHCWA considers the community housing sector is best placed to meet the Government's overall objective of responsive social housing because it is more flexible in its supply of housing and has a better ability to increase the housing stock.
 - Social and affordable housing meets the ERA's criteria for divesting government ownership. The CHCWA conducted an assessment against the criteria, presented on page 6 of their submission.

³⁰¹ The CHCWA used evidence from the Productivity Commission to support this claim. The Productivity Commission, 2014, Report on Government Services: Chapter 17 Housing Attachment tables, table 17.A.19

- An objective of the State's Affordable Housing Strategy is to create a contestable market for social and affordable housing utilising private Community Housing Providers (**CHPs**). CHCWA notes that there has only been slow progress and support the transfer of public housing title and/or management to CHPs. Transfer of 5,000 public housing properties to CHPs would save the Government an estimated \$203 million over four years.

The following comments were made concerning asset recycling:

- CMEWA noted that divestment should occur in conjunction with a capital recycling strategy that would see the Government reinvest funds raised from asset divestments into new economic infrastructure.
- PCA consider it best practice policy to implement an asset management model that makes better use of scarce new capital by recycling existing capital.

4.3.2.2 Submissions to Discussion Paper

Of the six submissions that addressed the issue of government ownership to the Discussion Paper, 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 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 CMEWA 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 CMEWA 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 Western Australian ports that could be delivered more efficiently by the private sector and may be attractive for sale.

4.3.3 Why does the Government intervene in markets?

4.3.3.1 Lack of 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, businesses 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 business, there may be the threat of an additional business entering the market. The threat of potential entrants alone is an incentive for the business to produce the goods and services in a manner consistent with consumer demands.

Competition drives businesses to 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 businesses seeking to lower the cost of producing products and services. Consider an established business selling a given product. If a competing business can enter the market and sell a similar product at a lower price, the established business can expect to lose market share and may be forced out of the market if the established business is unable to compete. Competition and competitive pressures encourage businesses to reduce costs.

Second, competition for inputs among competing businesses offering alternative products or services encourages resources to be allocated to where they are most valued. This is because the most efficient businesses earn greater revenue per input than other businesses and hence can afford to outbid other businesses. This ensures that society, as a whole, is better off because the limited resources of the economy are used for their highest value.

Third, increased competition compels businesses to compete for consumers through differentiating their product or service. Businesses will innovate the product or services to the benefit of consumers in order to retain or attract new consumers.

The objective of competitive pressure is to drive businesses 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. However, competition is not an end in itself. Rather, competitive pressure is an effective mechanism by which customers receive goods and services at a 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 scenario 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 charge consumers above the cost of production in order to increase its profit.

This leads to the under-provision of the good or service, as less consumers would be willing to purchase the good or service at the inflated price.

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 consumer demand or ensure that allocation between customers is efficient. Competitive markets, on the other hand, are capable of achieving technical, allocative and dynamic efficiencies simultaneously as businesses have to compete for customers and resources.

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 affect third parties, such as when environmental and public health risks are prevalent (known as externalities). Private sector provision may not be appropriate in some situations, but well-designed regulatory arrangements should generally 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 be 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 does not charge individuals for using regional parks. The Government pays for the maintenance of regional parks through taxation.

4.3.4 Public ownership

4.3.4.1 When should a Government be involved in the market?

Governments have a number of alternative mechanisms for addressing market failures other than government ownership of assets. Governments should identify the most appropriate mechanism, or even whether intervention is necessary, before intervening in the market.

If there is no failure in the market, there should be no need for government intervention in the market. Government intervention in markets that do not exhibit market failures is generally not necessary and the reasons for intervening 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, 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 a 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 a market:

- The Government could be responsible for the provision of the goods or services through full asset ownership and delivery. For example, the Western Australian Government owns the Water Corporation.
- The Government could be responsible for the provision of the good or service, but the private sector could be responsible for the delivery of the good or service with standards and regulations specified through contractual arrangements, if necessary. Either the private or the public sector could own the asset. 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, carbon 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 regulation of private businesses or correction of price signals is often a better way of correcting market failures than government ownership. This is because private businesses generally operate more efficiently and are more innovative than public businesses.

There are several reasons why the private sector is generally more efficient and has a greater ability to innovate than the public sector:

- The Government has a wide range of objectives, some of which may be conflicting. In comparison, the private sector has one main objective: to respond to consumer demand in a way that will maximise profit. The pressure that a competitive market places on a private business encourages cost reduction and efficiency.
- In general, the private sector is better equipped to innovate and diversify risk than the public sector. 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 the public sector. In industries that are characterised by high levels of innovation and technological change (for example, telecommunications) a private sector owner is more likely to be able to adapt to changes and perform more efficiently than a government owner.
- A private sector entity is generally reliant on shareholders and principal creditors to provide funding. As such, 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 the best way to provide goods and services.

The Bank of Western Australia is an example of where an asset was performing soundly under government ownership but there was an overall benefit in divesting the asset.³⁰²

³⁰² Parliament of Western Australia, Hansard: Legislative Assembly, Thursday 8 December 1994, p.9267.

Box 12 Case Study: Bank of Western Australia (BankWest)

The Government of Western Australia retained ownership of BankWest until 1995. The bank had been operating well in a competitive market prior to divestment³⁰³ and there was no specific or pressing need for the Government to divest assets.

However, the Government found that the potential financial risk of retaining ownership of the bank was greater than the benefits to society of government ownership. This is illustrated in the then Premier's (Richard Court) second reading speech of the *Bank of Western Australia Bill 1994*³⁰⁴:

*"... the Government has decided that the State should now dispose of the bank due to: banking not being a core business of State Government; the level of risk attaching to the banking industry generally as reflected in changing profit levels; the further risk to the State of retaining the bank but not having any control over its day-to-day operations; the magnitude of the State's potential exposure under its guarantee of the bank's financial obligations."*³⁰⁵

The Government did see some benefits to the wider community in retaining the bank's head offices and hence employment opportunities in Western Australia. The Government was able to specify the retention of these benefits through provisions in the *Bank of Western Australia Act 1995*.³⁰⁶

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.

Those concerns³⁰⁷ appear to be in relation to possible price increases, declining service and environmental standards, and the abandonment of non-commercial activities (such as educating consumers on reducing their consumption of electricity to save money and benefit the environment).

The Government can address these concerns through well-designed regulation or intervention. 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. The case study below shows an example of regulatory and legislative arrangements that ensure the private operators are meeting consumer and society's interests.

³⁰³ Parliament of Western Australia, Hansard: Legislative Assembly, Thursday 8 December 1994, pg.9267.

³⁰⁴ Now the Bank of Western Australia Act 1995.

³⁰⁵ Parliament of Western Australia, Hansard: Legislative Assembly, Thursday 8 December 1994, pg.9267.

³⁰⁶ Bank of Western Australia Bill 1995.

³⁰⁷ As illustrated by Mr. Porzig's submission to the Inquiry.

Box 13 Case Study: The Residential Gas Market in Western Australia

In 1998, the gas provider, AlintaGas separated into two entities: AlintaGas Sales (retailer) and AlintaGas Networks (supplier). In 2000, the Government of Western Australia passed legislation and divested the State owned AlintaGas Sales and AlintaGas Networks.

The Government implemented legislation and regulations to ensure efficient pricing and supply of gas and to protect consumers from possible monopolistic or anticompetitive behaviour by the gas retailer or network owners.³⁰⁸ These provisions include:

- Price caps: the State Government sets a maximum price that the retailer can charge to residential customers.^{309 310}
- Access arrangements: the gas transmission and distribution service provider must comply with the National Gas Rules. This ensures that the network tariffs reflect efficient costs.³¹¹
- Safety regulation: the Energy Safety Unit within the Department of Commerce is responsible for the technical and safety regulation of most of the gas industry. It enforces safety legislation and standards to safeguard all individuals involved in the supply or use of gas in Western Australia.^{312 313}

These provisions have been put in place to ensure that consumers are no worse off due to privatisation of State owned assets.

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 assess periodically 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.

³⁰⁸ Many of these were in place prior to divestment, and apply to public and privately operated entities alike.

³⁰⁹ Residential customers are those customers who consume less than 1 terajoule per annum.

³¹⁰ Department of Finance, *Public Utilities Office: Gas tariff caps*, accessed online 23/04/2014.

³¹¹ For more information, please see Gas Access Arrangement Guidelines published 10 March 2014 on the [ERA website](#).

³¹² For a list of the applicable legislation, please see the State Law Publisher or the Department of Commerce: Energy Safety website.

³¹³ Prior to divestment the Government regulated gas through the State Electricity Commission of Western Australia, which became the State Energy Commission of Western Australia.

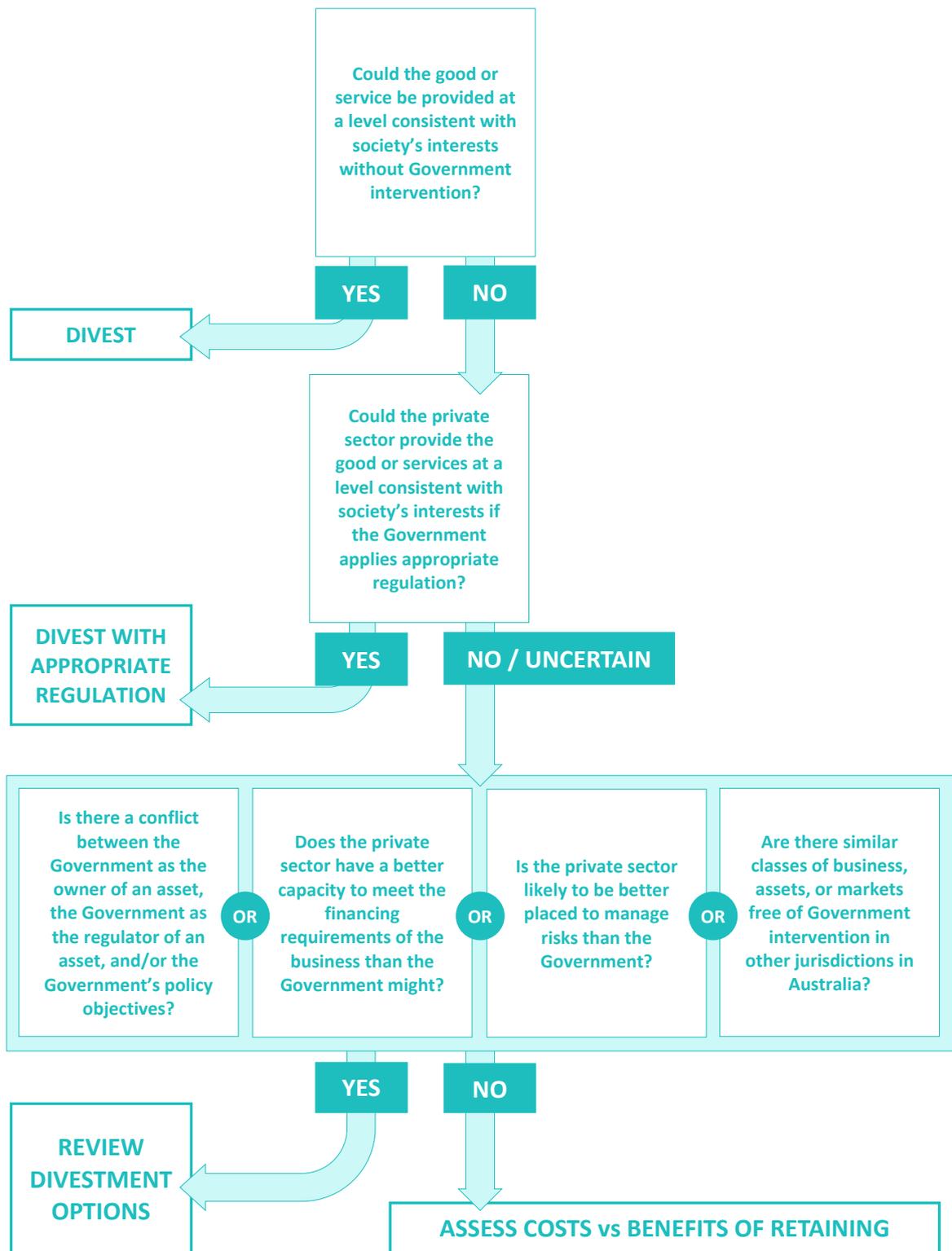
4.3.5 Criteria for reviewing Government ownership

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 31 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 31 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 a 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 TNPS and therefore the Government must prioritize its spending within the whole TNPS, including GTEs. Hence, the performance and investment requirement 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, then the Government should consider selling the risks 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 money at a cheaper rate than private businesses. This is because taxpayers are underwriting government bonds and can 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, as taxpayers are ultimately accountable for financial risk undertaken by the Government that they may not be being adequately compensated for. 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 an 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 affect 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, significantly adding to the State's net debt.

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 affecting 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 Western 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.

The ERA considers that there are benefits in applying the criteria to all State owned assets and businesses, including those surveyed below.

The asset surveys are not conclusive, and should be used as a guide to understanding the criteria and application of the criteria.

4.3.6.2 Recommendations

11. 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

<p>Asset/Entity description</p>	<p>Western Power builds, maintains and operates the electricity network³¹⁴ 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).</p> <p>Western Power is a statutory corporation established by the <i>Electricity Corporations Act 2005</i>. It is owned by the State Government of Western Australia and is accountable to the Minister for Energy.</p>
<p>Could the good or service be provided at a level consistent with society's interests without government intervention?</p>	<p><u>Is there prospect for direct competition?</u></p> <p>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.³¹⁵</p> <p>Potentially in the future, advances in battery storage technology, (in combination with distributed generation such as solar PV panels) could provide customers with an economically viable alternative to connecting to the grid.</p> <p><u>Are there any externalities?</u></p> <p>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.</p> <p>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.</p> <p><u>Conclusion</u></p> <p>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. This is because a monopoly operator could charge more than the cost of providing the service and/or provide the service at a standard that is less than required by customers and may pose a safety concern.</p> <p>It is unclear whether the private sector would address the externalities in a manner consistent with society's interests.</p>
<p>Could regulation enable the private sector to provide the services at a level consistent with society's interest?</p>	<p>The <i>Electricity Act 1945</i> and the <i>Electricity Industry Act 2004 (EIA)</i> set out the legislative requirements for transmission and distribution electricity networks in Western Australia. Key subsidiary legislation which regulates these networks includes:</p> <ul style="list-style-type: none"> • <i>Electricity Networks Access Code 2004 (ENAC)</i>; • <i>Electricity Industry (Network Quality and Reliability of Supply) Code 2005 (NQ&R Code)</i>; • <i>Electricity Industry Metering Code 2005 (Metering Code)</i>;

³¹⁴ An electricity network contains the transmission and distribution assets such as power poles and power lines.

³¹⁵ Western Power, 2014, *How Western Power is Regulated*, http://www.westernpower.com.au/aboutus/How_we_are_regulated.html (accessed 18 June 2014).

- *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)*; and
- *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**):

	<ul style="list-style-type: none"> • 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 customers 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. <p>All of the above legislation would apply to any electricity network regardless of ownership.</p> <p>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.</p>
Is there a conflict of interest?	<p>There is an inherent conflict of interest in the Government ownership of Western Power with the legislative powers it has in setting the rules and regulations relating to electricity networks in Western Australia.</p> <p>As indicated below, there is a potential conflict of interest between the Government as Western Power's shareholder, government policy and government budgetary considerations.</p> <p>An important check and balance in a regulatory framework is the ability of the service provider to appeal a decision of the regulator. The <i>Electricity Industry Act 2004</i> provides for this to happen. However, when the ERA delivered its final decision on Western Power's AA3 Access Arrangement,³¹⁶ the Government issued a directive to Western Power not to appeal the ERA's decision.³¹⁷ 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.</p> <p>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.</p>
Does the private sector have a better capacity to meet the financing requirements?	<p>The Government's overall financial position can restrict the ability of Western Power to efficiently invest in and maintain its network.</p> <p>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</p>

³¹⁶ ERA, 2012-2017 *Western Power's Approved Revised Access Arrangement (AA3)*, 2012.

³¹⁷ Western Power, 2012, *Amended proposed access arrangement information for the Western Power Network*, p. 8.

	<p>Power has outlined further investment requirements of \$2.8 billion to 2016.³¹⁸</p> <p>The actual capital expenditure by Western Power over the AA2³¹⁹ 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.³²⁰ 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.</p> <p>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.³²¹</p> <p>In relation to government underinvestment on assets, Infrastructure Australia recently made the following observation.</p> <p><i>"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."</i>³²²</p> <p>Yes, the private sector would have better capacity to meet the financing requirements.</p>
<p>Is the private sector likely to be better placed to manage the risk?</p>	<p>The main business-specific risks associated with Western Power are:</p> <ul style="list-style-type: none"> • 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 demand 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. • Physical asset failure and/or damage, such as towers and lines damage, power and transformer failure or circuit breaker failure. • Operational risk such as cost blow-outs and inefficiencies. <p>Most of the highlighted risks are better dealt with by the private sector through mitigation strategies, insurance or self-insurance. The private</p>

³¹⁸ Western Australian Department of Treasury, 2013, *2013-14 Government Mid-year Financial Projection Statements*.

³¹⁹ The AA2 period was from 2009/10 to 2011/12.

³²⁰ March 2012, Geoff Brown & Associates, Technical Review of Western Power's Proposed Access Arrangement for 2012-2017, pp. 46-47.

³²¹ Standard and Poor's, Submission to the Senate Standing Committee on Finance and Public Administration, 2008.

³²² Infrastructure Australia, Part of the Answer to Removing the Infrastructure Deficit, 2012, p. 11.

	<p>sector's recognized incentive and ability to drive innovation and efficiency contributes to its capacity to manage risk.</p> <p>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 taxpayers exposed to these risks.</p> <p>Yes, overall the ERA considers that the private sector is best placed to manage electricity network risk due to its ability to innovate, diversify and price risk.</p>
Is the asset/business privately owned in other jurisdictions of Australia	<p>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.³²³ Government ownership has been retained in New South Wales, Queensland, Tasmania and the Northern Territory.</p>
Could the asset be divested?	<p>Yes, there is potential for Western Power to be divested; however, further review of the costs and benefits is necessary.</p>

³²³ Australian Energy Regulator, *State of the Energy Market 2013*, 2013, pp. 62-63.

Synergy

<p>Asset/Entity description</p>	<p>Synergy operates as an energy retailer and generator in the SWIS.³²⁴</p> <p>Synergy is a statutory corporation and must comply with the <i>Electricity Corporations Act 2005</i> (WA) and other state and commonwealth laws.</p> <p>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.</p> <p>In 2012/2013 Synergy retailed approximately 62 per cent of the electricity sold to households and business customers in the SWIS.³²⁵ In 2012/2013 it provided 52 per cent of the generating capacity in the SWIS.³²⁶ However, if bilateral contracts with other independent generators are also considered, Synergy's market share is potentially much higher.³²⁷</p>
<p>Could the good or service be provided at a level consistent with society's interests without government intervention?</p>	<p><u>Is there prospect for direct competition?</u></p> <p>Yes, there is prospect that direct workable competition would emerge in the electricity generation and retail sectors. Indeed, numerous competing firms in Western Australia currently provide generation and some retail services.</p> <p>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.</p> <p><u>Are there any externalities?</u></p> <p>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.</p> <p><u>Conclusion</u></p> <p>No.</p> <p>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.</p> <p>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 were no regulations.</p>
<p>Could regulation enable the private sector to provide the services at a level</p>	<p>Society is interested in an affordable, safe and reliable energy supply.</p> <p>The <i>Electricity Industry Act 2004</i> regulates the licensing scheme for electricity supply. The licensing scheme has four classes of license:</p>

³²⁴ The SWIS extends from Kalbarri in the north, east to Kalgoorlie-Boulder and south to Albany.

³²⁵ Synergy, *Annual Report 2012-13*, 2013, p. 6.

³²⁶ Verve Energy, *Annual Report 2012-13*, 2013, p. 13.

³²⁷ 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.

consistent with society's interest?	<p>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.³²⁸</p> <p>If an entity is required to have a license, then the regulatory framework applying to the licensee is the same regardless of ownership.</p> <p>Environmental externalities from electricity generation can be dealt with by:</p> <ul style="list-style-type: none"> • 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. <p>Yes, regulation would enable the private sector to provide the service at a level consistent with society's interest.</p>
Is there a conflict of interest?	<p>The Government owns Synergy, sets the retail prices for consumers, and sets general policies within the electricity sector. There could be conflicts between the roles that may lead to inefficient outcomes. For example, the Government might want Synergy to:</p> <ul style="list-style-type: none"> • 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. <p>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 (non-contestable 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.</p> <p>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.³²⁹</p> <p>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</p>

³²⁸ 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.

³²⁹ Public Utilities Office, *Gas Market Moratorium*, 2014.

	<p>regulations protecting Synergy prevent any retailer from competing for non-contestable electricity customers.³³⁰</p> <p>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.</p>
<p>Does the private sector have a better capacity to meet the financing requirements?</p>	<p>Synergy has an Asset Investment Program estimated at \$329 million for the period 2013-17.³³¹</p> <p>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.³³²</p> <p>Yes, the private sector has a better capacity to meet Synergy's financing requirements (but only if electricity prices are cost reflective).</p>
<p>Is the private sector likely to be better placed to manage the risk?</p>	<p>Some of the main risks related to generation and retailing activities are stated below:</p> <ul style="list-style-type: none"> • 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 by 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 or circuit breaker failure. • Operational risk such as cost blow-outs and inefficiencies. <p>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.</p> <p>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 taxpayers exposed to these risks.</p> <p>Furthermore, the risks associated with Synergy are not consistent with the maintenance of the triple-A credit rating.</p>

³³⁰ The limited protection provided by the Gas Market Moratorium was highlighted when, in March 2013, Wesfarmers Kleenheat Gas entered the natural gas market and was able to compete for the Alinta Energy customers covered by the Gas Market Moratorium.

³³¹ Western Australian Treasury, 2013, *Budget Papers: Synergy*, p.750 and Western Australian Treasury, 2013, *Budget Papers: Verve Energy*, p. 751.

³³² Standard and Poor's, Submission to the Senate Standing Committee on Finance and Public Administration, 2008, http://www.aph.gov.au/~media/wopapub/senate/committee/sgfm_cte/submissions/sub18_pdf.ashx (accessed 18 June 2014).

	<p>Yes, the private sector is best placed to manage Synergy's risk due to their ability to innovate, diversify and price risk.</p>
<p>Is the asset/business privately owned in other jurisdictions of Australia</p>	<p>Yes.</p> <p>Neither Victorian nor South Australian Governments hold any generation assets. In NSW, the Government is in the process of selling all its generation assets. In Queensland, the Government owns around 65 per cent and in Tasmania the Government owns nearly all generation capacity.</p> <p>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 ActewAGL provides 90 per cent of retail to small customers and almost all small customer retail in Tasmania is provided by the publicly owned Aurora Energy.</p> <p>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.</p>
<p>Could the asset be divested?</p>	<p>Yes, the assessment of Synergy indicates there are reasons that warrant the Government review the costs and benefits of divesting Synergy.</p> <p>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.</p>

Water Corporation

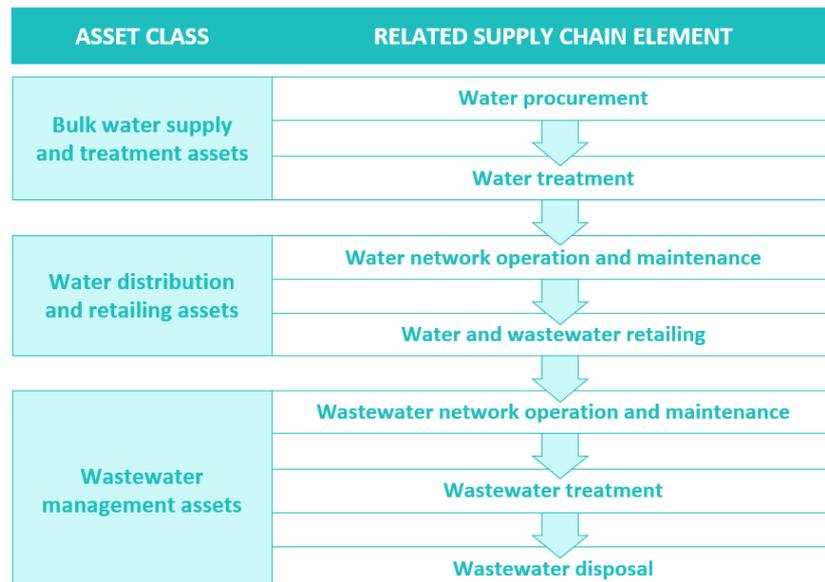
Asset/Entity description

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*.

A Board of Directors who governs the Water Corporation is 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 are shown in the figure below.



The three asset classes grouped by the ERA are:

- Bulk water supply and treatment, which includes providing, operating and managing dams and reservoirs for water supply, the State's desalination plants and water recycling plants.
- Water distribution and retailing, which includes the water pipeline network in Western Australia and retailing services provided to end users.
- Wastewater³³³ assets include those associated with collecting, treating and disposing of wastewater in urban areas. This includes the wastewater network and treatment plants.

There are significant differences in the asset classes in terms of their suitability for divestment. Ideally, a separate review would be conducted of each individual asset class.³³⁴ For the purpose of this report the ERA has surveyed the Water Corporation as a whole.

³³³ Wastewater is water that has been used. For example the water has been used for washing, in manufacturing processes or in sewerage.

³³⁴ These differences include the level of (conceivable) competition, the necessity of government intervention and the capacity of the private sector to provide the good or service.

	<p>However, the ERA considers that a more in depth analysis by asset class would add further value to the debate surrounding the divestment of water assets.</p>
<p>Could the good or service be provided at a level consistent with society's interests without government intervention?</p>	<p>The ERA considers that consumers should receive reliable, cost reflective and continuous access to clean water and wastewater services to meet society's interests.</p> <p><u>Is there prospect of direct competition?</u></p> <p>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</p> <p><i>"...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."</i> ³³⁵</p> <p>The ERA has reviewed competition in bulk water previously and proposed the introduction of competition in the bulk water supply chain.³³⁶ 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.</p> <p>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.</p> <p>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.³³⁷</p> <p><u>Are there any externalities?</u></p> <p>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 sector³³⁸:</p> <ul style="list-style-type: none"> • <i>Health externalities of water and wastewater services:</i> 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. <p>If the provision of water and wastewater services was left entirely to markets, it might be expected that the vast majority of</p>

³³⁵ Productivity Commission, *Australia's Urban Water Sector Inquiry Report Volume 1*, pp. 245, 2011.

³³⁶ ERA, *Inquiry on Competition in the Water and Wastewater Services Sector*, 2008.

³³⁷ 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.

³³⁸ Productivity Commission, *Australia's Urban Water Sector Inquiry Report Volume 1*, 2011 pp. 74-75.

	<p>households and businesses would choose to purchase these services. However, some of them would not be able to afford it.</p> <p>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.</p> <ul style="list-style-type: none"> • <i>Environmental externalities of wastewater and storm water disposal:</i> 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. <p><u>Conclusion</u></p> <p>The water and wastewater assets are a collection of specific assets, each with differing characteristics.</p> <p>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.</p> <p>The extent of the externalities associated with the provision of water justifies government intervention in the market to prevent the negative effects on the population.</p>
<p>Could regulation enable the private sector to provide the services at a level consistent with society's interest?</p>	<p>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.</p>

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 by-pass 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 agricultural sector.

Source: Economic Regulation Authority, 2008, Inquiry on Competition in the Water and Wastewater Supply Chain, p. 12.

For the services where competition is conceivable,³³⁹ 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,³⁴⁰ 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. For example, competition is conceivable in both elements of the bulk water supply and treatment asset class, water procurement and water treatment; hence, the entire asset could potentially be divested.

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,

³³⁹ These include water procurement and alternative ways of ensuring security of water supply, water treatment, water and wastewater retailing, wastewater treatment and wastewater disposal.

³⁴⁰ These include the water network and the wastewater network.

	<p>an operating subsidy could be provided to ensure the non-commercial objectives are met.</p>
<p>Is there a conflict of interest?</p>	<p>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.”³⁴¹ These multiple roles of the Government, invariably leads to conflicts or biases, where the Government owns the asset.</p> <p>The Productivity Commission acknowledges the potential conflict of interest in the water industry;</p> <p><i>“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.”</i>³⁴²</p> <p>The Productivity Commission also stated that;</p> <p><i>“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.”</i>³⁴³</p> <p>In January 2013, the ERA published its report on the <i>Inquiry into the Water Corporation’s tariffs</i>³⁴⁴, which included recommended tariffs for the next three years. The tariffs recommended would have enabled the Water Corporation to 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, the Government did not adopt these recommendations. 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.</p> <p>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.</p> <p>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:</p>

³⁴¹ Department of Water, *What we do, 2014*, <http://www.water.wa.gov.au/About+us/What+we+do/default.aspx> (accessed 18 June 2014).

³⁴² Productivity Commission, *Australia’s Urban Water Sector Inquiry Report Volume 1*, 2011, pp. 67.

³⁴³ Productivity Commission, *Australia’s Urban Water Sector Inquiry Report Volume 1*, 2011, pp. 67.

³⁴⁴ ERA, *Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board*, 2013.

	<p><i>“governments are assigning multiple objectives to their agencies, utilities and regulators, with inadequate guidance on how to make trade-offs among them.”³⁴⁵</i></p> <p>The ERA has reiterated the need for better governance arrangements in its most recent Inquiry into water and wastewater tariffs.³⁴⁶</p> <p>Without some governance and/or institutional reform, the Government will continue to have conflicts of interest in the water sector.</p>
Does the private sector have a better capacity to meet the financing requirements?	<p>In its 2013 review,³⁴⁷ the ERA estimated the Water Corporation requirements for capital expenditure to be over \$700 million per annum for 2014-15 and 2015-16.</p> <p>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.</p> <p>However, current State funding constraints, the Government’s desire to reduce debt levels and the need for 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.</p>
Is the private sector likely to be better placed to manage the risk?	<p>Some of the risks associated with the Water Corporation include:</p> <ul style="list-style-type: none"> • 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 damages for example: 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 risks: 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. <p>Most of the highlighted risks are better dealt with by the private sector through mitigation strategies, insurance or self-insurance.</p> <p>The private sector would normally have incentives to price its risks and recover compensation through their tariffs to consumers. The Government does not generally price risk effectively, leaving taxpayers exposed to the risk without adequate compensation.</p> <p>Yes, the private sector would be better placed to manage the risks facing the Water Corporation.</p>
Is the business privately owned in	While there are cases where individual water assets are privately owned (e.g. Sydney Water Desalination Plant), this is rare. There are

³⁴⁵ Productivity Commission, *COAG’s Regulatory and Competition Reform Agenda: A High Level Assessment of the Gains*, Research Report, 2012.

³⁴⁶ ERA), *Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board*, 2013.

³⁴⁷ ERA, *Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board*, 2013 p. 43.

other jurisdictions of Australia	<p>no instances in Australia of a vertically integrated water and wastewater services being privately owned.</p> <p>An overseas example is the UK, where water businesses were divested in the late 1980s.</p> <p>No, certain aspects of the supply chain are owned by the private sector in other jurisdictions. However, there is no evidence of a whole water and wastewater supply chain being owned by a private entity.</p>
Could the asset be divested?	<p>Yes, there might be reasons for private ownership of individual supply chain elements of the water and wastewater assets, particularly bulk water assets. Further analysis should be undertaken into the particular supply chain elements that may be suitable for divestment.</p> <p>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 wastewater provision are ensured.</p> <p>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.</p> <p>Regardless of ownership, efficiency of service provision would improve if governance arrangements were clarified and regulatory functions were conducted at arms' length.</p>

Fremantle Port Authority

<p>Asset/Entity description</p>	<p>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 trade, cruise ships and visiting naval vessels.</p> <p>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.</p> <p>Private companies operate three of the five jetties in the Outer Harbour; 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.</p>
<p>Could the good or service be provided at a level consistent with society's interests without government intervention?</p>	<p><u>Is there prospect for direct competition?</u></p> <p>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.³⁴⁸</p> <p>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.</p> <p><u>Are there any externalities?</u></p> <p>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.</p> <p><u>Conclusion</u></p> <p>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.</p>
<p>Could regulation enable the private sector to provide the services at a level consistent with society's interest?</p>	<p>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.</p> <p>As part of CIRA, Western Australia has agreed that:</p> <ul style="list-style-type: none"> • 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; • where the Government decides that economic regulation of significant ports is warranted, it should conform to a consistent national approach; and

³⁴⁸ Australian Competition and Consumer Council, 2013, Container Stevedoring Monitoring Report no.15.

	<ul style="list-style-type: none"> • competition will be allowed, unless a transparent public review shows that the benefits of restricting competition outweigh the costs to the community, including implementation.^{349,350} <p>In terms of economic regulation, COAG has agreed that, wherever possible, third party access to services at ports and port 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.) Most States, as part of their COAG commitments, have undertaken reviews of the application of regulation to ports.³⁵¹</p> <p>Regulation can deal with negative externalities associated with operating a port, where necessary.</p> <p>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.</p> <p>Yes, the asset could be sold to the private sector; however, pricing oversight would need to be considered.</p>
Is there a conflict of interest?	<p>The Government owns the Port of Fremantle and sets policy objectives. These conflicting roles may lead to a conflict of interest.</p> <p>For example, there is potentially a conflict between the profit-maximizing objectives of the Fremantle Port Authority (which if it does have market power could seek to raise prices above efficient levels, thereby reducing throughput) and its trade facilitation role (which would seek to maximize throughput 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.</p> <p>Unclear, conflicts of interest may exist.</p>
Does the private sector have a better capacity to meet the financing requirements?	<p>The Port of Fremantle requires significant capital expenditure to fund port expansion and growth: Fremantle Port Authority has an approved Asset Investment Program for 2013-14 to 2016-17 totaling \$336.7 million.³⁵²</p> <p>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 that contributes to the private sector's capacity to meet the financing requirements.</p> <p>Under current government funding constraints: government's desire to reduce debt levels; and the requirement of government</p>

³⁴⁹ Council of Australian Governments, Competition and Infrastructure Reform Agreement, 2006.

³⁵⁰ 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, Seamless National Economy: Final Report on Performance, 2013.

³⁵¹ 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.

³⁵² Department of Treasury, *Western Australian State Budget*, p. 414, 2014.

	<p>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:</p> <p><i>“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.”³⁵³</i></p> <p>Yes, in general, the private sector has a greater ability to meet the Port’s financing requirements.</p>
<p>Is the private sector likely to be better placed to manage the risk?</p>	<p>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 influences the waiting times for ships to be loaded or unloaded, this can cause congestion for truck and rail access as the goods wait to be loaded.</p> <p>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.</p> <p>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.</p> <p>Unclear, although it is likely that the private sector is better placed to manage most risks.</p>
<p>Is the asset/business privately owned in other jurisdictions of Australia</p>	<p>Yes.</p> <p>Two out of the four major Victorian ports are privately owned.³⁵⁴ 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.³⁵⁵</p> <p>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.³⁵⁶</p> <p>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.³⁵⁷ Part of the Abbot Point Port, the Abbot Point Coal Terminal was divested on a 99 year lease. The remainder of the</p>

³⁵³ Infrastructure Australia, 2012, Part of the Answer to Removing the Infrastructure Deficit, p. 11.

³⁵⁴ Recent press reports indicate that the Victorian Government is preparing a scoping study into the possible sale of the Port of Melbourne.

³⁵⁵ Department of Transport, Planning and Local Infrastructure Victoria, *Ports and Freights*, 2014.

³⁵⁶ Government of South Australia, 2008, Review of Significant Ports in South Australia under the Competition and Infrastructure Reform Agreement, 2008, p. 17.

³⁵⁷ Department of Transport and Main Roads Queensland, *Ports*, 2014.

	<p>port remains in government ownership. Recently the Port of Gladstone and Townsville port have been flagged for divestment.</p> <p>In NSW Port Botany and Port Kembla were divested on a 99 year lease in 2013³⁵⁸. The NSW Government is also proceeding with the long-term lease of the Port of Newcastle.³⁵⁹</p>
Could the asset be divested?	<p>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.</p>

³⁵⁸ Government of New South Wales, *Port Botany and Port Kembla Lease Finalised*, 2013.

³⁵⁹ Treasury of New South Wales, *Port of Newcastle Transaction*, 2013.

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.³⁶⁰

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 compliance activities;
- the purchase and maintenance of computer systems to manage reporting requirements;

³⁶⁰ Depending on the level of price competition in the sector, businesses may pass some or all of this cost on to consumers. In this case, any cost pass-through is likely to be spread across all consumers, rather than resulting in substantial consequences for some individuals.

- 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.

The costs of regulation will ultimately 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.

Cumulatively, the costs of poorly-designed regulation can be very large, and efforts to reduce these costs can deliver a real and substantial economic impact, fostering entrepreneurialism and innovation in the community.

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.

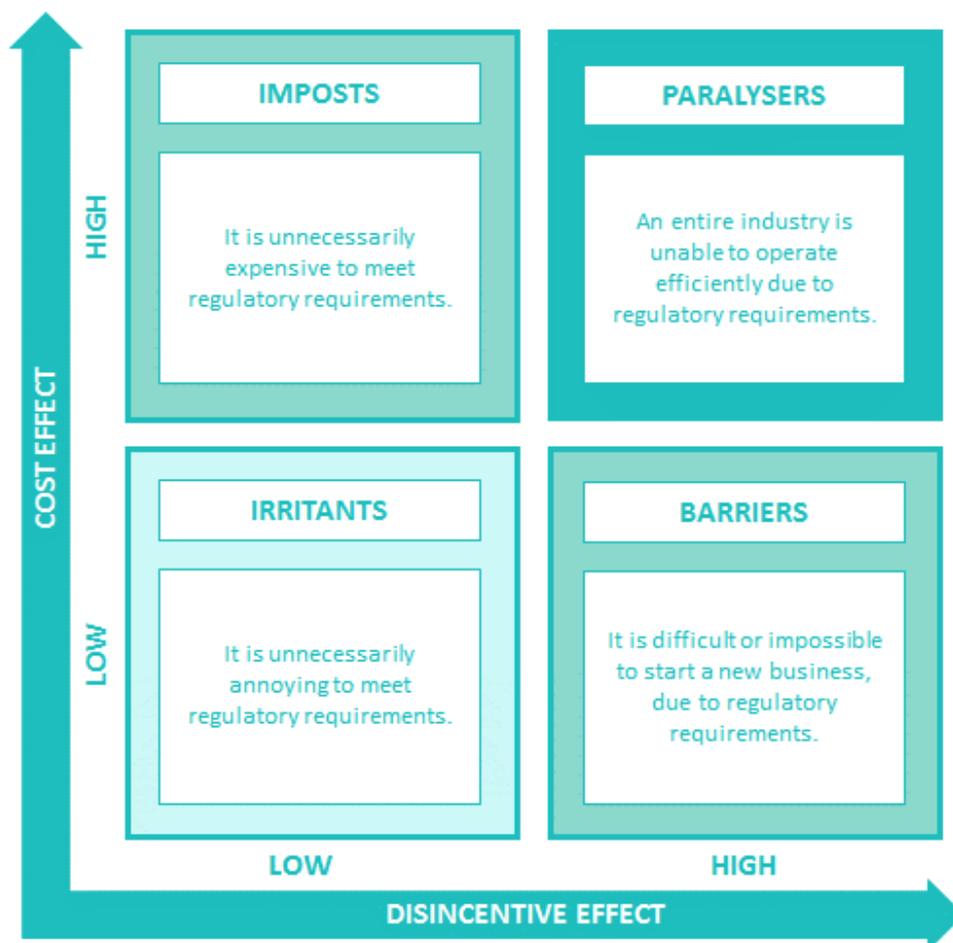
As with the costs of regulation, the benefits are also shared by the wider community, with well-designed regulation creating a safer, more equitable, and more sustainable community.

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.³⁶¹ 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 other outcomes that stifle entrepreneurialism and innovation. These effects are illustrated in Figure 32.

Figure 32 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.

³⁶¹ Hilmer, F. 2014, *Competition Policy from 1992 to 2014*, Presentation to the Business Council of Australia on 13 February 2014, accessed 25 March 2014.

For example, if each small business in Western Australia (over 200,000 in 2012³⁶²) is required to submit the same form three times, this may be a relatively minor annoyance for an individual business, but result in 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 licence 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 the Government. 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 the 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 2009.³⁶³

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.³⁶⁴

³⁶² Western Australian Small Business Development Corporation website <http://www.smallbusiness.wa.gov.au/small-business-statistics/>, (accessed 26 March 2014).

³⁶³ See Appendix 5 for information on the Red Tape Reduction Group and earlier reform initiatives in Western Australia.

³⁶⁴ 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.

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 in these reform projects into contact with other parts of Government who may benefit from their expertise.

The Government also established a Ministerial Taskforce on Approvals, Development and Sustainability in 2009. This taskforce has been responsible for steering the reform of approvals processes in Western Australia, working with a range of agencies such as the Department of Planning, Department of Mines and Petroleum, and Department of Environmental Regulation.

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.³⁶⁵ 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.

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.³⁶⁶ 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 the 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 category,³⁶⁷ 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 the larger organisations.

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 some areas of Western Australian regulatory practice (detailed in Section 5.1.4 and Appendix 5), 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

³⁶⁵ 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.

³⁶⁶ Western Australian Department of Premier and Cabinet, *Lead Agency Framework: A guidance note for implementation*, 2009.

³⁶⁷ Western Australian Department of Premier and Cabinet, 2009, *op. cit.*

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.³⁶⁸

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
- 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 5.3.5.

³⁶⁸ An overview of the key organisations responsible for regulation and regulatory oversight in Western Australia provides further context, and is given in Appendix 5. The Appendix also provides some context as to recent initiatives in regulatory reform in Western Australia.

5.2 Submissions

Regulatory burden was discussed in 14 of the submissions received in response to the Draft Report, in addition to feedback received on the Issues Paper and Discussion Paper.³⁶⁹ Comments were provided by a diverse range of government departments, corporations, and community and business advocacy organisations.³⁷⁰

Submissions received in response to the Draft Report were broadly supportive of all recommendations made by the ERA. A number of submissions also raised specific concerns regarding the efficiency of the State's planning regulations, and a perceived lack of co-operation between the State and local governments.

This section outlines the main points made in individual submissions received in response to the Discussion Paper and Draft Report.

5.2.1 Discussion Paper

5.2.1.1 Association of Mining and Exploration Companies

In its submission on the Draft Report, Association of Mining and Exploration Companies (**AMEC**) commented on the complexity of the existing infrastructure regulatory framework, and strongly supported the ERA's recommendation to establish a State-wide regulatory reform programme, and to further the progress that has already been made by the Government's Red Tape Reduction Group.

5.2.1.2 Australian Information Industry Association

In its submission on the Draft Report, the Australian Information Industry Association (**AIIA**) supported a focus on reducing the cost of regulation, increasing the requirements for Government agencies to introduce new regulations, and improving the efficiency of Government service delivery.³⁷¹

The AIIA also strongly supported the ERA's conclusions regarding the importance of technology in improving the quality and efficiency of Government service delivery, and the establishment of an Information and Communications Technology office within Government to further this process. In relation to this recommendation, it emphasised the value of industry engagement, the need for leadership across agencies in this area, and the importance on drawing upon the experiences of other Australian jurisdictions that have engaged in similar reform processes.

5.2.1.3 Bunbury Wellington Economic Alliance

In its submission on the Draft Report, the Bunbury Wellington Economic Alliance (**BWEA**) stated its support for all ERA recommendations relating to reducing the cost of complying with regulation.

³⁶⁹ Submissions received in response to the Discussion Paper highlighted common concerns regarding slow, unnecessarily complex approvals processes, duplication of regulatory processes, and lack of clear responsibility for approvals. Additionally, many submissions commented on the failure of departments and agencies to use online delivery to improve services and the provision of information.

³⁷⁰ The public submissions are available on the [ERA's website](#).

³⁷¹ The AIIA also provided a detailed submission on related issues in response to the Issues Paper. This submission is also available on the [ERA's website](#).

5.2.1.4 City of Bunbury

In its submission in response to the Draft Report, the City of Bunbury specifically supported the ERA's recommendations to update the Red Tape Reduction Group's 2009 assessment of regulatory burden in Western Australia. The City of Bunbury also supported the ERA's recommendations relating to the Review Guidelines applied to all new legislation (that is, the Regulatory Impact Assessment process). It further proposed that any review policy for new legislation be extended to cover significant amendments to current legislation.

The City of Bunbury highlighted the need to consider the issue of regulatory burden imposed on other levels of government by changes in State legislation, and in particular the impact on local councils. It proposed a comprehensive review of the regulatory framework within which local government is required to operate, such as this relates to the interaction between local governments and the State Government.

5.2.1.5 City of Greater Geraldton

In its submission in response to the Draft Report, the City of Greater Geraldton stated its strong support for the ERA's recommendations on reducing the burden of existing regulation, and improving the Regulatory Impact Assessment process. It further highlighted the burden of regulation on local government and emphasised the need for consultation with Western Australian Local Government Association (**WALGA**) in developing any reform programme.

The City of Greater Geraldton also raised a concern that local government within Western Australia 'is unnecessarily burdened with antiquated, complex, and counterproductive regulation that seriously impacts upon the ability of local governments to govern locally and impedes effective and efficient decision making.' In relation to this concern, it particularly noted the need for review of the *Local Government Act (1995)* and the *Planning and Development Act (2005)*, and proposed an extension of the ERA's recommendations to specifically address regulatory burden in the context of local government.

5.2.1.6 Civil Contractors Federation WA

In its response to the Discussion Paper, the Civil Contractors Federation WA (**CCFWA**) raised concerns around the lack of transparency and consistency in government decision-making processes. It also noted that there were outstanding recommendations from the Government's 2009 *Reducing the Burden* report in this area that, when implemented, would serve to address these concerns.

The CCFWA also supported whole-of-government targets for reducing regulatory burden in the State, and noted that the timeliness and accountability of the environmental approvals process could be improved.

5.2.1.7 Chamber of Commerce and Industry of Western Australia

In its response to the Discussion Paper, the Chamber of Commerce and Industry of Western Australia (**CCIWA**) included an extensive discussion on regulatory burden. It recommended improvements to monitoring, reporting, consultation, and accountability of the Regulatory Impact Assessment (**RIA**) process, and the transferral of all Governmental regulatory reform and gatekeeping functions to the ERA.³⁷²

³⁷² The ERA notes that it does not support this recommendation.

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.

In its submission on the Draft Report, the CCIWA broadly supported the ERA's proposed reforms, and indicated that the following reforms would be particularly likely to deliver a benefit to the State:

- establishing a single agency responsible for regulatory reform and Key Performance Indicators for senior departmental staff in relation to the achievement of regulatory reduction targets; and
- requiring mandatory Regulatory Impact Statements for new legislation, and five yearly reviews of all existing regulations.

5.2.1.8 Chamber of Minerals and Energy of Western Australia

In its response to the Discussion Paper, 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.

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.

In its submission in response to the Draft Report, the CMEWA emphasised the importance of ensuring that regulation is fit for purpose and does not impose unnecessary and costly burdens on industry.

The CMEWA supported the ERA's recommendation to appoint a lead reform agency to assist in the development of regulatory reform targets, and to monitor, enforce, and publish performance against the targets. More broadly, it supported all recommendations relating to the ongoing monitoring and review of both existing and new legislation.

Finally, the CMEWA recommended the Government formally establish a default position of 'no new regulation' when considering policy options, with any new regulatory proposals being subject to rigorous assessment before being approved.

5.2.1.9 Committee for Perth

In its submission on the Draft Report, the Committee for Perth stated its support for all ERA recommendations relating to reducing the cost of complying with regulation. It also proposed:

- The adoption of a best practice model in establishing a lead reform agency, given the variable success of similar approaches in other jurisdictions;
- a focus on Information and Communications Technology as a key customer service tool to enable 24/7 accessibility to Government, replacing manual systems and reducing the use of office and telephone-only systems, and applying a one stop shop approach to licensing processes;
- further consideration of the conditions necessary to trigger the establishment of a regulatory reform working group should be established, and of the definition of accountability and reporting responsibilities for working groups; and
- further consideration of practical recommendations to improve co-operation between existing agencies, and between the State and local governments.³⁷³

5.2.1.10 Department of Local Government and Communities

In its submission on the Draft Report, the Department of Local Government and Communities stated it supported all efforts to reduce regulatory burden.

5.2.1.11 Master Builders Association of Western Australia

In its response to the Discussion Paper, the Master Builders Association of Western Australia (**MBAWA**) 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.

In its submission in response to the Draft Report, the MBAWA supported the ERA's recommendations regarding the establishment of a more rigorous approach to regulatory formulation in Western Australia. The MBAWA further discussed the need for planning reform, proposing the following actions:

- introduction of a system of private certification, wherein private organisations act as permit authorities for the building and planning approvals processes;
- adoption of consistent terminology across government;
- improvement of uptake of electronic lodgement processes;
- better co-ordination of integrated infrastructure delivery;

³⁷³ The ERA agrees that fostering cultural change within government is challenging. While this chapter does not address organisation culture in detail, the ERA notes that identifying effective solutions will be critical for any future reform efforts, and should be given careful consideration by Government.

- introduction of more tightly regulated time frames for decision-making agencies;
- clearer disclosure of environmental requirements by government; and
- application of consistent development approval conditions across local government areas.

5.2.1.12 Property Council of Australia

In its submission on the Draft Report, the Property Council of Australia (**PCA**) supported the ERA's recommendations that would make the public sector accountable for regulatory reform targets, and emphasised a general need for the public sector to focus on administering regulatory services at a lower cost.

The PCA also stated that the lead reform agency recommended by the ERA should consider alternative models to administer regulation, as well as developing reform targets. It provided the example of private certification, where private certifiers act as permit authorities – for instance, in the building and planning approvals processes.

The PCA also pointed out that inefficiencies in the current administrative practices would be significantly improved by the introduction of electronic processing systems.

5.2.1.13 Small Business Development Corporation

In its response to the Discussion Paper, 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.

5.2.1.14 Urban Development Institute of Australia

In its submission on the Draft Report, the Urban Development Institute of Australia (**UDIA**) supported a number of specific recommendations, including:

- the appointment of a lead reform agency;
- the establishment of regulatory reform Key Performance Indicators for senior departmental staff;
- updating of the Red Tape Reduction Group's 2009 measure of regulatory burden in the State;
- replacement of the Regulatory Impact Assessment guidelines with a statutory mandate; and
- the establishment of a five-yearly recurring review of the implementation and effectiveness of the RIA process.

The UDIA also raised concerns regarding *State Planning Policy 2.6 State Coastal Planning*, the State's current bushfire policy, and other policies impacting the urban development sector it considered to be 'policy over reach'.

5.2.1.15 Western Australian Local Government Association

In its response to the Discussion Paper, 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.

In its submission on the Draft Report, WALGA broadly supported the ERA's recommendations, and highlighted the need for removal of regulatory restrictions on local government fees and charges, and specific reforms to the *Local Government Act 1995* and *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*.

5.2.1.16 Woolworths

In its response to the Discussion Paper, 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 the 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 the 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 disproportionately 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 ERA's [website](#).
- 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 conduct both 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:

1. 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.³⁷⁴ The State also has a substantial food manufacturing sector, valued at \$3.92 billion over the same period.³⁷⁵ 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;

³⁷⁴ Synergies Economic Consulting, *Cost of Red Tape in Western Australia*, 2014.

³⁷⁵ *Ibid.*

- 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);
- 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 the State and local governments.

Small businesses in the sector are often disproportionately 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 are 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 (**GSP**) in 2013.³⁷⁶

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.)

³⁷⁶ Western Australian Department of Mines and Petroleum website, <http://www.dmp.wa.gov.au/7846.aspx> (accessed 26 March 2014).

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);
- 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 Western Australian 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.³⁷⁷

5.3.2.3 Tourism

In 2011/12, the tourism industry contributed over \$8.5 billion to Western Australia's GSP.³⁷⁸ The sector predominantly consists of small businesses, with 86 per cent of operators being classified as 'small', and employs around 90,000 people.³⁷⁹

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 the 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.

³⁷⁷ Synergies Economic Consulting, *op. cit.*

³⁷⁸ *Ibid.*

³⁷⁹ Tourism Western Australia, *Tourism Satellite Account – Western Australia 2011 – 2012*, 2012.

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 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* which 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 the State Planning Strategy and the 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 of Western Australia 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 suggests 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.

The Department of Planning is also in the process of developing and implementing a new approvals management platform, to be rolled out during the second half of 2014. The platform is expected to provide electronic lodgement facilities, and improve delegation and tracking of approvals across multiple agencies. The Department of Planning has advised the ERA that it will use this technology to streamline the approvals process (for both agencies and customers) and to allow users to check an application's progress in real-time.³⁸⁰ These objectives align with the ERA's comments on the use of technology to improve services and efficiency (Section 5.3.4.3), and on designing processes to meet the needs of users (Section 5.3.4.5), and if met, would address some of the concerns around planning approvals that were raised in public submissions.

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 the 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

³⁸⁰ Communication with Department of Planning, 12 June 2014.

- an increased likelihood of errors or delays due to the volume of paperwork involved in the process;

Duplication also imposes costs on the 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 business, 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 queries 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 Western Australian 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 that 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.³⁸¹ Regulatory reform must involve practices that maximise the '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.

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.

³⁸¹ Polidano, C, *Why Civil Service Reforms Fail*, Public Policy and Management Working Paper no. 16, Institute for Development Policy and Management, 2001.

Co-operative reform development

Co-operative efforts require clear guidance and structure.³⁸² 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);³⁸³
- innovation funding to invest in joint projects with other agencies and local governments;^{384,385} 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 Office³⁸⁶ while Canada's is managed by the Treasury Board.³⁸⁷ 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 the Government.

³⁸² OECD, *Rethinking e-government Services: User Centred Approaches*, 2009.

³⁸³ Australian Public Service Commission, *Building Better Governance*, 2007.

³⁸⁴ Gore, A., *From Red Tape to Results: Creating a Government the Works Better and Costs Less*, 1993.

³⁸⁵ Ryan, C. M. & Walsh, P, Collaboration of Public Sector Agencies: Reporting and Accountability Challenges, *International Journal of Public Sector Management*, 2004.

³⁸⁶ The equivalent of Western Australia's Department of Premier and Cabinet.

³⁸⁷ The Cabinet committee responsible for the Canadian public service.

Co-operative service delivery

Departments should adopt a co-operative approach to regulation and service delivery where they have joint or overlapping responsibilities.

A business or individual trying to comply with regulatory requirements generally expects to engage with ‘the Government’, not with a variety of separate departments and authorities.³⁸⁸ 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.^{389, 390}

Many agencies in Western Australia independently collect substantially the same information, in their own format, and this information is not always shared effectively between agencies, as there is 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.³⁹¹ 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. The Economic Reform division also provides advice to Government on economic and structural reform, competition policy, and productivity.

The ERA considers that the DPC may be best placed to lead cross-agency co-ordination in regulatory reform. However, the Economic Reform division has valuable expertise and experience in the field, and if adequately resourced, could take a leading role in establishing best practice and prioritising reforms. The establishment of a joint-agency taskforce across the DPC and the Department of Finance to co-ordinate and guide reform efforts would provide a third alternative to either department taking on the lead agency role independently.

³⁸⁸ Newfoundland Labrador Red Tape Reduction Task Force, *Report of the Red Tape Reduction Task Force to the Minister of the Department for Business*, 2007.

³⁸⁹ Steele, J. & Thomas, A, *The One Stop Shop Approach to Development Consents*, 1998.

³⁹⁰ 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.

³⁹¹ Steele, J. & Thomas, A, *op. cit*, 1998.

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 (or a combination of the two) 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 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.³⁹²

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

In addition to appointing an agency to lead the reform programme across the 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, including Directors General and Chief Executive Officers, can also drive staff at all levels to identify regulatory problems and seek solutions.³⁹³

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 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.³⁹⁴ For instance, the Dutch Interior Ministry estimated in 2010 that 40 per cent of recent administrative burden reductions for citizens had been technology-related.³⁹⁵ The use of technology to improve the way

³⁹² Airedrie Echo article, *Red Tape Report raises eyebrows*, <http://www.airdrieecho.com/2014/02/04/red-tape-report-raises-eyebrows> (accessed 13 March 2014).

³⁹³ Western Australian Department of Treasury 2010, *op. cit.*

³⁹⁴ Ho, A. T, Reinventing Local Governments and the E-Government Initiative, *Public Administration Review*, 2002.

³⁹⁵ OECD, *op. cit.*, 2010.

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 the 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.³⁹⁶

Western Australia is currently the only Australian State that does not have a Government ICT strategy,³⁹⁷ and is yet to appoint a public official to develop the State's capacity in this area. As detailed in Table 25, 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 25 Information and Communications Technology reform progress (as at March 2014)

	WA	Cwth	NSW	Vic	Qld	SA	Tas	ACT	NT ^b
Published ICT strategy	✗	✓	✓	✓	✓	✓	✓	✓	✗
Appointed office or agency with oversight for ICT ^a	✗	✓	✓	✓	✓	✓	✓	✓	✗
Appointed Chief Technology Officer or equivalent	✗	✓	✓	✓	✓	✓	✗	✓	✗

Source: ERA analysis, Australian State and Federal Government websites

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.

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 opportunities.³⁹⁸ This does not appear to have resulted in any material outcomes.³⁹⁹ 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.

³⁹⁶ 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.

³⁹⁷ Australian Information Industry Association Website, *State Government ICT Strategy Briefing 2013*, https://www.aiia.com.au/?page=State_Govt_ICT_Strat (accessed 7 April 2014).

³⁹⁸ Communication with the Department of Premier and Cabinet, 20 March 2013.

³⁹⁹ 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, *Citizen Centric Government Electronic Service Delivery Strategy for the Western Australian Public Sector*, 2008.

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:

1. 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 the Government: collecting and managing the information used in regulatory processes results in costs for the Government. New information management technologies mean that it is no longer necessary for government departments to bear these costs.

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 the Government.⁴⁰⁰ 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.

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.

Online services can also be used to receive, process and track information more efficiently, interact with applicants, and distribute information to the relevant 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 Australian Tax Office (**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.⁴⁰¹

⁴⁰⁰ 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.

⁴⁰¹ Productivity Commission, *Regulator Engagement with Small Business*, 2013.

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.⁴⁰²

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 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.⁴⁰³ 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.⁴⁰⁴ 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.⁴⁰⁵

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 advance 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.

⁴⁰² OECD, *op. cit.*, 2006.

⁴⁰³ OECD, *Rethinking e-government Services: User Centred Approaches*, 2009.

⁴⁰⁴ OECD, *op. cit.*, 2010.

⁴⁰⁵ 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 data-sharing initiatives also exist in the Netherlands, Korea, Norway, the United States, and Finland. (OECD, *Cutting Red Tape: National Strategies*, 2006.)

This can be achieved by following the example of other Australian jurisdictions and establishing an office within the Government with oversight of ICT policy and direction. This office would typically be headed by a Chief Technology Officer, and be placed within the State's Department of Premier and Cabinet (DPC), or Department of Finance. In Western Australia, the area has generally fallen within the DPC's scope of work, and the ERA is aware that the DPC currently retains staff with expertise in the field. 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 the Government.

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

The Australian Federal Government also has extensive expertise in this area and provides resources and support to the State and local governments. The Federal Department of Finance has appointed a Chief Technology Officer to provide infrastructure, expertise, and services to Australian Governments, and could assist the Western Australian Government in improving its service delivery and information sharing capabilities.⁴⁰⁶ 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.⁴⁰⁷ 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.⁴⁰⁸

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.

⁴⁰⁶ Australian Government Department of Finance website, <http://www.finance.gov.au/about/> (accessed 14 March 2014), and communication with the Office of the Chief Information Officer, 13 March 2014.

⁴⁰⁷ OECD, *op. cit.*, 2009.

⁴⁰⁸ United States General Accounting Office, *Testimony before the Committee on Small Business: Paperwork Reduction, Governmentwide Goals Unlikely to be Met*, 1997.

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.^{409,410} The ERA considers that continued use of the BCC will assist in providing results that are comparable with those calculated in previous years. However, the Government should monitor any advances in Australian and international best practice in the field, and take these into consideration in any future assessment of the State's regulatory burden.

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, to determine the change in the level of regulatory burden since 2009.

This assessment should be used by departments to develop and publish measurable targets for regulatory reform, in consultation with the lead reform agency. Departments should 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.

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

In its *2014 Report on Government Services*, the Productivity Commission noted that Western Australia scored particularly poorly 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.

⁴⁰⁹ OECD, *Why is Administrative Simplification So Complicated? Looking Beyond 2010*, 2010. 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, *op. cit.*, 2009.

⁴¹⁰ 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, *OBPR Best Practice Regulation Handbook*, 2013.)

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.⁴¹¹ Recognition of outstanding performance, as practiced in a variety of jurisdictions,⁴¹² can also help prioritise customer service, as well as communicating the Government's commitment to efficient service delivery.

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.⁴¹³

Many Western Australian Government agencies already publish customer service charters, outlining the set of core service standards they intend to meet.⁴¹⁴ 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.⁴¹⁵ 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 in 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,

⁴¹¹ OECD, *Regulatory Reform in Italy: Government Capacity to Assure High Quality Regulation*, 2001.

⁴¹² 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, <http://www.finance.gov.au/collaboration-services-skills/australian-government-ict-awards-program/> (accessed 10 March 2014))

⁴¹³ Treasury Board of Canada, *The 2012-2013 Scorecard Report: Implementing the Red Tape Reduction Action Plan*, 2013.

⁴¹⁴ 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, http://www.publicsector.wa.gov.au/sites/default/files/documents/customer_service_charter_0.pdf (accessed 25 March 2014)).

⁴¹⁵ 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.

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, achievements of 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.⁴¹⁶

For instance, the United Kingdom's 'Red Tape Challenge' has focused on harnessing the experiences 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 topics, and has accelerated the decision-making process.⁴¹⁷ 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.⁴¹⁸ The RGU has also given consideration to this approach, both as a way to improve the Government's understanding of the day-to-day impacts of regulatory burden, and to identify innovative solutions.⁴¹⁹

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.

⁴¹⁶ OECD, *op. cit.*, 2009.

⁴¹⁷ Technopolis Group report to the European Commission, *Public Sector Innovation: Case Study on the Red Tape Challenge in the United Kingdom*, 2012.

⁴¹⁸ United Kingdom Cabinet Office website, <https://www.redtapechallenge.cabinetoffice.gov.uk/> (accessed 10 March 2014).

⁴¹⁹ Communication with the Economic Regulation Authority, 5 June 2014.

5.3.5 Recommendations

12. Appoint a lead reform agency (either the Department of Premier and Cabinet, or alternatively the Department of Finance, or a combination of the two) to work closely with senior departmental staff across all areas of the Government to develop regulatory reform targets and monitor, enforce, and publish performance against the targets.
13. Set Key Performance Indicators for regulatory reform targets for senior departmental staff, including Directors General and Chief Executive Officers.
14. Establish an Information and Communications Technology (ICT) office within Government (ideally within the Department of Premier and Cabinet) 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.
15. 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. The findings of this assessment should be made publically available.
16. 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.

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 the 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 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 5 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?

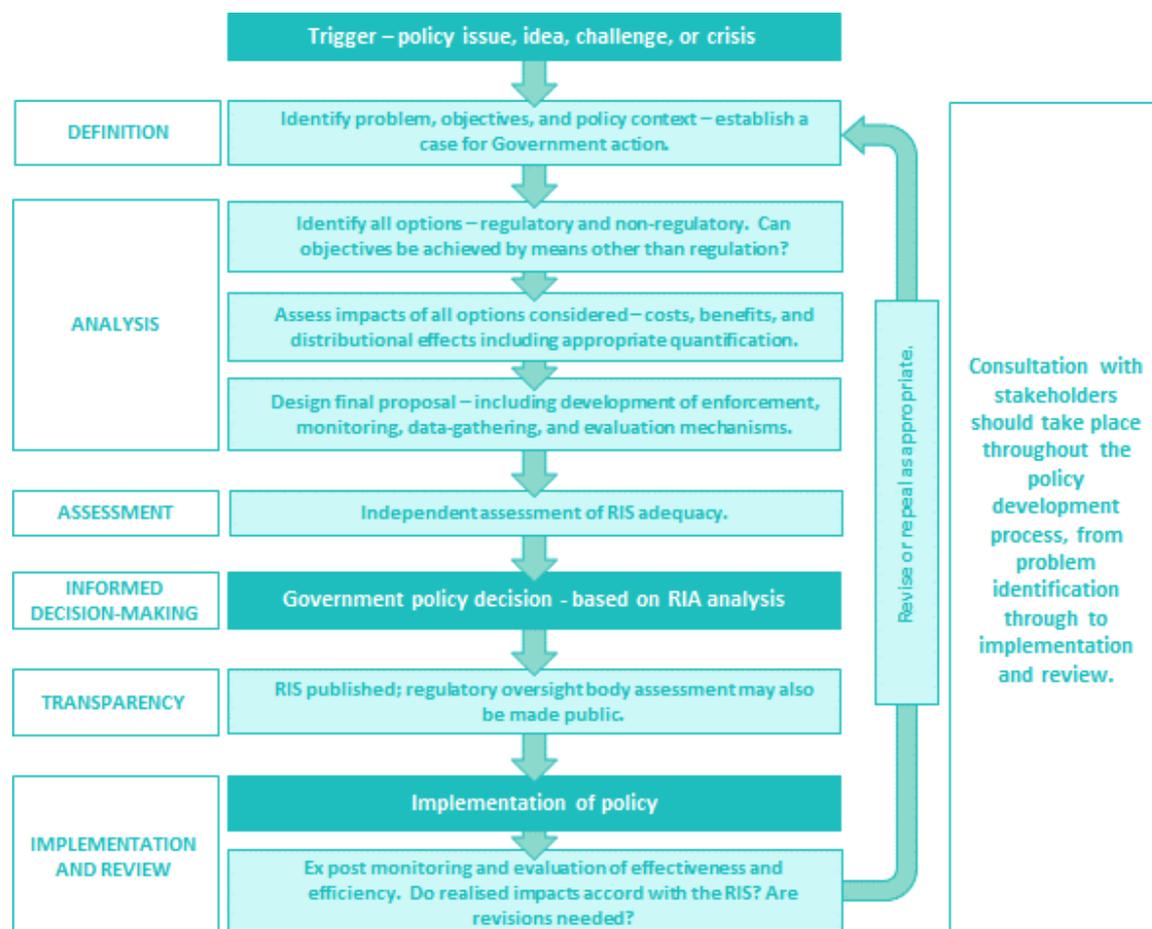
RIA is designed to improve the quality of government decision-making by considering the likely consequences of a proposal, and any practical alternatives. It is an established tool, having been introduced in the United States in the late 1970s and the United Kingdom in the 1980s, and is now used in almost all OECD countries and a growing number of developing countries.⁴²⁰

RIA does not, in itself, define best practice policy development and regulation. Rather, RIA is a tool that assists the Government in achieving best practice regulation. It does this by providing a strong filtering process that identifies poor quality regulatory proposals before they are implemented.

⁴²⁰ OECD, *Regulatory Policies in OECD Countries: From Interventionism to Regulatory Governance*, 2002.

Practically, the RIA process, when applied properly, consists of the steps shown in Figure 33. 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).⁴²¹ In producing this document, the regulatory 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 33 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 businesses, Government, or the community, the responsible Government department should explore other options or develop an alternative approach.⁴²²

The process is most efficient where the 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.

⁴²¹ 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.

⁴²² 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.

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, will both minimise these costs, and transfer them back to decisions-makers and the Government. That is to say, government departments and the RGU bear any costs of implementing the RIA process and filtering inappropriate regulation. The RGU provides 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 ultimately 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 process 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 the 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.⁴²³ However, the degree of effectiveness can vary significantly, depending on how well the process is applied, and the commitment of the 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. However, the 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 RGU, currently part of the Economic Reform division of 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**).⁴²⁴

⁴²³ 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.

⁴²⁴ The Government of Western Australia, *Regulatory Impact Assessment Guidelines for Western Australia Updated July 2010*, 2010.

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 the 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.

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.⁴²⁵ They provide detailed guidance on:

- the practical application of the RIA process, including scope, best-practice analysis, and documentation;
- the roles and responsibilities of the 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 to the RGU for assessment.

Where the RGU finds the proposal is not likely to have significant effects, the proposal moves to Cabinet for consideration. Departments are currently not required to provide the relevant PIA documents to Cabinet along with the relevant proposal, nor to the Government's Executive Council. The ERA considers that the PIA documents provide valuable context, and that these documents should be included with all proposals submitted to the Cabinet and the Executive Council.

Where the RGU finds a proposal is likely to have significant effects and, does not fall into a category subject to an exception⁴²⁶, the department then prepares a full RIS.^{427,428} (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.)⁴²⁹

⁴²⁵ These principles are provided in Appendix 5.

⁴²⁶ The exceptions generally relate to specific areas such as taxation and electoral issues, which are often subject to other impact assessment mechanisms.

⁴²⁷ See Appendix 5 for a more detailed explanation of the RIA process in Western Australia.

⁴²⁸ 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).

⁴²⁹ Based on figures reported in [Western Australian Hansard, Legislative Assembly, Tuesday, 19 June 2012](#).

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 35.^{430,431} The Government would not be expected 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 frameworks⁴³², 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.⁴³³

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 5 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

⁴³⁰ Public disclosure of RIS documents does not appear to meet this requirement at the present time.

⁴³¹ 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.

⁴³² Productivity Commission, *Regulatory Impact Analysis: Benchmarking*, Research Report, 2012.

⁴³³ 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.

for consultation...or as a requirement to be ‘ticked-off’ at the end of the policy development process in order to get legislation introduced’.⁴³⁴

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.⁴³⁵ 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 the 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 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 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 the Cabinet, but does not consider that this should necessarily limit opportunities for public discourse and input at the policy development stage.⁴³⁶

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.⁴³⁷ 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 process, as it allows non-compliance to be disguised as a late exemption.⁴³⁸

In 2012, the Productivity Commission expressed concern over the poor levels of disclosure in this area observed across a number of jurisdictions, including Western Australia,

⁴³⁴ Productivity Commission, *op. cit.*, 2012.

⁴³⁵ 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.)

⁴³⁶ The ERA notes that some PIA documents may be subject to confidentiality conditions.

⁴³⁷ Western Australia’s Small Business Development Corporation (SBDC) 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 Exemptions, 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 exemptions. The ERA notes the exact number of these exemptions has not been publicly disclosed.

⁴³⁸ Productivity Commission, *op. cit.*, 2012. 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.’

contrasting this to the robust disclosure practices of the Federal and Victorian Governments.⁴³⁹

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 seven exemptions were granted between 1 December 2009 and 19 June 2012.

Additionally, exemptions are available for election commitments. A 2012 paper from the Department of Treasury stated that;

“In practice, most election commitments are granted a Treasurer’s Exemption [now a Minister for Finance Exemption] in Western Australia.”⁴⁴⁰

The Department of Finance has advised the ERA that this is inaccurate, and overstates the proportion of exemptions granted for election commitments.⁴⁴¹ Due to the lack of transparency around the granting of exemptions, it is not possible to provide a clear assessment of current practices in this area. However, regardless of the number of exemptions provided in the past, the ongoing potential to grant exemptions for election commitments is in itself a significant vulnerability in the RIA process.

In its 2012 *Regulatory Impact Analysis: Benchmarking* research report, the Productivity Commission expressed concern over the granting of exemptions for election commitments, 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.”

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 the Government decisions, these decisions are arguably the least likely to be evidence-based.

The ERA considers that 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 availability of exemptions 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.

⁴³⁹ Productivity Commission 2012, *op. cit.*

⁴⁴⁰ Western Australia Department of Treasury, *Response to the Productivity Commissions Draft Report ‘Regulatory Impact Assessment: Benchmarking, 2012.*

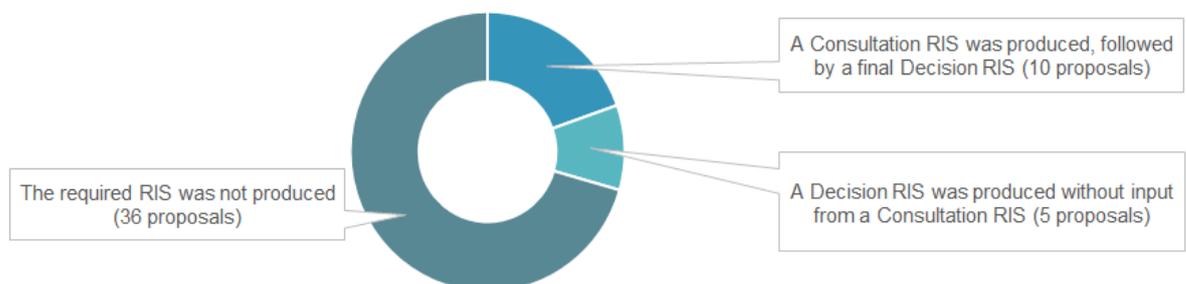
⁴⁴¹ Communication with Department of Finance, 5 June 2014.

Transparency⁴⁴² 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 2009.⁴⁴³ 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 impacts on business, consumers, or the economy.⁴⁴⁴ However, he also stated that only 15 Decision RISs were actually prepared during the period, as shown in Figure 34.⁴⁴⁵ A public consultation phase resulting in the publication of an earlier Consultation RIS appears to have been undertaken in 10 of these 15 cases.⁴⁴⁶

Figure 34 Outcomes for proposals requiring a RIS due to likely significant impacts (1 Dec 2009 - 19 Jun 2012)



Source: *Western Australian Hansard, Legislative Assembly, Tuesday 19 June 2012.*

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. 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 34, 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:

⁴⁴² '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.*)

⁴⁴³ Based on figures reported in [Western Australian Hansard, Legislative Assembly, Tuesday, 19 June 2012](#).

⁴⁴⁴ *Ibid.*

⁴⁴⁵ *Ibid.*

⁴⁴⁶ *Ibid.*

- the proposal is still undergoing the RIA process;
- a Minister for Finance Exemption from the RIA process was granted;
- the proposal has been deferred; 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).⁴⁴⁷ He also stated that 20 proposals were in the process of being finalised, 7 were undergoing consultation, and 11 were under further review.⁴⁴⁸ 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 as at 19 June 2012 may now have been undergoing the RIA process for between 18 months and 4 years.⁴⁴⁹ Some of these proposals may have been deferred during the period, extending the RIA process, and some may have been withdrawn or rejected. However, due to a general lack of transparency, it is impossible to determine precisely how many proposals are currently 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 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 the 15 Decision RIS documents referred to in Figure 34.⁴⁵⁰ As indicated in Figure 35 no documents are available for 7 (40 per cent)

⁴⁴⁷ *Ibid.*

⁴⁴⁸ *Ibid.*

⁴⁴⁹ 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).

⁴⁵⁰ 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. Similarly, while the RGU has stated that 'as at 3 Feb 2014, 10 out of 19 Decision RISs and 10 out of 11 Consultation RISs

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 35 Publication of RIS documents for proposals where a RIS was completed (1 Dec 2009 – 19 Jun 2012)⁴⁵¹



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 the Government decisions.
- It obscures cases where the 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 being managed on an *ad hoc* basis across various government 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.

were published on respective agencies' websites' the ERA found that, using the search methods described above, it was not possible to locate all of these documents, and likewise it would not be reasonable to describe them as "accessible". (Communication with the Department of Finance, 12 June 2012)

⁴⁵¹ 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.

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 Commission⁴⁵² and the Department of Treasury⁴⁵³, the Western Australian RIA process would be significantly enhanced by the provision of guidance 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 at the PIA stage, both in terms of costs and benefits, and in the inclusion of basic Key Performance Indicators. Similar 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 the RIA process 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 hold the 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

⁴⁵² Productivity Commission, *op. cit.*, 2012.

⁴⁵³ Western Australian Department of Treasury, *Response from the Department of Treasury, Western Australia, to the Productivity Commission's Draft Report Regulatory Impact Analysis: Benchmarking*, 2012.

Notices. However, the ERA considers that a similar result may be achieved by providing 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.⁴⁵⁴

The Productivity Commission has highlighted the likely benefits of establishing a periodic 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.⁴⁵⁵ 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 the 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 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 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 impact.⁴⁵⁶ 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.⁴⁵⁷ 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.⁴⁵⁸ Since

⁴⁵⁴ 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.

⁴⁵⁵ Productivity Commission, *op. cit.*, 2012.

⁴⁵⁶ Western Australian Hansard, *op. cit.*, 2012.

⁴⁵⁷ 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*.

⁴⁵⁸ *Ibid.*

this time, the Government also conducted a ‘Repeal Week’ in 2013, resulting in the removal of 43 pieces of obsolete legislation.⁴⁵⁹

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.⁴⁶⁰

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 5), 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.⁴⁶¹

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 department or external organisation to perform the review;
- criteria to guide legislators in identifying how frequently a review should be performed; and
- 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

⁴⁵⁹ Media Statement, 19 November 2013, <http://www.mediastatements.wa.gov.au/pages/StatementDetails.aspx?listName=StatementsBarnett&StatId=7969> (accessed on 7 April 2014)

⁴⁶⁰ 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.

⁴⁶¹ 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 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.

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 from individual agencies 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. Require that all regulatory proposals submitted to Cabinet and the Executive Council be accompanied by the relevant Preliminary Impact Assessment documents.
21. Amend the Guidelines (or their legislated replacement) to:
 - a. limit applications for 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; and
 - d. require timely publication of the reasons for all exemptions granted.

22. 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.
23. Determine and mandate an appropriate minimum consultation period for Regulatory Impact Assessments, in cases where consultation is undertaken as a part of the Regulatory Impact Assessment process.
24. Empower the Regulatory Gatekeeping Unit to require, review, and publish post-implementation reviews for all non-legislative proposals that have been subject to a Regulatory Impact Assessment.
25. Direct the Regulatory Gatekeeping Unit to perform an audit of legislation overdue for review, report the results of the review to Cabinet, and to make the findings available to the public. Where legislation is overdue for review, the relevant Minister should direct the appropriate department or review body to conduct the review as soon as practicable.
26. 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 Department 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.
27. Request that the Department of Finance's Economic Reform division deliver a response paper and implementation plan to Cabinet, giving regard to:
 - a. the timing and prioritisation of reforms; and
 - b. the levels of funding and resourcing required to implement the ERA's recommendations.

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 2014/15.⁴⁶²

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 by the ERA's consultants to be in the order of \$1 billion per annum.⁴⁶³ Hence, it is necessary that any examination of microeconomic reform consider the efficiency effects of State taxes.

The ERA 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 (**Synergies**) 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 with the recommended changes.

The two main tax reform options developed by Synergies involve reforming payroll tax, residential transfer duty and land tax by either:

- broadening the base and lowering the rate of all three taxes to increase their efficiency; or
- increasing reliance on efficient taxes (land tax and payroll tax) and reducing or abolishing the inefficient taxes (residential transfer duty).

A preliminary investigation indicates that the efficiency benefits of such reforms to State taxes are likely to be considerable and have been estimated to have the potential to add

⁴⁶² Department of Treasury (WA), *2014/15 Economic and Fiscal Outlook*, 2014, p. 88.

⁴⁶³ 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, *CGE Analysis of the Current Australian Tax System*, 2010, p.5. Department of Treasury, *2013/14 Overview of State Taxes and Royalties*, 2014, 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, *State tax review – interim report*, 2006, p. 174.

\$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.

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. Nevertheless, the ERA considers that the two main tax reform options outlined in this chapter are worthy of more detailed consideration, including a General Equilibrium analysis to refine the estimates of the efficiency benefits of the options.

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 discussion of efficiency effects of the three main taxes in Western Australia being payroll tax, transfer duty and land tax;
- a summary of submissions received in response to the chapter in the Draft Report on State taxes; and
- 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 the bases that they could legally apply taxes to by applying taxes to these bases itself (like the income tax base).⁴⁶⁴

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 2014/15.⁴⁶⁵ This causes several issues including; decreased

⁴⁶⁴ Department of Treasury and Finance, *Discussion Paper on Commonwealth-State Relations*, 2006, p.12.

⁴⁶⁵ Department of Treasury (WA), *2014/15 Budget Paper No. 3 Economic and Fiscal Outlook*, 2014, p. 88.

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.⁴⁶⁶

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 distortions available for businesses 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.
- Sending parts of their operations off-shore, where wages and tax liabilities are lower. The Chamber of Commerce and Industry of Western Australia (**CCIWA**) 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.⁴⁶⁷
- 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 their 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 cent⁴⁶⁸ 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

⁴⁶⁶ Department of Treasury and Finance, *Discussion Paper on Commonwealth-State Relations*, 2006, p. 14.

⁴⁶⁷ Communication between CCIWA and ERA, dated 18 March 2014.

⁴⁶⁸ Department of Treasury (WA), *2013/14 Overview of State Taxes and Royalties*, 2014, p. 10.

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 CCIWA, 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 reliance of the States on the Commonwealth. The ERA considers that further reforms of this nature would be very difficult to achieve, and cannot happen through the efforts of one State acting alone.⁴⁶⁹

However, there seems to be increasing recognition of the need for further reforms to Commonwealth-State financial relations.

- The Commonwealth Government has committed to producing white papers on the reform of the Federation⁴⁷⁰ and on tax reform during this term of Government.⁴⁷¹
- The National Commission of Audit (commissioned by the Commonwealth Government) recommended that State Governments have direct access to a portion of income tax generated in their economy and this be offset by a reduction in tied grants. It has also recommended pro rata distribution of GST, with top ups to the supported States.⁴⁷²
- The \$80 billion reduction in Commonwealth grants to the State Governments by 2024/25 contained in the 2014/15 Commonwealth Budget triggered further public discussion of the need for the GST base to be widened and the rate increased.⁴⁷³

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.

⁴⁶⁹ 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.

⁴⁷⁰ Coalition, *The Coalition's policy to boost productivity and reduce regulation*, 2013.

⁴⁷¹ Coalition, *The Coalition's policy to lower the company tax rate*, 2013.

⁴⁷² National Commission of Audit, *Media Release: National Commission of Audit Releases Review of the Activities of the Commonwealth Government*, <http://www.ncoa.gov.au/media-release.html>, 2014, (accessed 3 June 2014).

⁴⁷³ Australian Government, *Towards a functioning Federation*, 2014 http://budget.gov.au/2014-15/content/overview/html/overview_07.htm, 2014 (accessed 3 June 2014).

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 incentives to work, save, invest or consume).⁴⁷⁴ The efficiency costs 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.⁴⁷⁵ 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.⁴⁷⁶

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”.⁴⁷⁷ 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”.⁴⁷⁸ This primarily consists of the costs associated with

⁴⁷⁴ The main caveat to this being taxes that are deliberately designed to change behaviour (for example, when externalities are present).

⁴⁷⁵ KPMG Econtech, *CGE Analysis of the Current Australian Tax System*, 2010, p.2.

⁴⁷⁶ Productivity Commission, *Stocktake of progress in microeconomic reform*, 1996.

⁴⁷⁷ Sandford, C. Godwin, M. and Hardwick, P., *Administrative and Compliance Costs of Taxation*, Bath: Fiscal Publications, 1989, page 10.

⁴⁷⁸ Allers, M., *Administrative and Compliance Costs of Taxation and Public Transfers in the Netherlands*, Groningen: Wolters-Noordhoff, 1994, Page 19.

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 2013/14.⁴⁷⁹

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. The exemption threshold is scheduled to increase to \$800,000 from 1 July 2014 and to \$850,000 from 1 July 2016.⁴⁸⁰ A rate of 5.5 per cent is levied on each dollar above the tax-free threshold.⁴⁸¹

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 revenue collected.⁴⁸² There are around 12,000 businesses paying payroll tax in Western Australia out of a total potential number of businesses of 220,000.⁴⁸³

⁴⁷⁹ Assumes that residential transfer duty accounts for 46.25 per cent of transfer duty. Synergies Economic Consulting, *Review of Western Australia's tax system, A report for the Economic Regulation Authority*, 2014, p.38. Department of Treasury, *Budget Paper No.3 Economic and Fiscal Outlook*, 2014, p.3.

⁴⁸⁰ Department of Treasury (WA), *2013/14 Overview of State Taxes and Royalties*, 2014, p.5.

⁴⁸¹ Department of Treasury (WA), *2013/14 Overview of State Taxes and Royalties*, 2014, p.2.

⁴⁸² 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, *Budget Paper 2013-14, economic and fiscal outlook, budget paper no. 3*, 2013, p. 90 and 116.

⁴⁸³ 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.

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 reduce 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, in their submissions, the Chamber of Minerals and Energy and the CCIWA noted 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.⁴⁸⁴ 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.⁴⁸⁵

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.⁴⁸⁶ This implies a total efficiency cost of \$450 million, compared to the \$760 million cost of the current payroll tax regime.

A number of organisations that made submissions in response to the Draft Report (for example, Alcock Brown-Neaves (**ABN**) Group, Association of Mining and Exploration Companies (**AMEC**), Civil Contractors Federation of Western Australia (**CCFWA**), Master Builders Association of Western Australia (**MBAWA**), National Retailers Association (**NRA**), Small Business Development Corporation (**SBDC**)) argued that payroll tax should be

⁴⁸⁴ KPMG Econtech, *CGE Analysis of the Current Australian Tax System*, 2010, p.5.

⁴⁸⁵ 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.

⁴⁸⁶ KPMG Econtech, *CGE Analysis of the Current Australian Tax System*, 2010, p.63.

abolished on the basis that payroll tax is a tax on employment, which effectively discourages businesses from employing additional staff and places greatest burden on labour intensive industries.

The ERA does not agree that payroll tax should be viewed as a tax on employment, given the difference between the legal incidence of a tax and the economic incidence of a tax. The legal incidence of a tax refers to the party that is legally liable for paying a tax. The legal liability for payroll tax rests with the employer.⁴⁸⁷

In contrast, the economic incidence of a tax refers to the party or parties that ultimately bear the burden of the tax. As with all taxes, the economic incidence of payroll tax can be shifted through transactions. Part of the tax may be borne by the employer (which would indeed result in a reduction in profits or a reduction in employment). However, part may also be borne by employees (through lower wages) or by consumers (through higher prices).⁴⁸⁸

It is likely that in the short term employers may bear the burden or experience the benefit of changes to payroll tax.⁴⁸⁹ However, over a longer period, the economy will adjust to any changes and the burden or benefit may be passed on to employees and consumers.

It is also not correct that the burden of payroll tax is only borne by labour intensive sectors of the economy. As discussed in Australia's Future Tax System, the burden of payroll tax may be shifted to untaxed sectors of the economy.

*"...it is likely that all workers, not just those in businesses remitting payroll tax, bear the tax burden through lower wages (Freebairn 2009). In the long run, businesses will pass the burden of payroll tax onto workers, so some workers are likely to leave businesses that remit payroll tax and seek higher wages in businesses that do not. The influx of workers trying to get jobs in the exempt sector means that such businesses will not have to pay as much to attract workers. This means that workers in untaxed businesses receive lower incomes than they would have otherwise, effectively sharing the payroll tax burden."*⁴⁹⁰

A number of organisations that made submissions in response to the Draft Report called for an increase in the payroll tax exemption threshold (below which businesses do not pay payroll tax). More specifically, submitters called for the threshold to:

- be raised to \$1.5 million to exempt small businesses; or
- be raised to the national average exemption threshold for payroll tax (which was approximately \$1.0 million in 2013/14); or
- be indexed for inflation to prevent 'bracket creep'.

The options for payroll tax reform presented in the Draft Report did not include an exemption threshold for payroll tax. The ERA considers that an exemption threshold is warranted on the basis that the compliance costs borne by small business taxpayers, and the administration costs borne by the Office of State Revenue, could exceed the amount of

⁴⁸⁷ Parliament of Australia, Department of Parliamentary Services, *Economic effects of payroll tax*, 2009.

⁴⁸⁸ Parliament of Australia, Department of Parliamentary Services, *Economic effects of payroll tax*, 2009.

⁴⁸⁹ Australian Government, *Australia's Future Tax System: Final Report*, Part Two: Detailed analysis – volume 1 of 2, 2009, pp.293-297.

⁴⁹⁰ Australian Government, *Australia's Future Tax System: Final Report*, Part Two: Detailed analysis – volume 1 of 2, 2009, pp.293-297.

revenue raised from some small businesses. In addition, compliance costs tend to be regressive when measured as a proportion of the tax base.⁴⁹¹

The ERA considers that the current payroll tax exemption threshold is set too high relative to estimates of compliance costs and administration costs. Analysis indicates that businesses with an annual turnover of less than \$1 million incur internal compliance costs (that is, staff and management costs, not external professional support) of around \$1,500 per annum.⁴⁹² In addition, small businesses may incur external compliance costs, but these were not separately quantified in the study.

The Office of State Revenue incurs administration costs in collecting payroll tax. Information provided by the Office of State Revenue indicates that the administration costs associated with collecting payroll tax from an additional taxpayer are in the order of \$600 per annum.⁴⁹³ These amounts include both the fixed and variable administration costs incurred by the Office of State Revenue and, as such, represent an upper-bound cost of collecting payroll tax.

This suggests that the combined value of compliance and administration costs for payroll tax is in the order of \$2,100 per annum. Additionally, it indicates that, at the current tax rate of 5.5 per cent of payroll, that tax should not be levied on a payroll of less than \$38,200 per annum, which is considerably less than the current threshold of \$750,000. Reflecting this, the ERA does not consider that there is any need for the payroll tax thresholds to be increased. In fact, the payroll tax threshold could be significantly reduced.

The tax rate in the reform options presented in section 6.6 of this Final Report implies a higher threshold because the tax rate is lower than the legislated rate (that is, 1.91 per cent in Option 1 and Option 2 instead of 5.5 per cent). The exemption threshold would need to be set at a payroll of \$110,000 per annum if taxation collections were to exceed compliance and administration costs of \$2,100 per annum (assuming a payroll tax rate of 1.91 per cent).

However, this option would not be sufficient to maintain the Government's current level of payroll tax revenue. Any adjustment to the threshold requires an adjustment to the rate. For example, raising the exemption threshold in the Options from \$0 to \$110,000 will remove businesses from the base, resulting in a loss of payroll tax revenue. Therefore, the total amount those businesses would have paid, had there been no threshold, needs to be distributed across the remaining businesses to maintain the same level of revenue. This is done by increasing the rate.

At the time of writing the Draft Report, the ERA did not have sufficient data on individual businesses in Western Australia and the value of their payrolls to calculate the values that the payroll tax rate and exemption threshold would need to be simultaneously set at to exempt businesses with a payroll tax liability of less than \$2,100 per annum, while maintaining current levels of payroll tax revenue.⁴⁹⁴ However, since that time, the ERA has acquired sufficient data to estimate this rate and threshold. The ERA estimates that the payroll tax rate would need to be set at approximately 3.6 per cent, with a threshold of around \$58,000.

It would also be necessary to amend the current structure of the payroll tax scale, if this change were to be implemented. The purpose of this analysis is to ensure that taxpayers

⁴⁹¹ Board of Taxation, *Scoping study of small business tax compliance costs*, 2007.

⁴⁹² P.Lignier and C. Evans, *The rise and rise of tax compliance costs for the small business sector in Australia*, Paper 5 presented to the Tax Administration Conference in Sydney on 2 and 3 April 2012, 2012.

⁴⁹³ Department of Finance, *2012/13 Annual Report*, 2013, p.96.

⁴⁹⁴ The Office of State Revenue only collects this information for businesses that have payrolls above the existing \$750,000 exemption threshold.

do not pay an amount of tax that is less than the estimated compliance and administration costs associated with collecting that tax (estimated to be \$2,100). However, the payroll tax scale is currently structured such that taxpayers do not pay payroll tax on the portion of their payroll that is below the exemption threshold. This can result in a situation where taxpayers may be liable to pay a minimal amount of tax once they exceed the exemption threshold. For example, under the current payroll tax regime, a business with a payroll of \$750,001 will be liable for payroll tax of 5.5 per cent in the dollar over the threshold (that is, payroll tax of 5.5 cents.)

This problem is unavoidable in any scenario where the taxpayer is not required to pay tax on the portion of payroll expenditure that is below the threshold. However, it can be resolved by requiring taxpayers who exceed the \$58,000 threshold to remit payroll tax based on their entire payroll expense (rather than on their total payroll expense, less the amount of the exemption threshold, as is currently the case).

This is not practical with a payroll tax rate of 5.5 per cent and an exemption threshold of \$750,000, because it results in taxpayers paying no tax if they are immediately below the threshold, but tax of \$41,250 if they are just above the threshold. This would create a distortion in behaviour because businesses would have a strong incentive to remain under the exemption threshold. This incentive is considerably weakened with a payroll tax rate of 3.6 per cent and an exemption threshold of \$58,000 because the increase in tax liability is only around \$2,100.

This option is discussed in further detail in section 6.6.3.

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.

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 the State Tax Review, undertaken in 2006, that shows that owner-occupier purchasers amount to around 37 per cent of the conveyance duty base.⁴⁹⁵ REIWA data also suggests that around 20 per cent of purchases of residential properties are for investment purposes.⁴⁹⁶ Extrapolating from this information, it 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.⁴⁹⁷

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;

⁴⁹⁵ Government of Western Australia Department of Treasury and Finance, *State tax review – interim report*, 2006, p. 174.

⁴⁹⁶ Based on advice from the Western Australia Treasury.

⁴⁹⁷ Synergies Economic Consulting, *Review of Western Australia's tax system, A report for the Economic Regulation Authority*, 2014, p. 38.

- 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
- 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.⁴⁹⁸ It 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.⁴⁹⁹

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.⁵⁰⁰

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.⁵⁰¹ 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.⁵⁰²

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.

⁴⁹⁸ KPMG Econtech, *CGE Analysis of the Current Australian Tax System*, 2010, p.5.

⁴⁹⁹ KPMG Econtech, *CGE Analysis of the Current Australian Tax System*, 2010, p.6.

⁵⁰⁰ 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, *Review of Western Australia's tax system, A report for the Economic Regulation Authority*, 2014.

⁵⁰¹ Australian Government, *Australia's Future Tax System: Report to the Treasurer*, Part Two: Detailed analysis – volume 1 of 2, 2009, p.247.

⁵⁰² Australian Government, *Australia's Future Tax System: Report to the Treasurer*, Part Two: Detailed analysis – volume 1 of 2, 2009, p.250.

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.⁵⁰³ 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 the potential variability of land tax paid by industry.⁵⁰⁴

Applying an average efficiency cost of 6 cents to the 2012/13 land tax collections of \$568.2 million⁵⁰⁵ implies a total efficiency cost of \$34 million per annum.

A uniform land tax does not distort decision-making and therefore has an average efficiency cost of zero.⁵⁰⁶ 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.

Burella Pty Ltd, Community Housing Coalition of Western Australia (**CHCWA**) and the Property Council of Australia (**PCA**) opposed aggregation of land values for land tax purposes in their submissions to the Draft Report on the basis that it is inequitable. However, the ERA disagrees. The ERA considers that aggregation is necessary to ensure that taxpayers that have land holdings of the same value pay the same amount of tax irrespective of whether they hold the land as one high-valued parcel of land or several lower-valued parcels. The ERA notes that aggregation is applied by all Australian jurisdictions that impose land tax.⁵⁰⁷

An alternative way of addressing concerns about aggregation of land tax would be to flatten the land tax rate thresholds by introducing a single rate (which would obviate the need for aggregation) or reducing the number of thresholds. Reducing the number of land tax brackets or introducing a single rate, while raising the same amount of revenue, would be expected to result in increased revenue collections from low value land holders and decreased collections from high value land holders.

6.5 Submissions

6.5.1.1 Alcock Brown-Neaves Group

At a high level, the ABN Group welcomes proposals to increase the State Government's reliance on efficient taxes and reduce or abolish inefficient taxes.

The ABN Group supports a strategic approach to replacing stamp duty over the long-term to increase housing affordability and stimulate economic growth. However, the ABN Group would not support changes to stamp duty that would adversely impact homebuyers (particularly first home buyers) and that would put pressure on housing affordability. ABN Group considers that such changes would be detrimental to the home building industry, which is a large contributor to employment, growth and the economy.

The ABN Group notes that land taxes incurred during the development phase of housing also add significantly to the holding costs of developers and further erodes housing affordability in the State. Land tax has increased over 30 per cent in the last two years as a result of State budget measures.

⁵⁰³ KPMG Econtech, *CGE Analysis of the Current Australian Tax System, Final Report*, 2010, p. 5.

⁵⁰⁴ KPMG Econtech, *CGE Analysis of the Current Australian Tax System, Final Report*, 2010, p. 6.

⁵⁰⁵ Department of Treasury (WA), *2013/14 Overview of State Taxes and Royalties*, 2014, p.2.

⁵⁰⁶ KPMG Econtech, *CGE Analysis of the Current Australian Tax System, Final Report*, 2010, p.53.

⁵⁰⁷ RevenueSA, 2014, Frequently asked questions – land tax, accessed from <http://www.revenuesa.sa.gov.au/taxes-and-duties/land-tax/frequently-asked-questions> (accessed on 28 May 2014).

The ABN Group does not consider payroll tax to be an efficient tax. It considers that payroll tax limits business and employment growth and development. ABN Group suggest that the impact of payroll tax needs be reviewed and that the Government's reliance on payroll tax be reduced.

6.5.1.2 Association of Mining and Exploration Companies

The AMEC notes that the Western Australian mining and mineral exploration sector contributes significant revenue streams to the State Government in the form of taxes and other payments (such as the mine safety levy, mining rehabilitation fund levy, tenement rentals, licensing and application fees and charges).

AMEC is concerned about the gradual growth in the number and extent of these taxes, levies, fees and charges and considers them to be an impediments to business decisions, which directly affect economic growth, and have the potential to distort investment decisions.

AMEC supports a review of state taxation reform options to ensure that inefficient taxes are abolished. In particular, AMEC supports raising the payroll tax threshold to address bracket creep and reducing the payroll tax rate in order to bring the State more in line with the national average.

AMEC considers that small businesses may redirect payroll tax savings towards additional staff or improved cash flow for operational purposes and business growth, and economic benefits.

6.5.1.3 Burella

Ms Suzanne Gardiner of Burella Pty Ltd (a property development and leasing company) notes that land tax is one of the very few tax bases available to the State Government. Burella supports broadening the land tax base (as set out in Option 1 in the Draft Report), but does not consider it to be politically feasible. However, Burella have a number of concerns with the existing land tax regime and the reform options set out in the Draft Report.

Burella opposes aggregation for land tax on the basis that it is inequitable.⁵⁰⁸ Burella consider it 'patently unreasonable' that two blocks (owned by different parties) can be largely the same in terms of location, size and value, but result in vastly different land tax liabilities because of differences in ownership structures and the aggregation principle. Burella notes that taxpayers being charged higher amounts cannot achieve greater returns from the land than those being charged less. Taxpayers being charged higher rates are effectively penalised when there are high vacancy rates because they have to recover more from rental income.

Burella notes that the aggregation principle is subject to evasion, whereby taxpayers create different legal entities to avoid aggregation of land. Burella considers that there has only been a token effort to address evasion, despite there being anti-avoidance provisions in the legislation.

Burella are opposed to any form of land tax that has a wide range of tax rates (0.0 - 0.57 per cent in Option 1 and 0.0 - 2.91 per cent in Option 2) and so many brackets (six brackets in both options). Burella consider that rates should be flattened and the number of brackets

⁵⁰⁸ Land tax is calculated on the aggregated taxable value of all taxable property held in the same ownership (excluding exempt land) at midnight on 30 June. For example, if an individual owned two taxable properties with taxable values of \$200,000 and \$300,000 respectively, the tax is assessed on \$500,000. Source: Office of State Revenue, *What is land tax and how is it calculated?* <http://www.finance.wa.gov.au/cms/content.aspx?id=238> (accessed 15 May 2015).

reduced to two to three, with the ideal structure being a single rate. Burella considers that flattening the rate and reducing the brackets would help mitigate avoidance of the aggregation provisions.

Burella consider that there should be no exemption for land valued at less than \$300,000 and the lower rate should be increased. A minimum rate should be introduced (similar to local government rates).

Burella are concerned about the potential for large increases in land tax liabilities arising from land revaluations, particularly when combined with bracket creep. Changes in land tax liabilities are unpredictable and are an unreasonable impost on business. Problems are compounded during downturns in the economy, as high vacancy rates can make the holding costs of land difficult to support.

6.5.1.4 Civil Contractors Federation Western Australia

The CCFWA supports calls by the CCIWA for the payroll tax threshold to be raised to \$1.5 million, to exempt small businesses from the base. CCFWA also supports the view of the Master Builders Association that payroll tax ultimately be abolished, on the basis that it is a disincentive to providing employment.

CCFWA support the recommendations for Reforming the Federation contained in the National Commission of Audit's First Report. If adopted, it would directly address the imbalance in revenue raising capacities and expenditure responsibilities between Commonwealth and State Governments, and potentially increase the State's GST revenue and reduce its reliance on other taxes on business.

6.5.1.5 Chamber of Commerce and Industry

The CCIWA endorses the proposal to replace residential transfer duty with a broad based land tax regime. The CCIWA considers that transfer duty is an inefficient and inequitable transaction based tax that distorts activity. In contrast, the CCIWA considers land tax to be one of the most efficient taxation bases available to a government.

The CCIWA makes the following additional suggestions for reforming land tax.

- The transition to a broad based land tax regime should occur over an extended period of time, to ensure that decision making is not unduly distorted by the change in policy.
- A single rate of land tax should be adopted. The CCIWA consider that the current stepped rate system means that higher valued land is taxed at a higher effective rate. This has the potential to distort decision making of households and businesses who may choose to locate their activities on land further away from existing infrastructure and services than would be the case if land tax rates were uniform, potentially harming economic efficiency.
- The Metropolitan Region Improvement Tax (**MRIT**) should be incorporated into the land tax base. The CCI considers MRIT to be an unnecessary additional levy that adds to the complexity of the tax system.

The CCIWA considers that reforms to payroll tax (which it notes is just one of many taxes on labour income imposed by governments in Australia) should not occur in isolation of a broader program of taxation reform that considers the Federal and State Tax systems as one regime.

The CCIWA submits that the introduction of a broad based, low rate payroll tax regime as presented in the Draft Report, would fail the principle of equity. This is because the incidence of the tax will fall to those organisations with a lower capacity to pay because the options presented in the Draft Report were designed to be revenue neutral. The CCIWA raised the following specific concerns:

- Payroll tax exemptions for apprentices and trainees, Indigenous Australians and persons with a disability should not occur without consideration of the impact on the government's policy goals in workforce participation.
- Payroll tax exemptions for charities, religious organisations and benevolent institutions recognise their lower capacity to pay. There may be scope to clarify the definition of each of these groups, to ensure the exemption is targeted at those institutions with a lower capacity to pay.
- Reducing the payroll tax exemption threshold to zero significantly shifts the burden of taxation from larger entities to small and micro businesses, which generally have a substantially lower capacity to pay. This would result in a large number of new taxpayers being brought into the base and there may be no net gain in revenue for the Government because of the increased administration and compliance costs.

6.5.1.6 Chamber of Minerals and Energy

The Chamber of Minerals and Energy (**CMEWA**) considers that the options presented in the Draft Report to increase the efficiency, base and stability of taxes are 'a step in the right direction'. However, recognising the interactions between taxation at different levels of Government, the CMEWA urges the State Government to be actively engaged in the Australian Government's White Paper tax reform process as it develops throughout 2014-15.

CMEWA maintains that payroll tax exemptions for apprenticeships and traineeships are critical and must be maintained in their current form. The CMEWA considers that the alternative of grant payments to employers who employ workers in certain groups do not provide as much certainty or stability for industry as the existing payroll tax exemptions. The CMEWA notes that any increase in payroll taxes (such as the removal of payroll tax exemptions and concessions) would present an additional financial impost when the resources sector is struggling with increasing business costs and may influence the hiring intentions of companies.

CMEWA supports tax reform options involving reducing or abolishing land transfer duty, which it considers inefficient. CMEWA notes that transfer duty on the purchase of properties discourages turnover and potentially restricts mobility.

CMEWA recommends the State considers improving the timeliness of the duty assessment process if transfer duty is not abolished. The lack of time limits on the Office of State Revenue currently leads to significant inefficiencies and delays (commonly measurable in years) in finalising taxation outcomes and directly causes significant compliance costs. The lack of appeal process around the new interim assessment laws is not good governance and should also be reviewed.

CMEWA recommends the Western Australia landholder duty provisions under Chapter 3 of the *Duties Act 2008* be brought into line with landholder provisions in other States. CMEWA considers that landholder provisions should not be applied to 'mining information' (such as geological data) as if it is an interest in land. Such provisions unfairly tax information. CMEWA also consider that Western Australia should only impose a duty as a percentage

of the otherwise payable duty rate on takeover provisions (i.e. only 10 per cent of the calculated duty) to encourage investment and mergers and acquisitions activity. Western Australia currently imposes full duty on the \$2 million unimproved value listed takeover test. This makes investment and acquisition decisions in land-rich Western Australian entities less attractive than in other jurisdictions.

Resources sector investment dollars are mobile and projects must compete both internationally and interstate for investment. Any consideration of tax reform must ensure Government fiscal policy does not adversely impact the Western Australian resources sector's competitiveness by the imposition of additional taxes and maintaining those which are prejudicial to the mining industry and encumber business decisions.

The CMEWA expressed concern about the way in which local government rates are applied to resource projects in Western Australia, considering them to be complex and inconsistent. The CMEWA has welcomed the introduction of the GRV policy trial and will continue working with the Department of Local Government and Communities on the trial. The ERA does not intend to address this matter in the Final Report.

6.5.1.7 Committee for Perth

The Committee for Perth supports, in principle, the ERA's recommendations on tax in the Draft Report. The Committee for Perth believes that the efficiency of the State's taxation system should be improved and would support a detailed review of the State Taxation system to further examine the options and potential costs and benefits of reforming payroll tax, residential transfer duty and land tax.

6.5.1.8 Community Housing Coalition

The CHCWA supports abolishing transfer duty and replacing it with a broadened annual land tax that is levied on all land, on the grounds that it would improve efficiency and housing affordability. The CHCWA considers that this will result in a number of benefits including: increasing the supply of rental housing and lowering rental costs; reducing the price of housing; accelerating the development of new housing on vacant sites and old industrial sites; discouraging land speculation and land banking in undeveloped areas; providing the State Government with a less volatile source of revenue; and resulting in a more progressive taxation system.

CHCWA acknowledges that replacing stamp duties on housing transactions with an annual land tax will negatively affect home owners with high land values but limited cash flows and current home owners who have already paid stamp duties. CHCWA considers that this could be addressed through a phased transition, with properties moved from the current stamp duty regime to the new land tax regime as they were sold. CHCWA note that the ACT Government has affirmed this approach by committing to a five-year plan to phase out stamp duties on conveyance and to introduce a broad-based land tax over a period of 20 years.

CHCWA notes principal places of residence are exempt from land tax. CHCWA contends that this exemption should be abolished as it 'creates a contraction in the supply of affordable rental housing'. Presumably, this is because the tax burden on land other than that used for principal places of residence is higher to compensate for the loss of tax revenue for the exemption.

CHCWA does not support aggregation for land tax purposes as it pushes owners with multiple properties into higher marginal land tax brackets and it discourages land-based investment and the development of rental housing.

6.5.1.9 Department of Local Government and Communities

The Department of Local Government and Communities does not support removing the local government payroll tax exemption. The exemption is based on a long-standing agreement that State and local governments do not tax each other and the exemption from payroll tax forms part of a complex set of financial offsets between State and local government.

Any additional revenue raised by the State Government from taxing local governments would be countered by additional costs to local governments, who in turn would need to reduce expenditure and service levels, raise rates or receive additional government grants.

6.5.1.10 Housing Industry Association

The Housing Industry Association (**HIA**) supports the proposal in the Draft Report to increase the reliance on efficient taxes and reduce or abolish inefficient taxes. HIA considers this preferable to simply modifying inefficient taxes.

The HIA considers that replacing transfer duty on residential property with more efficient taxes will deliver significant benefits to the community and should be a priority. The HIA notes that stamp duty is levied when a property is sold and this tax can be paid multiple times along the process of bringing a new home to the market. The cost of these taxes is embedded in the final purchase price paid by the consumer.

A well-designed land tax would provide an efficient means of replacing transfer duty. However, consideration should also be given to other efficient taxes, including taxes levied at the Federal level, such as broadening the base or increasing the rate of GST.

The proposal to remove the concessions and exemptions and lower the rate of payroll tax is likely to reduce the inefficiency of the tax. However, payroll tax will remain distortionary. Complete removal of payroll tax and replacing revenue with more efficient taxes, for example broadening the base or increasing the rate of GST, would be preferable.

6.5.1.11 Mostyn Consulting

Mostyn Consulting advocates greater consideration of replacing inefficient state taxes (particularly transfer duty and payroll tax) with a State income tax. Mostyn Consulting considers that such a reform would significantly increase efficiency and reduce distortions from the State tax system. Mostyn Consulting notes that it does not consider there to be any constitutional barriers to introducing a State based income tax, but notes that it would be politically difficult to implement.

6.5.1.12 Master Builders Association

The MBAWA does not support the ERA's recommendation to increase reliance on payroll tax. The MBAWA considers that payroll tax acts as a disincentive to employing labour once the exemption threshold is surpassed.

The MBAWA notes that the construction industry is particularly affected by payroll tax because of relatively low profit margins and high labour costs. The tax fails to account for the ability of the taxpayer to pay. A construction subcontractor on tight margins, with few profits, but lots of employees, can pay much more payroll tax than a very profitable mining company that has a few employees.

The MBAWA calculates that payroll tax collections in Western Australia have grown more rapidly than wages or inflation, growing around 12 per cent per annum on average.

The MBAWA considers that payroll tax should be phased out, as revenues permit, by restraining public sector wages growth.

The MBAWA notes that the payroll tax threshold is fixed, rather than being indexed for inflation, resulting in more employers entering the payroll tax base each year. The MBAWA submits that the Western Australian Government should immediately commit to indexing the threshold level, to wage levels, to protect many growing small businesses from the compliance costs associated with payroll tax.

The MBAWA would consider supporting a broadening of land tax if it were used to help reduce transfer duties on property transactions. However, the MBAWA would require more details and a more thorough cost-benefit analysis to assess any proposal to abolish stamp duty and extend the land tax base.

The MBAWA notes that replacing transfer duty with land tax has merit, as it would encourage more mobility amongst home-owners and be beneficial for the building industry. The MBAWA recommends that the proposal be considered thoroughly as a separate exercise, with more detail (for example, of tax rates and thresholds) and greater consultation.

6.5.1.13 National Retailers Association

The NRA cautions against broadening the payroll tax as recommended in the Draft Report. The NRA considers payroll tax to be a regressive tax, effectively penalising success, and that broadening its base would only harm the Western Australian economy and the competitiveness of the state, compared to other jurisdictions. The NRA also notes that the payroll tax regime makes no allowance for businesses that are more labour intensive, such as in the retail sector and related services industries.

The NRA strongly suggests increasing the exemption threshold in line with an index of wage inflation. The NRA also recommends that the payroll tax rate be adjusted to be more competitive with rates in other jurisdictions.

6.5.1.14 Mr Anton Porzig

Mr Anton Porzig notes that the ERA recommended in the Draft Report that the land tax base be extended to principal places of residences and farm land that are currently exempt. Mr Porzig expresses concern that the land tax rates currently paid by businesses and investors will be reduced, while taxes on individuals (that is, people who own their principal place of residence) will be increased. This will mean that these individuals will have less disposable income to spend on goods and services offered by these businesses.

Mr Porzig considers that if the ERA wishes to promote this proposal, it should publicise what its intention is: that is, reducing the tax on business and imposing a tax on private home owners.

6.5.1.15 Property Council of Australia

The PCA strongly supports the recommendation to consider options for reforming payroll tax, residential transfer duty and land tax. The PCA considers that tax reform is the most effective tool to rectify the budget position.

The PCA notes that transfer duty is widely recognised as one of the most distortionary State taxes. The PCA cited the following concerns:

- transaction-based taxes lock people into inappropriate housing and discourage mobility, leading to an inefficient use of the housing stock;
- transfer duty has a detrimental effect on the delivery of government policy objectives (such as greater in-fill development because it favours land purchases with separate building contracts);
- transfer duties reduce the effective supply of housing, discourage the development of new housing stock and increase cost of housing;
- transfer duty reduces the attractiveness of commercial property as an investment and the actual burden of stamp duty in the commercial sector is shifted to business customers, including commercial tenants and investors.

The PCA considers that the Western Australian land tax structure is inefficient and inequitable as it does not cover all types of land or all ownership structures and incorporates tax-free thresholds as well as numerous exemptions that continually diminish the tax base. The PCA believes that land tax should take the highest priority on a tax reform agenda, and calls on the State Government to review the land tax system to make it fairer by broadening the land tax base and achieving a more equitable distribution of the land tax burden.

The PCA cites the following specific concerns with the land tax system:

- The land tax burden is not distributed equitably. Total land tax revenues have doubled in the last ten years but the number of land tax payers has declined by 50 per cent.
- The narrowing of the tax base has increasingly shifted the burden of land tax onto larger landholders - mostly owners of multiple properties and their tenants. The PCA also notes that 1.7 per cent of taxpayers account for more than 60 per cent of the total land tax revenue.
- The inequity and unfairness of the current land tax system is magnified by the practice of aggregation at an entity level.
- The narrowing of the base threatens the long term sustainability of the base, and in the short term it limits the organic growth of land tax revenue, based on the current valuation criteria.
- Land tax is one of the most expensive taxes to administer as the land needs to be valued. The Property Council suggests that administration costs could be lowered, changing how the tax is administered by introducing a single rate system and reducing the number of thresholds. The administrative cost savings may also produce wider benefits, such as improved efficiency, equity and, in most cases, compliance.

6.5.1.16 Real Estate Institute of Western Australia

The Real Estate Institute of Western Australia (**REIWA**) supports the proposal to abolish residential transfer duty by replacing this revenue from broadened land and payroll tax bases (achieved by removing the various concessions and exemptions). However, REIWA

submits that consideration be given to abolishing duty on all property transactions, because transfer duty represents a significant impost on commercial investment.

6.5.1.17 Small Business Development Corporation

The SBDC made a submission to the Discussion Paper, but not to the Draft Report. In this section, the SBDC's submission to the Discussion Paper is summarised.

The SBDC strongly disagrees with the notion that the tax system could be made more efficient by redistributing liability from transfer duty to payroll tax.

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.

6.5.1.18 Mr Patrick Smith

Mr Patrick Smith⁵⁰⁹ recommends that the taxation system be used to act as a disincentive to land speculation and to advance the rate of development. These could include differential rating, progressive property tax and/or time specific building requirements.

Mr Smith notes that other countries have applied restrictions on overseas speculative investment in residential land (Indonesia, Malaysia, Canada) while progressive taxes on land profits have been used to provide affordable housing support (Malaysia).

He also considers that the need for land to be available and affordable for community purposes, such as schools and churches, may require special provision in taxation legislation changes.

6.5.1.19 Western Australian Council of Social Service

The Western Australian Council of Social Service (**WACOSS**) agrees with CHCWA's recommendation that transfer duty be abolished and replaced with a broadened annual land tax that is levied on all land. It submits that this would be more efficient and would improve housing affordability in Western Australia.

WACOSS approves of the Government's decision in the 2014-15 State Budget to reduce the transfer duty exemption threshold for first home buyers of established properties from the current threshold of \$500,000 to \$430,000. WACOSS considers this to be positive because it will stimulate a greater supply of affordable housing, as fewer established properties in inner metropolitan areas will be affordable to first home buyers, and only new

⁵⁰⁹ The submission was from a group of concerned citizens that included Mr Patrick Smith, John Hollywood, Rodney McAtee, Gerry O'Brien and Joanna Sadowska.

properties on the development fringe are likely to come in under the threshold. WACOSS advocates removing the exemption for established properties altogether.

6.5.1.20 Western Australian Local Government Association

The Western Australian Local Government Association (**WALGA**) is opposed to local governments being included in the payroll tax base. Removal of the current payroll tax exemption for local governments would suggest that reciprocal taxation arrangements should apply between the State and local governments.

WALGA suggests that the recommendation in the Draft Report to broaden the payroll tax base ignores the political and practical difficulty of implementing such arrangements. The impact of reciprocal taxation on individual local governments would vary according to the presence of the State Government in their district (that is, the additional rate revenue raised compared to the State taxes incurred). WALGA believes a much broader review of State taxation should take place before such a recommendation could be considered.

WALGA supports the recommendation in the Draft Report that the State Government decrease its reliance on transfer duty on the basis that it is an inefficient tax. WALGA considers that this form of State taxation should be phased out, but recognises that such comprehensive tax reform is difficult. If transfer duty is to remain, the State Government could at least mitigate the disincentive for older people to downsize in retirement through targeted concessions.

The Association recognises that land tax, when applied to a comprehensive base, is a far more efficient tax than transfer duty. While noting that there are many potential advantages to broadening the land tax base, WALGA would only support such a reform subject to the following conditions.

- That local government does not act as the land tax ‘collector’ for the State Government. Furthermore, if land tax is to be applied to a comprehensive base, the State Government should take the opportunity to use the same arrangements to collect the Emergency Services Levy from property owners.
- That land tax should be levied at relatively low rates (similar to those suggested in the Draft Report) so that the tax does not compromise local governments’ ability to raise rates revenue.
- That appropriate transitional arrangements are put in place. This should include phasing in the land tax over time and exemptions or concessions for households and other entities that have recently paid transfer duty.
- That appropriate arrangements are made for ‘asset-rich, income-poor’ households. This could include allowing pensioners to defer their land tax payments until the property is sold, as currently occurs with local government rates.
- That local governments continue to be exempt from land tax.

WALGA believes that the State Government should initiate a major review of State taxes aimed at improving efficiency and equity. This review should be broader in scope than the ERA’s assessment of State taxation in this Inquiry on the basis that a broader review is necessary so that the costs and benefits to all parties affected by taxation change can be understood. Such a review should include extensive consultation with the community and discussion of transitional and compensatory arrangements for groups adversely affected by

tax reform. In the case of local governments, this would include investigating the implications of reciprocal taxation in Western Australia.

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.

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-based 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.⁵¹⁰ Consumption taxes have been found to be more efficient than income taxes.⁵¹¹

For these reasons, Option 3 is not given further detailed consideration in this chapter. However, it is noted that a State-based income tax applied at a rate of 4.51 per cent to taxable income, as assessed under Commonwealth income tax laws, would be sufficient to replace revenue foregone from abolishing payroll tax.⁵¹²

Option 1 and Option 2 are discussed in more detail below.

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 revenue⁵¹³, 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

⁵¹⁰ 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.

⁵¹¹ 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, *Tax and economic growth*, OECD Economic Department Working Paper no. 620, OECD, 2008.

⁵¹² Synergies Economic Consulting, *Review of Western Australia's tax system, A report for the Economic Regulation Authority*, 2014, p. 73.

⁵¹³ 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.

from the Tax Expenditure Statement in the 2013-14 Budget (Budget Paper no. 3) published by The Government of Western Australia.⁵¹⁴

- Data on residential property sales in 2012-13 was obtained from 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.

The modelling is based upon the 2013/14 land tax scale. The State Government has announced that it will increase land tax rates by 10 per cent in 2014/15.⁵¹⁵ The calculations in this report have not been updated to reflect this change.

The modelling is based on the 2013/14 payroll tax scale. The payroll tax exemption threshold is set to increase from \$750,000 to \$800,000 from 1 July 2014 and to \$850,000 from 1 July 2016.

Under Option 1 developed by Synergies, there is no exemption threshold for payroll tax. The ERA considers that an exemption threshold is warranted on the basis that the compliance costs borne by small business taxpayers, and the administration costs borne by the Office of State Revenue, could exceed the amount of revenue raised from some small businesses. Assuming compliance and administration costs of \$2,100 per annum, the ERA would suggest a payroll tax rate of 3.6 per cent and exemption threshold of \$58,000 per annum (assuming that tax is paid on the full payroll once the exemption threshold is exceeded).

⁵¹⁴ The Government of Western Australia, *2013-14 Budget Paper 3: economic and fiscal outlook*, 2013, p. 116.

⁵¹⁵ Department of Treasury (WA), *2013/14 Economic and Fiscal Outlook*, 2014, p.93.

Table 26 Broadening the tax bases and lowering the rate - indicative summary of change (based on 2012/13 figures)⁵¹⁶

	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 27	Table 28	1.91%	Table 27	Table 28
Number of taxpayers	12,178	n/a	n/a	221,956	71,611	988,549

Table 27 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 28 Land Tax rate scale

Value of land	Rate (Pre-change)	Rate (Post-change)
\$0 to \$300,000	0.00%	0.00%
\$300,001 to \$1,000,000	0.10%	0.02%
\$1,000,001 to \$2,200,000	0.53%	0.12%
\$2,200,001 to \$5,500,000	1.37%	0.32%
\$5,500,001 to \$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.⁵¹⁷

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.

⁵¹⁶ 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.

⁵¹⁷ 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 for 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 2012/13.⁵¹⁸ The Department of Treasury also estimates that exemption from land tax (including Metropolitan Region Improvement Tax) amounted to \$393 million in 2012/13.⁵¹⁹

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;
- CMEWA 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.

⁵¹⁸ 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, *2013/14 Economic and Fiscal Outlook*, 2013, p.116.

⁵¹⁹ Department of Treasury (WA), *2013/14 Economic and Fiscal Outlook*, 2013, pp. 90 and 116.

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 Box 17. 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.

Under Option 2 developed by Synergies, there is no exemption threshold for payroll tax. The ERA considers that an exemption threshold is warranted on the basis that the compliance costs borne by small business taxpayers, and the administration costs borne by the Office of State Revenue, could exceed the amount of revenue raised from some small businesses. Assuming compliance and administration costs of \$2,100 per annum and a payroll tax rate of 1.91 per cent, the exemption threshold should be set at a payroll of at least \$110,000 per annum.

Table 29 Greater reliance on efficient taxes - indicative summary of change (based on 2012/13 figures)⁵²⁰

	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 27	Table 30	1.91%	0.00%	Table 30
Number of taxpayers	12,178	n/a	n/a	221,956	0.00	988,549

Table 30 Land Tax rate scale

Value of land	Rate (Pre-change)	Rate (Post-change)
\$0 – \$300,000	0.00%	0.00%
\$300,001 to \$1,000,000	0.10%	0.12%
\$1,000,001 to \$2,200,000	0.53%	0.63%
\$2,200,001 to \$5,500,000	1.37%	1.64%
\$5,500,001 to \$11,000,000	1.64%	1.96%
Over \$11,000,000	2.43%	2.91%

Synergies estimates that the efficiency benefit of implementing Option 2 in Western Australia could be in the order of \$580 million per annum.⁵²¹

⁵²⁰ 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.

⁵²¹ 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

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.

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 Option 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, which are presented in the tables below.

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 2013.⁵²²

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 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

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 to be the efficiency benefit of introducing Option 2.

⁵²² Australian Bureau of Statistics, *Average Weekly Earnings*, Australia, Nov 2013, Cat. No. 6302.0, 2014.

are introduced because the benefit from the rate reduction exceeds the cost of removing the exemption threshold.

Synergies did not consider the option of retaining an exemption threshold for payroll tax. However, the ERA considers that payroll tax should not be collected in cases where the administrative and compliance costs are higher than the revenue raised. As discussed in section 6.4.1, the ERA has found that these administration and compliance costs are in the order of \$2,100 for each business subject to payroll tax.

Consequently, the ERA has modelled an additional option that includes a payroll tax exemption threshold. This option estimates the payroll tax rate and exemption threshold that would be required to exempt all businesses for whom administrative and compliance costs would exceed their tax liability. The adjustments to the payroll tax scale modelled in this option are revenue neutral.

To calculate the appropriate tax rate and threshold for this option, it was necessary to know:

- the administrative and compliance costs associated with payroll tax collection (\$2,100 per business);
- the actual payroll tax collections (\$3,475.7 million in 2012/13)⁵²³;
- the average annual salary for one employee in Western Australia (around \$67,408 based on the average weekly earnings per person in Western Australia in November 2013⁵²⁴); and
- the number of businesses in Western Australia, categorised by the number of employees.

Detailed data on business size in Western Australia, as measured by number of employees is not available. However, the ABS does publish data on the number of businesses in the State, by number of employees, grouped into four large categories (as shown in Table 31) as well as the number of small businesses with 4 or fewer employees (being 47,491 businesses⁵²⁵).

Table 31 Western Australian businesses by number of employees

Category	Number of businesses
No employees	139,167
19 or fewer employees	72,051
20 to 199 employees	10,056
200 or more employees	682

Source: ABS, 1379.0.55.001 *National Regional Profile, Western Australia, 2007-2011*; ABS 8165.0 *Counts of Australia Businesses by Size at June 2012 Year End*

The '200+' category contains a wide variety of businesses, from those with a few hundred employees, up to Western Australia's largest businesses, several of whom have well over 10,000 employees. In assessing the distribution of businesses in this category, by number

⁵²³ Department of Treasury (WA), *2013/14 Overview of State Taxes*, 2014, p.3.

⁵²⁴ Australian Bureau of Statistics, *Average Weekly Earnings*, Australia, Nov 2013, Cat. No. 6302.0, 2014.

⁵²⁵ Australian Bureau of Statistics, 2013, 1379.0.55.001 *National Regional Profile, Western Australia, 2007-2011*

of employees, the ERA was guided by information on Western Australia's largest employers that was aggregated and published in 2012.⁵²⁶ Based on this information, and the data provided by the ABS, the ERA estimated the distribution of businesses in Western Australia, by number of employees, with reasonable accuracy.⁵²⁷

This estimated distribution and the average annual salary figure, allowed the ERA to calculate the amount of payroll tax revenue that would be raised at any given rate and threshold. This was then used to determine the rate and threshold that would still raise revenue equal to the current amount, while only excluding businesses for whom administrative and compliance costs exceeded the amount that would otherwise be collected.

Under this scenario, the payroll tax rate would be around 3.6 per cent, with a threshold of approximately \$58,000. Under this scenario, payroll tax is calculated on the entire payroll of a business (rather than on their total payroll expense, less the amount of the exemption threshold, as is currently the case).

The ERA's modelling indicates that a business with one or more full-time employees, where each employee is paid the average Western Australian salary, would be liable for payroll tax. The ERA estimates that the payroll tax expense for a business with one full-time employee on an average salary of \$67,400 would be around \$2,400.

Table 32 Examples of changes to payroll liabilities

	Payroll	Pre-reform	Option 1	Option 2	Exemption threshold option
A small business employing 4 employees	\$269,630	\$0	\$5,137	\$5,137	\$9,707
A firm just below the 750,000 threshold with 11 employees	\$741,484	\$0	\$14,127	\$14,127	\$26,693
A firm just above the threshold with 12 employees	\$808,891	\$3,239	\$15,411	\$15,411	\$29,120
A large employer with 100 employees	\$6,740,760	\$329,492	\$128,427	\$128,427	\$242,667

Synergies has prepared three case study examples for transfer duty.

- Transfer duty liability on the average priced house in Western Australia of \$473,959.⁵²⁸
- Transfer duty on the value of the median priced house purchased by a first home buyer in Western Australia of \$444,000.⁵²⁹

⁵²⁶ Business News WA, *WA's Biggest Employers*, 2012, https://www.businessnews.com.au/sites/default/files/attachments/BiggestEmployers_0.pdf (accessed 19 June 2014).

⁵²⁷ This estimated distribution was cross checked against the Western Australian payroll tax revenue for 2013/14, using the current rate and threshold, and calculated the same revenue to within \$300,000. This provides confidence that the ERA's assumptions the distribution of business size are reasonably consistent with the actual figures.

⁵²⁸ 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.

⁵²⁹ Median price for the month of February 2014. Department of Treasury, 2014, First Home Owner Grant Data, <http://www.treasury.wa.gov.au/cms/content.aspx?id=641> (accessed 31 March 2014).

- Transfer duty on the median priced house in Perth of \$535,000.⁵³⁰

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 33 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 \$384,708.⁵³¹
- 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 34 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

Any reforms to the taxation system that are revenue neutral for the Government will result in winners and losers. This is because a reduction in the taxation liability of an individual or business will have to be paid for by an increase in the liabilities of others. By way of summary, the adoption of either Option 1 or Option 2:

- would result in increased payroll tax liabilities for small businesses below the existing exemption threshold, some beneficiaries of existing payroll tax concessions, and

⁵³⁰ Median price for the calendar year ending December 2013. REIWA, 2014, Property Market Indicators, <http://reiwa.com.au/RESEARCH/Pages/Market-indicators.aspx> (accessed 31 March 2014).

⁵³¹ 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.

decreased liabilities for large businesses above the existing payroll tax exemption threshold;

- would disadvantage people who had purchased a property that is currently exempt from land tax (such as a principle place of residence) prior to the introduction of either Option 1 or Option 2, because they would have paid the current high rate of transfer duty under the existing regime and would then need to pay land tax on the property once a new regime was introduced; and
- would disadvantage people that own properties that had previously been exempted from the land tax regime (such as a principle place of residence), but, under Option 1, may advantage those that are currently liable for land tax by reducing the rate.

However, the ERA considers that there are strong advantages of proceeding with the reform of State taxes, notwithstanding that it will result in winners and losers, because of the significant efficiency gains that are expected to accrue from reform.

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 per annum to \$580 million per annum to the State economy. Reforming State taxes will also ensure that the State Government has access to a stable and growing source of revenue.

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. However, the immediate impact on losers from the taxation reforms can be softened by adopting a staged-approach to the implementation of any reform measures. For example, the ACT Government has commenced phasing out transfer duties on conveyance over a 20 year period and is adopting general rates as a broad based land tax for revenue replacement.⁵³²

Reforming State taxes will 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 through a General Equilibrium analysis to refine the estimates of the efficiency benefits of the options.

⁵³² Department of Treasury (ACT), *2012-13 Budget Paper No. 3: Taxation Reform*, 2012.

6.8 Recommendations

28. 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; the housing sector (including 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 reform⁵³³ described in Chapter 2 of this Final 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.⁵³⁴ 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.

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;

⁵³³ Hilmer, F., *Competition Policy from 1992 to 2014*, Presentation to the Business Council of Australia on 13 February 2014.

⁵³⁴ Hilmer, F., *Competition Policy from 1992 to 2014*, Presentation to the Business Council of Australia on 13 February 2014.

- 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 extended in recent years, but continue to be some of the most restrictive in Australia.⁵³⁵

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 retailers (for example, large or small retailers) and for social purposes such as ensuring that employees in the retail sector have family time on weekends.⁵³⁶

The ERA considers 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. For example:

- Changes to the composition, and working hours, of households (such as the greater prevalence of dual income and single parent households and the increase in fly-in fly-out workers) make it more difficult for households to shop within restricted retail trading hours.
- Regulation of retail trading hours disadvantages ‘bricks and mortar’ shops relative to on-line retailers, which 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 regulation of retail trading hours primarily benefits small retailers, which have few or no restrictions on their trading hours, by protecting them, to some extent, from competition from retailers with more restricted trading hours. Protection of small retailers suggests that they are inherently preferable to large retailers. However, the ERA found no justification for this restriction on competition – a fact that has been consistently supported by other independent reviews of retail trading hours.

Rather than being of benefit, regulation of trading hours imposes considerable costs on customers and those retailers with restricted trading hours.

Regulation of retail trading hours reduces the choice and convenience of customers by preventing people from shopping when and where they choose. People, for various reasons, want to shop at times and places that are currently unavailable.

Data collected by the ERA demonstrates the extent to which customer behaviour is limited by the existing retail trading hours. On weekends in particular, there is a clear spike in shopping activity immediately after shops open and a significant drop in shopping activity immediately before shops close. These abrupt changes demonstrate that retailers are being forced to close during times when there is considerable customer demand. This situation contrasts with the behaviour observed in the deregulated trading markets of Victoria and New South Wales. Customers have greater choice about when they shop in

⁵³⁵ Productivity Commission, *Relative Costs of Doing Business in Australia: Retail Trade*, Productivity Commission Interim Report, 2014, Page 89.

⁵³⁶ National Competition Council, *Assessment of Governments' Progress in Implementing the National Competition Policy and Related Reforms*, 2001, page 21.1.

jurisdictions with deregulated trading hours, and this is reflected in more gradual increases and decreases in shopping activity over a 24 hour period.

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 closing when it is not. Deregulation of retail trading hours will generally not result in shops being open 24 hours a day, seven days a week, although a small number of retailers may choose to do so if it is profitable.

Restrictions on retail trading hours impose costs on retailers with restricted hours. These costs include: lost sales from being required to close when it may be profitable to be open; greater capital costs due to the need to have extra capacity to deal with greater peaks in customer activity; and compliance costs from needing to deal with complex retail trading regulations.

The regulation of retail trading hours also distorts the manner in which some retailers grow. Some small retailers, when confronted with the choice of growing (and no longer being able to operate during extended trading hours) or remaining the same size (and continuing to benefit from unrestricted trading hours), choose not to grow, or to grow in a distorted manner that ensures they retain unrestricted trading hours.

The ERA recognises that deregulation of retail trading hours will disadvantage some retailers, particularly existing small retailers, which have enjoyed a degree of protection from competition. The greater competition will be most harmful to the retailers least capable of meeting customer demand and reflecting customer tastes and preferences (that is, the most inefficient and inflexible retailers). These retailers will be replaced by retailers that can and do cater to customer tastes and preferences, and will create a more competitive and vibrant retail environment.

Small 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 and Good Friday, during which time only filling stations and retailers that employ eighteen (or fewer) staff may open. This is similar to the models implemented in Victoria and Tasmania.

7.1.2 Regulation of retail trading hours in Western Australia

7.1.2.1 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 its 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 four categories of regulated retail shops: 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:^{537,538}

- 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.

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'. 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.

7.1.2.2 Small Retail Shops

Small retail shops are defined as those 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'.⁵³⁹ 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.⁵⁴⁰

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.

⁵³⁷ Western Australia, *Parliamentary Debates*, Legislative Assembly, 26 May 1987, pp. 1376 - 1377 (Peter Dowding)

⁵³⁸ Western Australia, *Parliamentary Debates*, Legislative Council, 1 December 1987, pp. 6823 - 6824 (Hon J.M. Berinson)

⁵³⁹ 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*.

⁵⁴⁰ 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.

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.

7.1.2.3 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 6 am to 11:30 pm every day of the year.

The retail trading 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 flat-pack 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 is likely 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.

A full list of the goods that can be sold in each category of special retail shop is listed in Appendix 6.

7.1.2.4 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.

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 7.

7.1.2.5 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 area⁵⁴¹ (**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.⁵⁴²

⁵⁴¹ 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 8.

⁵⁴² 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.

Twenty nine local government authorities have successfully applied to amend the retail trading hours that apply to general retail shops in their jurisdiction.⁵⁴³

7.1.3 Draft Report

In the Draft Report, the ERA canvassed the costs and benefits of retail trading regulation for customers, retailers and retail employees. The following section provides a summary of the key issues addressed in the Draft Report.

7.1.3.1 Customers

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. The ERA noted that 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 working families where parents have limited opportunities to shop during regulated hours.

By restricting consumer choice, regulated trading hours can prevent customers from purchasing the goods that they demand and increase search costs because customers 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.

Greater congestion

Restricting retail trading hours condenses the window of time during which customers may shop. This increases customer traffic, above what it would be in the absence of such restrictions, and generates greater congestion in car parks, greater difficulty navigating to and within shops and longer waiting times at checkouts and service desks.⁵⁴⁴ These combine to make shopping more time consuming and stressful, as well as making it more difficult for families or households to shop together.

In the Draft Report, the ERA compared the distribution of transactions for two Coles supermarkets that have a similar number of transactions per week, but are subject to different trading hours, one in Perth (Victoria Park) and one in Melbourne (Dandenong).⁵⁴⁵

The ERA observed that during the peak periods, the Victoria Park store completed 50 per cent more transactions than the Dandenong store did at its peak demand. Transactions require the presence of (at least) one customer. For congestion levels in the two stores to

⁵⁴³ 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 Northampton, Shire of Plantagenet, Rottnest Island, Shire of York.

⁵⁴⁴ Productivity Commission, *Economic Structure and Performance of the Australian Retail Industry*, Productivity Commission Inquiry Report, 2011, p. 279.

⁵⁴⁵ Victoria Park was subject to the regulated trading hours for the General Retail Shop in the Perth metropolitan area (8am and 9pm Monday to Friday, between 8am and 5pm on Saturday and from 11am until 5pm on Sundays). Dandenong opened 24 hour a day, 7 days a week.

be comparable, the Victoria Park store must be capable of accommodating around 50 per cent more customers than the Dandenong store.

The comparison of the distribution of demand between the two stores demonstrates the extent to which regulated retail trading hours can increase congestion in and around shops.

Potentially higher prices

In the Draft Report, the ERA observed that the theoretical and empirical evidence is inconclusive about whether retail trading regulation artificially inflates prices above those that would be observed in a deregulated market.

However, the ERA observed that economies of scale often allow larger (restricted) retailers to offer lower prices than those offered by (unrestricted) small or special retail shops. Where this occurs, customers who shop when general retail shops are prohibited from opening will be faced with temporarily higher prices. The effect of this is not captured in price surveys, because no price change has occurred,⁵⁴⁶ but customers face higher prices than they may otherwise have faced in a deregulated environment.

The ERA concluded that the absence of evidence of price changes following the deregulation of retail trading hours, does not necessarily mean that customers will not experience lower retail costs following the deregulation of retail trading hours.

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.⁵⁴⁷ 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.

The ERA considers that 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 innovate the way they operate. Innovation can occur in a number of ways, including by offering new payment methods, new product lines, and the integration of smartphone applications into the shopping experience.

Facilitates greater social engagement

The ERA noted that 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 submissions to the ERA's Discussion Paper stated 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.

⁵⁴⁶ This limits the value of price survey data.

⁵⁴⁷ European Commission, *Why is competition policy important for consumers?* http://ec.europa.eu/competition/consumers/why_en.html (accessed 18 June 2014).

In contrast, the ERA considered 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. The presence of restricted trading hours means that grocery shopping may need to be prioritised over family and other preferred social activities because it must be undertaken with some regularity (particularly for perishable products). Expanded retail trading hours 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.

7.1.3.2 Retailers

Loss of sales

The ERA stated that the restriction of retail trading hours not only prevents General Retail Shops from competing with other retailers, it also restricts their ability to compete with online retailers and other indirect competitors. Some customers who wish to purchase goods from general retail shops during the times they are forced to close, will elect to purchase the goods from an alternate source, or spend their money elsewhere. This artificially reduces the sales enjoyed by general retail shops.

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). As was noted in the section discussing store congestion, 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.

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,⁵⁴⁸ which will increase 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 inhibit 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, or to grow in a distorted way.

In the Draft Report, the ERA discussed the experiences of the SpudShed, which had grown to the limit of what could be classified as a Small Retail Shop. Rather than continuing its

⁵⁴⁸ Shopping becomes less time consuming, less stressful and easier to undertake.

growth naturally, the SpudShed undertook a number of measures that ensured its continued classification as a Small Retail Business. This included the SpudShed owners divesting themselves of ownership of one of their stores,⁵⁴⁹ limiting the number of employees that could be on the shop floor at any one time,⁵⁵⁰ and recruiting only highly experienced and productive employees.⁵⁵¹ Such measures will allow the SpudShed to continue growing to a certain extent, but the restrictions on employees and shop expansion (both in size and number) will have a limit. When this point is reached, the SpudShed will be forced to determine whether it is more profitable to continue growing, but operate under restricted trading hours, or to remain a Small Retail Shop and forgo further growth.

The economic loss generated by constraints on growth of this nature is likely to be material.

Compliance costs

The ERA noted that 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.⁵⁵² Woolworths submitted to that Inquiry that, nationally these costs amounted to \$3.4 million over the 2010 Christmas trading period alone.⁵⁵³

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 31 different regimes are implemented across regional Western Australia.⁵⁵⁴ 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.

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.

The ERA stated that 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 and concluded that it is not obvious why small retailers should be inherently preferable to larger retailers.

The ERA also noted that 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. Research by the Productivity Commission observed that small retail business participation rates of around

⁵⁴⁹ Retail trading regulation dictates that owners of Small Retail Shops may own no more than three retail shops.

⁵⁵⁰ Retail trading regulation limits the number of employees that may operate within the shop to 18 at any one time.

⁵⁵¹ Because the restrictions on the number of employees on the shop floor required the remaining employees to operate highly efficiently.

⁵⁵² Productivity Commission, *Economic Structure and Performance of the Australian Retail Industry*, Productivity Commission Inquiry Report, 2011, p.278.

⁵⁵³ Woolworths Limited, *Re: Economic Structure of the Australian Retail Industry*, Submission to Productivity Commission Inquiry into the Economic Structure and Performance of the Australian Retail Industry, 2011, p.10.

⁵⁵⁴ 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.

90 per cent in both regulated and deregulated states and territories suggests that retail trading hours have little influence over the level of market participation by small retail businesses.

The ERA considered the issue of consolidation in the retail industry and the effect that consolidation would have on competition and concluded that the effects are often overstated. The consistent market share enjoyed by small retailers across all States and Territories regardless of the level of regulation imposed demonstrates that small businesses in deregulated markets retain their market share with competitive responses.

Economic and social interests of small communities

The ERA considered whether retaining the current regulations that allow local Governments in regional Western Australia to 'self-determine' their own unique retail trading hours best serve the needs of the community. The ERA considered that the most democratic form of self-determination is to allow customers to choose when and where they wish to shop and to allow retailers to respond to those choices.

The ERA noted 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, but considered that the overriding objective of deregulating retail trading hours is to meet the needs of consumers. If consumers in regional areas decide that small retailers are inherently better than large chain retailers, then they will continue to support small retailers. As was noted in the section discussing the protection of small businesses, small businesses are not inherently preferable to large businesses, thus there is no justification for providing them with protection from competition.

Economic benefits of restricted trading hours

The ERA considered whether extending retail trading hours would create material economic benefits, particularly in the face of evidence that some retailers do not make use of the trading hours that are already available to them.

The ERA observed in the Draft Report that 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.

Diminishing returns most certainly apply for retailers that trade for longer hours. However, the degree to which diminishing returns occur will differ significantly between retailers and applying one set of trading hours for an entire category of retailers will prevent some retailers from operating at times that are profitable.

The ERA noted that 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 it 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 considered 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.

7.1.3.3 Retail employees

Less flexible trading hours

In the Draft Report, the ERA considered the effect that extended trading hours would have on the working hours of those employed in the retail sector. The ERA noted that different people place different values on leisure at particular times. Consequently, people will tend to work hours that suit their desired lifestyle, whenever 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. These costs are unlikely to be significant.

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. 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 the Draft Report, the ERA considered 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 is unlikely to be material. The number of people for whom the regulation of retail trading hours benefits is limited to those employees of general retail shops, which account for a fraction of the entire working population in Western Australia.

As a general principle, the ERA considered in the Draft Report that the benefits from coordination of leisure time would 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.

7.1.3.4 Submissions

The ERA received 11 submissions on the Draft Report, two of which (the Independent Grocers Association State Board of Retailers (**IGA**) and the West Australian Independent Grocers Association (**WAIGA**)) opposed the ERA's recommendations. The remaining submitters who endorsed the ERA's recommendations provided little substantive comment. Therefore, the following section primarily summarises the points raised by the IGA and WAIGA and provides the ERA's response.

Customers

Restrictions on choice and convenience

The IGA stated that the ERA implies that consumers are being disadvantaged by, and are thus dissatisfied with, the current retail trading hours regime. The IGA conducted two surveys to ascertain whether consumers are disadvantaged by the current retail trading framework. The IGA states that the first survey, conducted in August 2013, demonstrates that 53 per cent of adults surveyed in Perth are satisfied with the current Sunday trading hours.

In April 2014, the IGA contracted the same research company to re-survey consumers and found that 66 per cent of respondents were satisfied with the current trading hours in Perth.

The IGA submits that the survey also found that 88 per cent of respondents believe that current trading hours were adequate for their needs.

The WAIGA queried the ERA's evidence that customer choice and convenience is being restricted by the regulation of retail trading hours.

After considering the IGA's survey results, the ERA disagrees with the IGA's interpretation that only a small minority are unhappy with current arrangements. The ERA's alternative analysis of the survey results find that:

- almost half of respondents (47 per cent) were not satisfied with the current Sunday trading hours;
- more than one in three respondents (34 per cent) were not satisfied with trading hours in Perth; and
- almost one in eight (12 per cent) of respondents stated that the current shopping hours in Perth were inadequate for their needs.

The ERA observes that deregulating retail trading hours will not diminish the satisfaction of those who are already satisfied with the trading hours, but is likely to increase the satisfaction of those who are currently unsatisfied.

In response to the ERA's analysis of data provided by Coles, the IGA and WAIGA questioned whether the data reflects the breadth of market demographics in Western Australia and the other jurisdictions for which Coles data was used.

The ERA has received additional aggregated transaction data from Coles.⁵⁵⁵ The data,⁵⁵⁶ displayed in

Figure 36 to Figure 38, demonstrates aggregate transaction data for 10 stores in Victoria,⁵⁵⁷ New South Wales⁵⁵⁸ and Western Australia⁵⁵⁹.

This data confirms the observations made in the Draft Report that the existing trading hours restrict customer behaviour. This is most obvious during the weekend, as illustrated by the large increases and decreases in transactions after opening hours and before closing hours on the weekend, compared to the smoother increases and decreases in transactions in other jurisdictions.

⁵⁵⁵ A transaction represents the purchase of any basket of goods that generates a receipt.

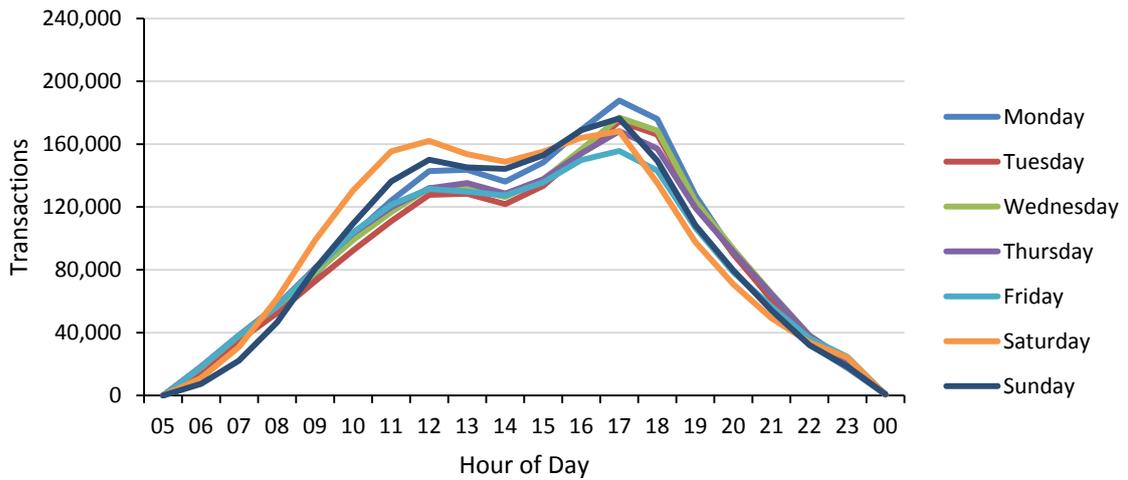
⁵⁵⁶ The data covers the period from 28/05/2012 until 26/05/2013.

⁵⁵⁷ Williamstown; Mitcham; Moonee Ponds; Noble Park; Sandringham; Waurin Ponds; Malvern; St Kilda; Richmond; Prahan.

⁵⁵⁸ Bondi Junction; Coffs Harbour; Katoomba; Lane Cove; Lindfield; Maroubra Junction; Ramsgate; Dee Why; Cambridge Garden; Manly Corso.

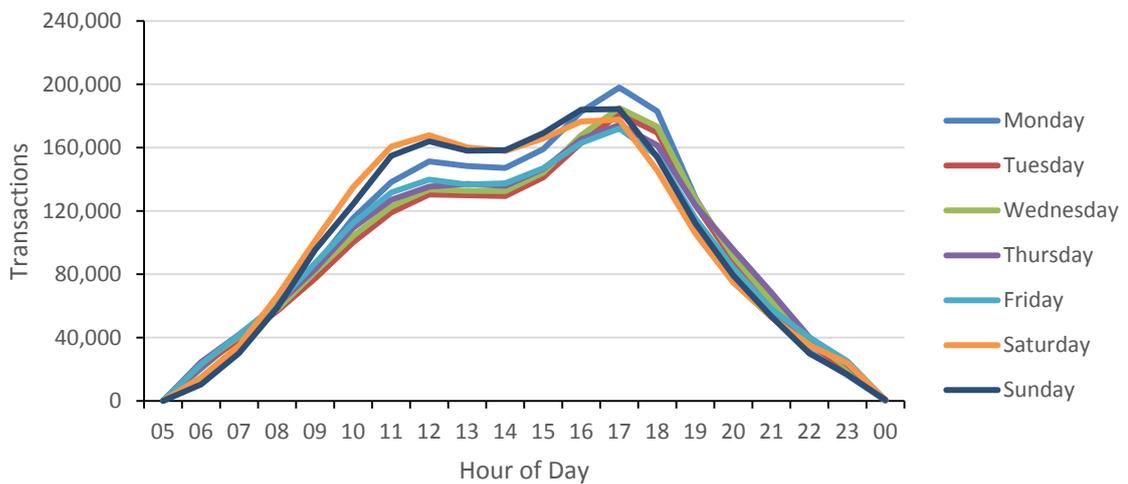
⁵⁵⁹ Subiaco; Victoria Park; Garden City; Gosnells; Melville; Midland; Claremont; Floreat; Joondalup; Warwick.

Figure 36 Purchasing behaviour in Victoria



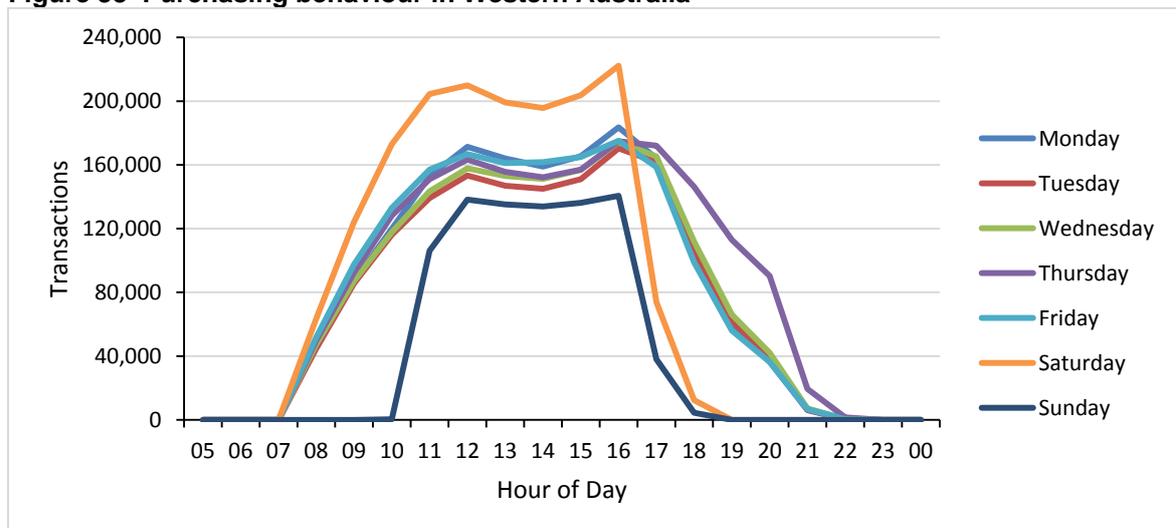
Source: Coles

Figure 37 Purchasing behaviour in New South Wales



Source: Coles

Figure 38 Purchasing behaviour in Western Australia



Source: Coles

Greater congestion

IGA submitted that the ERA's analysis did not consider a number of factors that cause congestion, including local population, store and centre design, store location, traffic management, proximity to competitors and promotional offers.

The ERA recognises that congestion does not have one sole cause and did not suggest that retail trading hours are the sole cause of congestion, only that it is a contributing factor and that the deregulation of retail trading hours will reduce congestion.

Potentially higher prices

The IGA submitted that the ERA has provided no proof that retail trading hours have any impact on retail prices.

The ERA did not conclude in the Draft Report that retail prices would fall following the deregulation of retail trading hours, but discussed reasons why prices may fall and reasons why prices may rise and concluded that it is not possible to be definitive on how prices would respond to deregulation.

ERA noted that economies of scale often allow larger retailers to offer lower prices than those offered by small or special retail shops. To the extent that larger retailers offer cheaper prices and are restricted in their hours of trade, customers who shop outside these hours will have to make their purchases from smaller and more expensive retailers. These customers will therefore tend to pay higher prices than they would have in the absence of trading hour restrictions.

This effect would not be captured in simple price surveys. Nonetheless, if customers' access to larger and cheaper retailers is restricted by regulated trading hours, then it is likely that they will pay higher prices on average than they would otherwise have faced in a deregulated environment.

The ERA concluded that customers may be able to enjoy lower retail prices by shopping at general retail shops even if prices do not fall following deregulation.

The IGA's submission on this issue has not altered the ERA's view.

Facilitates greater social engagement

The IGA states that the ERA's conclusion that the deregulation of retail trading hours is likely to have a positive effect on participation in family and social events is not supported by empirical or qualitative evidence.

In the Draft Report, the ERA observed that there is no evidence for, or against, the argument that regulated retail trading hours facilitate greater social engagement in the community. The ERA considered that the deregulation of retail trading hours is likely to have a positive effect rather than a negative effect on participation in family and social events. Time-poor individuals are faced with decisions on how they spend their limited spare time. Regulated trading hours mean that grocery shopping may need to be prioritised over family and other preferred social activities because it must be undertaken with some regularity (particularly for perishable products). Extended retail trading hours 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.

Submissions on this issue have not altered the ERA's view.

Retailers

Loss of sales

The IGA submitted that ‘restricted’ retailers are entirely able to compete with ‘non-restricted’ retailers and stated that the increasing market shares of many ‘restricted’ retailers are evidence of this.

With regards to online retailing, the IGA notes that Coles and Woolworths stores already have online services and because of this, the IGA considers that these businesses are already countering any “adverse impacts” of having restricted trading hours.

The ERA observes that regulations that prevent one retailer from opening at the same time as a direct competitor is a barrier to competition that prevents the restricted retailer from making sales and disadvantages customers.

Any increases in market share, or the ability to offer online services, do not change this fact.

Excess capital capacity

In response to the ERA’s conclusion that retail trading restrictions prevent retailers from efficiently using their capital because they are forced (by the legislation) to close prematurely, the IGA submits that most stores in the Perth CBD are closed by 6:30pm or 7:00pm on weeknights even though they can remain open until 9pm.

The IGA states that the Council of Small Business Organisations of Australia (**COSBOA**) undertook an informal survey of Perth shopping centres in December 2013. In the survey, visits were made to 16 Perth metropolitan shopping centres during the first week of December between 9:00am and 11:00am and after 4:00pm.⁵⁶⁰ The CEO of the COSBOA stated that the decision of major shopping centres like Carousel, Garden City and Karrinyup not to utilise the entire scope of allowed trading hours⁵⁶¹ sent a clear message that there is no need for 8am to 6pm trading in the first two Sundays in December. The IGA states that further investigation of consumer preferences is required as this will demonstrate whether current trading hours are restricting retailers’ ability to compete.

The ERA has already concluded in the earlier section on choice and convenience that there is demand for deregulated trading hours. The observations of the CEO of the Council of Small Business Organisations of Australia do not change these conclusions.

Whether or not all retailers elect to use all of the retail hours available to them is beside the point. The more important point is that retailers (irrespective of type, size or location) have the flexibility to match their opening times with customer demand. Matching opening times with customer demand allows retailers to reduce peak period demand by distributing sales 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 (as competitive pressure forces prices to reflect costs).

If there is no demand for deregulated trading hours then customer behaviour, existing retail trading hours and market shares will not change following the removal of trading restrictions. In this case, the regulations are redundant and the retention of regulation will only act to

⁵⁶⁰ From December 8, 2013 until 26 December 2013, Sunday trading hours in Western Australia were extended from 8:00am to 6:00pm (from 11:00am to 5:00pm). These trading hours were also applied to Boxing Day.

⁵⁶¹ The three shopping centres (Carousel, Garden City and Karrinyup) opened at 9am and closed at 5pm.

impose administrative costs. Removing the restrictions would not be detrimental for retailers that are not currently constrained by retail trading hours.

Distorted business decisions

The IGA agreed regulations stipulating staffing numbers distorts business decisions. The IGA suggested that rather than enforcing the current limit of 18 staff members (one of the criteria to be classified as a small retail shop) at all times, the limit could be amended such that it applies only at times that restricted retailers may not operate. That is, restricted retailers may operate outside of their current regulated hours, provided 18 or fewer employees are working at those times.

This suggested change does not prevent business decisions from being distorted. Any distinction between retailers that may operate without restrictions and those that may not creates the conditions in which distorted growth occurs. Altering the way in which this distinction is made simply shifts the distortion to a new set of retailers.

The only way to eliminate these distortions is by removing restrictions on retail trading hours, not by changing the rules to perpetuate the trading advantages of Small Retail Shops.

Compliance costs

The IGA disputes the ERA's view that deregulating retail trading hours will reduce retailer compliance costs. The IGA submits that the ERA has provided no direct or comparative evidence of the actual costs of compliance.

However, the ERA's concern about compliance costs is reinforced by the National Retail Association's (**NRA**) submission. One of the NRA's core functions is to deliver advice to its members to assist with compliance with laws and regulations that impact on business. The NRA states that the current legislation in Western Australia has resulted in 31 different retail trading regimes across Western Australia.

The NRA states that existing businesses that are affected by regulated trading hours, those that are unsure whether they are affected, and any new businesses must employ resources and time to analyse the regulations to determine how their business might be affected.

The NRA submits that businesses operating multiple stores must communicate different rules for different stores to their operational staff as well as customers and may not be able to rely on centrally-developed business policies in order to operate their stores lawfully.

The ERA considers the points raised by the NRA to be valid examples of situations that may result in retailers incurring additional compliance costs due to regulated trading hours.

In addition, the ERA notes that the burden of compliance costs will fall heavily on those businesses that sit at the threshold of what can be defined as a small retail shop (and are able to enjoy unregulated trading hours).

As noted in the Draft Report, the SpudShed identified ways in which it could grow and still maintain its classification as a small retail shop. In order to identify these avenues, it first had to understand the way in which a small retail shop is defined and understand the avenues in which it could not grow.

Most small retail shops are unlikely to have the necessary legal expertise to interpret the legislation and associated regulations and must spend time and money training staff or paying for external legal advice, or both. For a small business, these costs can be significant.

Protecting small business

The IGA agreed with the ERA that small retailers are not inherently preferable to larger retailers, but questioned the benefits of deregulation.

The ERA notes that given that small retailers are not preferable to large retailers, it is not necessary to separate the benefits that accrue from reform on the basis of business size. Deregulation of retail trading hours provides customers with greater choice and convenience and will encourage retail competition. The retailers that benefit will be those that best serve the needs of their customers, irrespective of size.

In the Draft Report, the ERA referenced a study by the Productivity Commission that found 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.⁵⁶² The WAIGA submitted that the analysis does not distinguish between retail and non-retail businesses.

The WAIGA submission is incorrect. The Productivity Commission analysis explicitly states that the data relates to small retail businesses⁵⁶³ relative to large retail businesses.

Economic and social interests of small communities

The IGA submitted that it did not appear as though the ERA had given specific consideration to the implications of deregulation on non-metropolitan retail markets and queried whether specific consideration had been given to the costs and benefits of deregulation in regional Western Australia.

The ERA notes that the existing legislation allows for local government authorities outside of the Perth metropolitan area to amend the retail trading hours in their jurisdiction. This allows local governments to 'self-determine' the retail trading hours that best serve the needs of the community.

The ERA notes that of the twenty nine jurisdictions that have taken the opportunity to modify their retail trading hours, all have extended their hours and eight have fully deregulated their trading hours.⁵⁶⁴ No jurisdiction has subsequently sought to re-regulate their trading hours in the last 15 years.

Economic benefits of restricted trading hours

The IGA and WAIGA question whether deregulation might lead to greater market consolidation and to a lessening of competition.

The IGA submits that anecdotal evidence it has received from IGA operators suggests that the introduction of weeknight and Sunday trading in Perth has resulted in losses of market share of up to 10 per cent to Coles and Woolworths.

The ERA notes that changes in market share following the removal of restrictions to competition demonstrate the extent to which the barrier to competition existed in the first place. Preventing general retail shops from operating on Sundays limited customer choice and convenience and prevented up to 10 per cent of grocery customers from shopping at the retailers that best meets their needs.

⁵⁶² Productivity Commission, *Economic Structure and Performance of the Australian Retail Industry*, Productivity Commission Inquiry Report, 2011, p.309.

⁵⁶³ Defined as employing less than 20 employees.

⁵⁶⁴ The remainder of jurisdictions have either deregulated trading hours across their entire jurisdiction or the major centres within the jurisdiction.

Any lessening of retail competition is a concern. However, the ERA observes that safeguards already exist to address this issue in the form of the *Competition and Consumer Act 2010*. One of the primary objectives of the *Competition and Consumer Act 2010* is to prevent retailers from acting anti-competitively. As such, it is not necessary for State legislation to regulate retail trading hours for this purpose.

Retail employees

Extended trading hours

The IGA agrees that vacancies will be filled by those who prefer to work the hours on offer, but submits that the ERA has not considered the effect of deregulation on those who are already working in the sector and whose existing rosters may be adversely impacted by re-rostering (that is, because they are required to work at times that they do not wish to, such as late nights, weekends or public holidays).

The ERA concurs that some current employees may be adversely affected by re-rostering. However, it is likely that, over time, vacancies for work outside of the current regulated hours will primarily be filled by those who prefer to work the hours on offer. People with a strong aversion to working outside of standard business hours will likely move over time to weekday jobs, either in retailing or elsewhere.

Other Issues

In the Draft Report, the ERA recommended that retail trading hours should be fully deregulated in Western Australia, with the exception of Christmas Day, Good Friday and the morning of ANZAC day, during which only retailers that employ 10 or fewer employees and filling stations should be allowed to operate.

The Chamber of Commerce and Industry of Western Australia (**CCIWA**) observed that the current regulations allow Small Retail Shops (which may employ up to 18 people) to operate in a completely unrestricted environment and submitted that the ERA's recommendations would mean that retailers that employ between 11 and 18 employees would be subject to more, not less, regulation. The CCIWA stated that the ERA did not outline a strong case for reducing this threshold to 10.

The ERA notes that setting the employee threshold at 10, will result in some retailers no longer enjoying the unrestricted trading they currently enjoy. The ERA is of the view that there is no strong case for reducing the number of retailers that enjoy unrestricted trading hours and concludes that the threshold should remain at 18.

The CCIWA also submitted that it was not clear from the recommendations in the Draft Report whether the ERA was recommending that product regulations⁵⁶⁵ be amended in line with changes to trading hours. This view was also expressed by SupercheapAuto.

Product regulation serves to categorise retailers based on the goods they sell. The hours during which each category of shop may operate are defined in the *Retail Trading Hours Act 1987*. Removing the regulation of retail trading hours will effectively equalise the hours during which retailers may open and will render product regulation redundant because all classifications of retailers may operate on the same unrestricted basis.⁵⁶⁶

⁵⁶⁵ Regulations that specify the goods that may be sold by specified categories of shop.

⁵⁶⁶ With the exception of those retailers that may open on Christmas Day, Good Friday and the morning of ANZAC day.

Although it was not made explicit, the ERA expects that the removal of retail trading restrictions would be accompanied by the removal of product regulation. There is no need to retain redundant legislation.

7.1.3.5 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 ERA concludes that no such market failure exists and that there is no compelling economic reason that retail trading hours should not be deregulated in Western Australia.

The ERA finds 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.⁵⁶⁷

Opponents to reform offer two main arguments against deregulation:

1. The purported benefits of reform will not occur because:
 - a. there is no customer demand for reform; and
 - b. regulations do not prevent regulated retailers from competing with unregulated retailers; and
2. Reform will cost small businesses and retail employees and may result in uncompetitive markets dominated by big businesses.

The ERA considers that opponents of deregulation contradict themselves by presenting both of these arguments. If there is no demand for reform, then customer behaviour will not change following the removal of trading restrictions. If this is the case, trading hours and market shares will remain unchanged. In this circumstance, the removal of retail trading regulation will have an inconsequential effect on market dynamics and their presence only acts to create administrative costs. On this basis, there is therefore no reason to retain the restrictions as they are ineffectual.

The alternative scenario is that deregulation of retail trading hours results in consumers substantially changing their shopping patterns to the detriment of retailers that are not currently constrained by retail trading hours. If this is the case, then retail trading hours

⁵⁶⁷ Productivity Commission, *Economic Structure and Performance of the Australian Retail Industry*, Productivity Commission Inquiry Report, 2011, Page 282.

should be deregulated because they act as a significant impediment to consumer choice and convenience and are a barrier to robust retail competition.

The ERA acknowledges that lifting the barriers to competition may 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 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, such that all retail shops are subject to unrestricted retail trading hours, irrespective of the goods or services sold,⁵⁶⁸ 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 recommends that small retail businesses (with a maximum of 18 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.

7.1.4 Recommendations

29. 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 filling stations and retailers that employ eighteen (or fewer) staff may open.

⁵⁶⁸ This recommendation only applies to regulations imposed as a result of the *Retail Trading Hours Act 1987* and does not apply to retail outlets that are subject to additional legislation such as liquor outlets or firearms retailers.

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 taxi license plates on issue in Western Australia;⁵⁶⁹ the maximum price that may be charged for taxi services; the vehicle standards; and driver behaviour and aptitude standards that must be met.

The ERA has concluded that standards for taxi vehicles and driver aptitude and behaviour have a net benefit, while the restrictions on the number of taxis have a clear net cost. Caps on maximum fares appear to be necessary when there is a restriction on the number of taxis operating to prevent the abuse of market power. The need for caps on fares would diminish if restrictions on the number of taxis were removed.

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 have resulted in taxi services in Western Australia being: over-priced by around 16 per cent; and under-supplied and unreliable, with booked taxis in Perth being 15 minutes late or longer on 115,000 occasions in 2013.

The ERA estimates that the benefit to taxi passengers of lower fares and reduced waiting times as a result of removing the restrictions on the quantity of taxis would be in the order of \$70 million per annum. Of this, \$18 million would be at the expense of private taxi plate owners (who are generally not drivers)⁵⁷⁰ in the form of income foregone.

Taxi drivers will generally be unaffected by the reforms and may in fact benefit from greater opportunities to own and operate their own taxi businesses, rather than working for a plate owner. Drivers may also benefit from more job opportunities, with demand for taxi services expected to increase by between 4 and 10 per cent as fare prices fall.

However, around 1,000 taxi drivers who lease their plates from the Government would lose a portion of their income, estimated to be around \$4,000 per driver per year. These drivers have enjoyed an advantage over drivers that lease from private plate owners under the current arrangements.

The ERA estimates that the net benefit to the Perth community of removing quantity restrictions would be between \$13 million and \$39 million per year. In practical terms, removing restrictions on the number of taxis will mean that: there are more taxis available, with shorter waiting times and more reliable services; cheaper fares; and more innovative and competitive services (such as alternative ways of booking and paying for taxis).

Opponents of deregulation of the taxi industry argue that many of the jurisdictions that have removed supply restrictions experienced a decline in the quality and safety of taxi services. The ERA notes regulations restricting the number of taxi are not designed to achieve quality and safety standards. The Government should ensure that quality and safety standards

⁵⁶⁹ Taxi plates give the owner of the plate, or their agent, the right to operate a taxi. The Department of Transport restricts the number of taxis permitted to operate in Western Australia by limiting the number of taxi license plates on issue. The practical outcome of this is that there are fewer taxis operating in Perth than there would be in the absence of this restriction.

⁵⁷⁰ A Department of Transport (WA) taxi driver survey, conducted in 2013, found that only eight per cent of respondents owned their own taxi plate.

are maintained through regulations specifically designed to achieve the desired outcomes and ensuring that these regulations are enforced.

The development of smart phone technology is starting to have a profound effect on the way passengers purchase taxi and related services. Smart phone technology has the potential to generate significant benefits for passengers and drivers, and as such these technologies should be welcomed rather than discouraged. However, the full potential benefits of smart phone technology will only be realised if the Government removes quantity restrictions on the taxi industry and removes the barriers that prevent small charter vehicles (**SCVs**) from competing with taxis (including minimum SCV fares).

Technological advances mean that it is no longer practical to maintain the current protections of the taxi industry. Most notably, the launch of Uber in Perth has started to facilitate greater competition between the taxi industry and the small charter vehicle industry. The ERA considers that it would be better for the Government to adjust regulations now in a planned and orderly manner, rather than try to respond when there is no choice other than to deregulate.

Reflecting these considerations, the ERA recommends that the Government establish a process to: effect the complete removal of quantity restrictions on the number of taxis operating in Western Australia; and remove the restrictions that prevent small charter vehicles from competing directly with the taxi industry.

Ideally, once the reform model has been agreed, removal of quantity restrictions in the taxi industry would occur completely and in a single stage. This will result in the greatest and earliest benefits to taxi passengers in the form of lower prices and will reduce opportunities for the deregulation process to be derailed by interest groups. The ERA does not consider that restrictions on the number of taxis should be removed slowly over time: a long transition process is not needed to allow the industry to adapt because this is already occurring in response to new technology.

Some additional regulations of SCVs may be required if they are to be permitted to pick up rank and hail passengers, to ensure the safety of both passengers and drivers. For example, some form of external signage would be important to allow passengers to easily differentiate between registered taxis and private vehicles so they do not inadvertently accept a ride from a driver that is not part of that industry. SCVs may also need to include in-vehicle cameras and Global Positioning Systems (**GPS**), as is currently required on taxis.

Removing restrictions on the number of taxis that are permitted to operate will erode the value of taxi licence plates and the ability of plate owners to generate an income from these plates in the form of lease fees. However, the ERA recommends that the Government does not compensate owners of taxi license plates for the loss of value of income, for the following reasons.

- Plate holders have been able to reap windfall gains from past government policy choices, without these being taken back, so it is reasonable to expect plate owners to bear windfall losses without compensation.
- New technologies are likely to erode the value of plates, irrespective of whether or not the Government removes quantity restrictions.
- The risk that the Government may remove the restriction at some point in the future should already be incorporated into taxi plate prices.

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 dimensions: quantity regulation, price regulation, quality regulation and market conduct regulation.⁵⁷¹ 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 overview of each aspect is discussed below.

7.2.2.1 Quantity regulation

The market for taxis can either be an open entry market or a restricted entry market.

In an open entry market, there is no set limit on the number of taxis that can operate. The only restrictions on supply are the 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 taxi plates allowed to operate in the taxi market. The limit is enforced by restricting the number of taxi licence plates (**taxi plates**) available. Taxi plates give the owner of the plate, or their agent, the right to operate a taxi.⁵⁷² There are four primary categories of taxi plates available in Perth.⁵⁷³ 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 2,087 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

⁵⁷¹ OECD, *Taxi Services: Competition and Regulation*, Policy Roundtables, 2007, pp. 19-21.

⁵⁷² 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 the taxi driver meets the requirements to operate a taxi. A Department of Transport survey of taxi drivers in 2013 found that just 8 per cent of drivers surveyed owned a taxi plate.

⁵⁷³ Two other taxi categories exist in Perth. "Green" taxis, and purpose built taxis or "London taxis" of which there were 24 and 39 as at December 2013 respectively. Both categories of taxi plate were issued as part of a trial and are subject to conditions and lease fees that are not representative of the rest of the market.

and Saturday evenings between 5pm and 6am. 400 peak period taxi plates are on issue in Perth.⁵⁷⁴

- **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.⁵⁷⁵
- **Multipurpose:** Multipurpose Taxis (**MPT**) provide a taxi service for people who travel in wheelchairs or scooters. The MPT fleet is currently coordinated by both Black and White and Swan Taxis, who have a contract with the Department of Transport to manage the service.⁵⁷⁶

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.⁵⁷⁷ The Government is no longer releasing taxi plates for private ownership. Instead, all new taxi plates are leased from the Government.

The extent to which the Government can increase the supply of taxis in Perth is restricted by Section 16(3) of *Taxi Act 1994* and Section 4A of the *Taxi Regulations 1995*. These two sections require that taxi plates that are leased from the Government may only account for a maximum of 45 per cent of all conventional taxi plates. No such restriction is applied to peak period or area restricted taxi plates.⁵⁷⁸ The maximum price at which privately owned taxi plates may be leased is set at \$355 per week (excluding Goods and Services Tax (**GST**)) by the Department of Transport.⁵⁷⁹ 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.⁵⁸⁰

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; and Friday 6pm to Monday 6am. In addition to this, a separate price schedule is applied whenever five or more passengers are carried.⁵⁸¹

⁵⁷⁴ Data provided on request by the Department of Transport (WA).

⁵⁷⁵ Data provided on request by the Department of Transport (WA).

⁵⁷⁶ 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.

⁵⁷⁷ The Taxi Industry Board 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.

⁵⁷⁸ A discussion of the conditions applied to each category of taxi plate is discussed later in this section.

⁵⁷⁹ Unless otherwise stated, all dollar values are exclusive of GST.

⁵⁸⁰ Government lease conventional plates for a period of eight years.

⁵⁸¹ 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.

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).

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 privately owned taxi plate is included as a cost component in the model. The fare setting model is based on:⁵⁸²

- 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.

7.2.2.3 Quality regulation

The primary purpose of quality regulation is to ensure the safety of passengers and guarantee a minimum level of service. The quality of taxi services in Western Australia is primarily regulated in two ways: the standard of vehicles that can be used, and the standards that drivers must meet.

Taxi drivers in Perth must successfully complete the Taxi Driver Training Course, the Taxi Aptitude Test 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.

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 regulations require taxi drivers to accept all fares⁵⁸³ and take the most economical route, unless otherwise requested.

In addition, 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 these bookings to taxi drivers. Drivers pay a weekly taxi dispatch membership fee for this service. Affiliation with a dispatch service does not preclude drivers from accepting passengers from the street, taxi ranks or making private arrangements with customers.

7.2.3 Draft Report

In the Draft Report, the ERA identified a number of areas in which the regulation of the Western Australian taxi market imposes net costs on the community. The ERA concluded that supply restrictions impose significant costs on the community. Quantity restrictions result in there being an undersupply of taxis which imposes costs on passengers in the form of higher fares, longer waiting times, less reliable taxi services and reduced service innovation and differentiation.

⁵⁸² PriceWaterhouseCoopers, *Department for Planning and Infrastructure: Recommendation report – taxi fare increase for 2008/09: Final Report, 2008*

⁵⁸³ There are exceptions relating to driver safety, passenger behaviour and concern about passengers refusing to pay the fare upon trip completion.

The ERA noted that the regulatory frameworks applied in Perth and regional Western Australia are broadly similar and, that while the quantitative analysis focused on the Perth market, the market constraints imposed by regulation are similar. The ERA stated that the conclusions should be applied uniformly across the entire State.

The ERA estimated that the application of supply restrictions imposed a net cost on the community in Perth of between \$7.1 million and \$9 million per year. Refer to Appendix 10 for details of the calculations.

Table 35 Costs and benefits of regulating the supply of taxis in Perth (Draft Report)

		Lower Bound	Upper Bound
Cost to Passengers	Price	-\$32.7 million	-\$33.7 million
	Waiting Time	-\$6.5 million	-\$7.4 million
	Service Reliability	Not Quantified	
Benefit to Plate Holders		\$27.7 million	\$27.7 million
Benefit to Taxi Drivers ⁵⁸⁴		\$4.4 million	\$4.4 million
Net Cost of Supply Restrictions		-\$7.1 million	-\$9.0 million

The costs of taxi regulation are primarily borne by passengers in the form of higher taxi fares and longer waiting times than would exist in a market without supply restrictions. It is from these higher prices that plate holders and taxi drivers derive their benefits, estimated to be \$27.7 million per year and \$4.4 million per year, respectively.

Higher prices impose a cost of \$32.1 million per year on current taxi passengers. Higher prices also reduce demand for taxi services, the cost of this is estimated to be between \$600,000 and \$1.55 million. In total, the estimated cost to taxi passengers of higher prices resulting from supply restrictions is between \$32.7 million and \$33.7 million per year.⁵⁸⁵

The ERA found that restrictions on the quantity of taxis result in longer passenger waiting times than those expected in a free market. The ERA notes that waiting times in Ireland fell by over five minutes following the removal of supply restrictions. The ERA conservatively assumed that waiting times would fall by around 60 seconds after the removal of supply restrictions. The ERA calculated that an additional minute of waiting time costs passengers a total of between \$6.5 million and \$7.4 million per year.⁵⁸⁶

The ERA observed that the barriers to becoming a taxi driver are relatively low and that there are more qualified taxi drivers than there are taxi licence plates. Because there are more drivers than taxis, drivers compete with each other in order to secure a seat driving a taxi.

The ERA noted that, in general, taxi drivers appear to earn relatively low incomes and capture few of the profits earned in the market. A similar situation would exist in the absence of quantity restrictions, except drivers would not be competing with each other for the right

⁵⁸⁴ This benefit is accrued by taxi drivers who lease their taxi plate from the Government.

⁵⁸⁵ In a traditional cost benefit analysis, transfers from one party to another party simply net each other out. In this case, the revenues enjoyed by taxi plate holders (\$27.7 million per year) and taxi drivers (\$4.4 million per year) are derived from passengers in the form of higher taxi fares. These higher taxi fares cost passengers between \$32.7 million and \$33.7 million per year. Therefore, under the traditional cost benefit analysis the net cost to the community of higher taxi fares is between \$600,000 and \$1.55 million per year.

⁵⁸⁶ An average of one minute of additional waiting time for each taxi trip undertaken in Perth during 2013 (13,007,268 trips in 2013) amounts to 216,788 hours cumulative waiting time during the year. Multiplying this by a weighted average value of time for taxi passengers (estimated as being between \$30 and \$34 per hour) gives a cost of between \$6.5 million and \$7.4 million per year.

to lease taxi plates. Instead drivers would be expected to have their own taxi plate and compete against each other for passengers (that is, there are greater opportunities to be a small business owner). In both regulated and deregulated markets, the level of competition between drivers will be similar, so the extent to which they compete their prices (income) down would be comparable in both instances.

The only exception to this is for drivers leasing their taxi plate directly from the Government. Drivers who lease from the Government pay slightly lower lease costs than drivers who lease private taxi plates. As such, drivers who lease from the Government currently earn slightly more than their counterparts who lease privately (because both groups earn the same regulated fare). This margin would be eliminated in a market without supply restrictions and drivers who had previously leased Government plates would have their income fall slightly, estimated to be approximately \$4.4 million per year across all Government lease plate drivers, to levels comparable to those leasing private taxi plates.

The ERA found that the undersupply of taxis results in taxi services being less reliable (that is, booked taxis do not always arrive as requested) relative to what would be expected in a market with unrestricted entry. Excess demand for taxi services provides taxi operators with a degree of choice about the passengers that they accept, primarily with pre-booked passengers.⁵⁸⁷ Passengers travelling shorter distances are less likely to have their custom accepted because they are less profitable than passengers travelling longer distances. Similarly, drivers are more likely to abandon pre-booked fares for more lucrative work in markets with restricted supply. These outcomes decrease service reliability relative to what would be expected in a market with unrestricted entry.

Price Regulation: The ERA noted that price regulation is necessary to address the lack of competition in taxi markets with restricted entry. However, constraints on competition are largely caused by quantity regulation and the removal of these would diminish the need for price regulation.

The ERA stated that there is less need for price regulation in an open-entry market because taxis are less able to influence prices. However, opportunistic pricing can arise even in the most competitive taxi markets. The high search costs in locating another taxi, particularly for rank or hail passengers during periods of high demand or obvious passenger vulnerability, substantially reduces the ability of consumers to negotiate fares. This provides drivers with the temporary market power that allows them to price opportunistically. The spread of smartphone booking applications will mitigate these risks as they become more prevalent. However, the problem will remain so long as rank and hail markets exist. Such a market failure can be addressed by requiring taxis to clearly publish their prices on both the outside and inside of the taxi, requiring taxis to register their price schedules with the regulator and requiring advanced notice prior to the implementation of a price change.

Removing quantity restrictions would not immediately remove the need for price controls. Robust competition would not occur immediately following reform because the market will undergo a period of rebalancing. Only once robust and sustained price competition has been observed can price regulation begin to be relaxed. However, the retention of light-handed price regulations (such as requirements for taxi operators to publish and prominently display their prices, and to use a taxi meter to remove driver manipulation of the taxi fare) may need to be permanently retained.

⁵⁸⁷ The acceptance of trips booked via a dispatch network is at the discretion of taxi drivers. Dispatch networks do not have the ability to direct taxis to pick up specific passengers. Taxis are obligated, as part of market conduct regulation, to accept all rank and hail passengers, although anecdotal evidence suggests that refusal for shorter fares is not uncommon.

Quality Regulation: The ERA considered 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 taxi safety and quality levels.

Market Conduct Regulation: The ERA considered the obligation to accept all passengers requiring a taxi service and to take the most economical route as necessary to address the market failures (resulting from information asymmetry) that would arise in their absence.

The justification generally given for mandatory dispatch affiliation is to provide for the safety of drivers and passengers. The ERA concluded dispatch networks are not the only possible providers of safety services, such as duress alarms. Allowing alternate providers to supply these services will encourage competition by allowing drivers to procure these services from the provider that best meets their needs.

The ERA concluded that there is no basis for requiring drivers to affiliate with a dispatch network and that the choice of whether to affiliate is best left to drivers.

The ERA concluded that there was a strong case for removing the restrictions on the supply of taxis in Western Australia and proposed the following three potential reform options:

- 1. Full and immediate removal of quantity restrictions:** This is the most aggressive of the proposed options and would see the community enjoy the benefits of reform almost immediately. It would also see the value of taxi plates eliminated overnight, to the detriment of plate owners. Other jurisdictions that have taken this approach and applied insufficient resources to addressing compliance have experienced falling service standards and passenger safety. Recognising this, additional attention would need to be placed on enforcing the regulated standards to ensure similar outcomes do not occur in Western Australia.
- 2. Staged removal of supply restrictions:** This could be handled in a range of ways, and the ERA suggested removing supply restrictions immediately, but retaining an annual lease fee (currently \$13,000 for Government plates) that could be reduced over time to either zero or a fee that reflects the cost of issuing taxi plates. This approach would reduce plate values over a longer period, providing owners with more time to adjust to the loss in value of their plates and plate lease income. This approach also delays the benefits of reform to the community and leaves open the risk that the reforms are not fully implemented.
- 3. Removal of barriers that prevent small charter vehicles to compete with taxis:** In the pre-booked market, small charter vehicles offer similar services to pre-booked taxis (that is a private point-to-point transport service). The significant differences between a pre-booked taxi and a small charter vehicle are the fare structures and the vehicle standards. Small charter vehicles are subject to a much higher vehicle standard than taxis and must charge by the hour, with the minimum charge being for one hour for no less than \$60. Removing these two barriers to entry would open up significant competition in the pre-booked taxi market. It is likely that competition in the rank and hail market would also develop as a result of advances in smartphone technology that allow small charter vehicles to be booked using a smartphone.

7.2.4 Submissions

Six submissions were received, five of which opposed the ERA's recommendations to remove regulation of the quantity of taxis. The key issues raised in submissions are discussed below.

7.2.4.1 Is there a need for change?

The Taxi Council of Western Australia (**TCWA**) submitted that there is no need for change in the taxi market. TCWA stated that the taxi industry provides an extremely high service standard and the industry has exceeded the key performance indicators set by the regulator over a long period of time. The TCWA compared the performance of the Perth taxi industry with the public transport system in Perth and concluded that, based on measures of key performance indicators (**KPIs**), the taxi industry in Perth is outperforming the public transport network.

The ERA disagrees that the taxi industry has exceeded the KPIs set by the Department of Transport over a long period of time. The ERA also considers it irrelevant to compare the performance of the taxi industry with the public train and bus network. Furthermore, the ERA did not recommend deregulation of the taxi industry on the basis of the performance of the taxi industry against its key performance indicators.

Taxi services are private point-to-point transport services for (usually) up to four passengers between destinations of the passengers' selection. In contrast, public bus and train transport services offer mass transit along predefined routes for up to thousands of passengers at a time. The two services are quite different and it is not appropriate to compare them in the way that the TCWA has attempted.

A price comparison of the three services demonstrates the extent of the differences. The Transperth website states that a train or bus fare from Perth Station to Fremantle Station at midday on a Monday costs \$3.57 for a standard SmartRider fare. The online fare estimates of Swan Taxis and Black & White Taxis both estimate the same trip in a standard taxi would cost approximately \$43.

The ERA makes the following observations in response to the TCWA's claims that the industry has exceeded the KPIs set by the Department of Transport:

- Jobs not covered:⁵⁸⁸ Industry KPIs for the Perth metropolitan area have not been achieved once in the last eight years.
- Telephone answered promptly:⁵⁸⁹ The requirement that 97 per cent of all calls to dispatch networks be answered within 60 seconds was only achieved once in the past three years.

While performance is better in other areas, the ERA does not consider the performance detailed above fits with the assertion that the taxi industry has been exceeding Department of Transport KPIs over a long period of time.

⁵⁸⁸ Jobs not covered measures the amount of standard Perth metropolitan taxi jobs not covered. This includes jobs where a passenger was never picked up or after waiting 15 minutes, a passenger gave up waiting and left the pick-up point. Rank and hail data is not included in this measure, nor is data from high-demand public holidays and special events.

⁵⁸⁹ The length of time taken to answer customer calls to book a taxi.

7.2.4.2 ERA conclusions are inconsistent with international experience

The Australian Taxi Federation (ATF), the Perth Taxi Group (PTG) and TCWA submit that the ERA's conclusions that removing supply restrictions will decrease fares, decrease waiting times, improve competition, improve service quality and improve driver conditions are inconsistent with the findings of research on taxi deregulation in other jurisdictions.

Service quality and safety

Organisations submitted that an outcome of removing quantity restrictions in other jurisdictions has been a fall in service quality and safety.

In the Draft Report, the ERA observed that many of the jurisdictions that have removed supply restrictions experienced a decline in service quality and safety. The ERA concluded that the existing quality and market conduct regulations should be retained, if not strengthened, if quantity restrictions are removed. Furthermore, monitoring and enforcement of quality and market conduct regulation should be increased to reduce the likelihood of substandard taxi operators entering the market and lowering service quality and safety.

Quality and safety regulation is designed specifically to address quality and safety issues. The decline in service and safety standards that have followed the removal of supply restrictions in other jurisdictions can, and should, be addressed by ensuring that non-price regulation is appropriate and robustly enforced, not by retaining supply restrictions. The Essential Services Commission of Victoria addressed this issue in the Final Report of its review of taxi fares in 2007/08:

"The argument that supply restrictions are required to ensure quality of service does not appear to be supportable where service quality and safety regulations are in place. Entry controls are an indirect and inherently inefficient way to regulate quality and safety. This function is better served by dedicated quality regulations which specifically target areas of concern and clearly detail desired outcomes. Licence scarcity is not an essential condition to achieve these."⁵⁹⁰

The ERA concludes that issues relating to the quality and safety of taxi services in Western Australia should be addressed by ensuring that the regulations designed for that purpose are appropriately enforced.

Fares

Submissions stated that it is unclear whether removing the cost associated with leasing taxi plates would result in lower fares for consumers. Submissions raised reforms in the Netherlands, the United States and Sweden as examples of this.

The ERA observes that the mixed experiences of other jurisdictions have been a result of the specific reforms undertaken in each jurisdiction and whether other impediments to competition remained following reform. The ERA makes the following observations in respect of each of the three nominated jurisdictions:

⁵⁹⁰ Essential Services Commission (Victoria), *Final Report: Taxi Fare Review 2007-08*, 2008, p.234.

- Netherlands: passengers of pre-booked taxis in the Netherlands had limited ability to choose their taxi provider and this limited the extent to which price competition could develop.⁵⁹¹
- United States: Opponents of taxi market reforms commonly cite a study by PriceWaterhouse as evidence that reform does not achieve the desired outcomes.⁵⁹² However, careful assessment of the conclusions reveal that the jurisdictions upon which PriceWaterhouse bases its conclusions embarked on much wider reform programs than has been recommended by the ERA.⁵⁹³ PriceWaterhouse did not observe significant issues in jurisdictions that employed reforms comparable to those recommended by the ERA.⁵⁹⁴
- Sweden: The taxi market in Sweden is unique because publically funded rides (transport for elderly, disabled and school children) account for more than half the taxi market turnover in Sweden.⁵⁹⁵ These services are reliant on Government subsidies to remain viable. Accordingly, the Swedish experiences of reform are unlikely to be representative of outcomes that would be expected to occur in Western Australia.

Waiting times

The ATF states that studies by Kang⁵⁹⁶ and the National Competition Council⁵⁹⁷ have demonstrated that waiting times increase rather than fall following removal of quantity restrictions from the taxi industry.

Submissions that waiting times do not fall following the removal of supply restrictions are inconsistent with the findings of a wide ranging Organisation for Economic Co-operation and Development (**OECD**) report that surveyed the outcome of taxi reform across OECD member countries. The OECD observed that passenger waiting times tend to fall substantially following the removal of supply restrictions.⁵⁹⁸

The ERA observes that waiting times are not a focus of Kang's paper and no discussion of the impact of reform in waiting times is made in the paper's conclusions.

The National Competition Council observed only reductions in passenger waiting times in its discussion of taxi waiting times following reform in international jurisdictions.⁵⁹⁹

⁵⁹¹ Law Commission, *Reforming the Law of Taxi and Private Hire Services: A Consultation Paper*, p.114.

⁵⁹² PriceWaterhouse, *Analysis of Taxicab Deregulation & Re-Regulation*, 1993, p.2.

⁵⁹³ PriceWaterhouse's conclusions are based on jurisdictions that implemented what it termed *Open Entry* reform. PriceWaterhouse defined *Open Entry* regulation on page 2 of its report as "...almost anyone who owns a vehicle can obtain a taxi permit and provide service..." PriceWaterhouse noted that some basic requirements may remain such as insurance or the absence of criminal record.

⁵⁹⁴ PriceWaterhouse observed that cities which employed *minimum standards* regulation "reported no significant issues and accordingly have maintained this structure". PriceWaterhouse define *minimum standards* regulation as allowing taxis to operate as long as they satisfy certain minimum standards. PriceWaterhouse stated that the application of minimum vehicle standards would meet its definition. The ERA observes that the application of vehicle, safety and driver standards are all retained under the ERA's recommendations.

⁵⁹⁵ OECD, *Taxi Services: Competition and Regulation*, Policy Roundtables, 2007, p.174.

⁵⁹⁶ Kang, *Taxi Deregulation: International Comparison*, 1998, <http://www.taxi-l.org/kang0898.htm> (accessed 20 June 2014).

⁵⁹⁷ National Competition Council, *Assessment of Governments' Progress in Implementing the National Competition Policy and Related Reforms 2002*, 2002.

⁵⁹⁸ OECD, *Taxi Services: Competition and Regulation*, Policy Roundtables, 2007, p. 8.

⁵⁹⁹ National Competition Council, *Assessment Of Governments' Progress In Implementing The National Competition Policy And Related Reforms 2002*, 2002, pp.5.2-5.3

While assessing the submission on waiting times, the ERA reconsidered whether the Draft Report calculation of the costs of longer waiting times was overly conservative. In the Draft Report, the ERA estimated that every 60 second reduction in average passenger waiting times would generate passenger benefits of between \$6.5 million and \$7.4 million per year in Perth. The ERA based its cost benefit analysis in the Draft Report on waiting times falling by 60 seconds.

The ERA notes that shorter waiting times have been observed in jurisdictions that have removed supply restrictions. In Ireland, the average waiting time has fallen by over five minutes. It is unclear whether average waiting times in Perth will fall by more, or less, than what was observed in Ireland.

Although data on the exact extent to which waiting times have fallen in response to supply deregulation is scarce, the ERA notes that the proportional increase in the number of taxis in Dublin is comparable with other jurisdictions that have also deregulated supply:

- Netherlands: Despite inability of pre-booked passengers to choose their taxi provider, the number of taxis increased by 50 per cent in the three years following reform in the Netherlands.⁶⁰⁰
- Wellington (New Zealand): In the four years following deregulation the number of taxis in Wellington increased by 105 per cent.⁶⁰¹
- Dublin: The number of taxis operating in Dublin increased by 133 per cent between 1997 and 2004 (deregulation occurred in 2000).⁶⁰²

The ERA stated in the Draft Report that it expected the outcomes in Perth to be comparable to those experienced in Wellington and Dublin. This view is unchanged.

With this in mind, the ERA considers that a reduction in waiting times of only 60 seconds is overly conservative. However, the ERA also recognises that there is uncertainty about the extent to which waiting times will fall. Accordingly, an estimation of the benefit to passengers, based on a range within which waiting times are likely to fall, provides a better indication of the benefits passengers will enjoy than one single estimate.

Based on the evidence above, the ERA is of the view that the removal of supply restrictions is likely to cause average waiting times to fall by between two and five minutes. Therefore, based on the weighted average cost of time estimates detailed in the Draft Report,⁶⁰³ the cost to passengers of longer waiting times equates to between \$13 million and \$37 million per year.⁶⁰⁴

Potential responses to maintain driver income

The TCWA submits that an increase in the number of taxis, resulting from the removal of quantity restrictions, will mean that the number of taxi fares would have to be divided across a greater number of vehicles; resulting in a less viable taxi industry. To maintain economic

⁶⁰⁰ OECD, *Taxi Services: Competition and Regulation*, Policy Roundtable, 2007, p.36

⁶⁰¹ Morrison, Restructuring effects of deregulation: the case of the New Zealand taxi industry, *Environment and Planning A*, 29(5), 1997, p.917.

⁶⁰² Goodbody Economic Consultants, *Economic Review of the Small Public Service Vehicle Industry*, 2009, p.33.

⁶⁰³ Lower bound of \$30 an hour and upper bound of \$34 per hour.

⁶⁰⁴ These figures are calculated by multiplying the lower bound cost estimate for every 60 seconds of additional waiting time by two and the upper bound of \$7.4 million by five.

viability, the TCWA submits that the industry may respond in one or all of the following three ways:

1. seek an increase in fares to maintain economic viability;
2. reduce operating costs; and/or
3. maintain revenue by working longer hours.

The TCWA submits that each of these responses are likely to erode benefits to passengers.

The ERA disagrees with the assertion that the removal of quantity restrictions harms the viability of the taxi industry. New taxis will only enter the market to the extent to which it is profitable for them to do so. The higher level of competition that new entry will bring may, however, mean that some existing inefficient operators will exit the market because they are unable to compete with new, more efficient, operators. As such, deregulation may be detrimental to the viability of some individual operators, but not to the industry overall.

The TCWA implies that, in the face of increased competition, operators will seek to lower their costs by offering passengers poorer quality services. The assertion that the removal of supply restrictions will result in lower quality services has already been addressed in this report. The ERA considers that the active enforcement of quality and market conduct regulation will ensure that taxi service quality and safety will not fall following the removal of supply restrictions.

There is no legislation in Western Australia that limits the number of hours that taxi drivers may operate. However, the Department of Transport has issued a code of practice for driver fatigue management.⁶⁰⁵ The ERA considers that driver fatigue has the potential to be a considerable hazard. As such, the ERA recommends that standards regarding fatigue management and driver hours of work should be added to the existing market conduct regulations.

7.2.4.3 Dispatch affiliation

The TCWA opposes the suggestion by the ERA that the requirement for mandatory affiliation with taxi dispatch services be abolished. The TCWA submitted that dispatch networks provide a range of valuable services that would not be provided in circumstances where drivers are not affiliated with dispatch networks. These include:

- Collecting data about taxi trips of affiliated taxis that is used to help investigations.
- Reuniting passengers with items that have been left behind in taxis.
- Providing a safe work environment for taxi drivers, primarily through the provision of a duress alarm.
- The provision of real-time taxi data to both the Department of Transport and police.

The TCWA stated that removing mandatory affiliation is likely to affect the manner in which the Department of Transport collects data and that data collection in a market with voluntary affiliation will require extensive Government resources to ensure that it is timely and accurate.

⁶⁰⁵ Department of Transport (WA), *Fatigue Management: A Code of Practice for the Western Australian Taxi Industry*.

The ATF supported the ERAs recommendation that the mandatory requirement for dispatch affiliation should be removed.

The ERA notes that the matters raised by the TCWA are primarily concerned with driver safety and data collection. Taxi dispatch networks are not the only, or necessarily the most efficient, providers of safety or data collection services. 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 dispatch affiliation becomes voluntary, non-affiliated taxis have alternative sources from which to address their security needs.

The issue of driver safety is addressed through the provision of duress alarms, GPS tracking and cameras in/on the taxi. While the provision and maintenance of these services are provided by dispatch networks, dispatch networks are not the only, or necessarily the most efficient, providers of these services.⁶⁰⁶

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.

The Department of Transport is tasked with regulating the taxi market and much of the data that is used to monitor the market and inform regulatory decisions is collected from dispatch networks. The Department of Transport has indicated to the ERA that should a taxi driver elect not to affiliate with a dispatch network, non-affiliated drivers would be required to provide the Department of Transport with the data that would previously have been supplied by its affiliated dispatch network. 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-affiliated drivers, the ERA does not consider it to be sufficient grounds to retain mandatory affiliation. 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.

7.2.4.4 Country taxis

The WA Country Taxi Operators Association (**WACTOA**) submitted that there are material differences between the Perth and regional taxi markets that justify the continuation of distinct regulation for the two areas.

The ERA observes that WACTOA outlined the legislative and regulatory differences between the Perth and regional taxi markets but did not substantiate its assertion that the underlying markets are different.

WACTOA also submitted that regional taxi drivers and operators received little assistance in ensuring driver safety. WACTOA noted that regional taxis are not required to have cameras installed and advocated for the mandatory installation of cameras in all regional taxis.

With respect to the provision of cameras in/on regional taxis, the ERA notes that the application of a single regulatory framework across Western Australia would require all taxis to have cameras installed.

⁶⁰⁶ Victoria Taxi Industry Inquiry, *Draft Report: Customers First – Service, Safety, Choice*, 2012, p.248

7.2.5 Conclusions

The ERA has reviewed and responded to the submissions on the ERA's draft recommendation to remove restrictions on the number of taxis permitted to operate in Western Australia. The ERA has concluded that submitters have not provided any evidence that warrants the ERA revising its analysis or departing from its conclusion in the Draft Report that quantity restrictions impose a net cost on Western Australia and should be removed.

The ERA has reconsidered the extent to which supply restrictions cost passengers in the form of longer waiting times and concluded that supply restrictions impose costs of between \$13 million and \$37 million per year on passengers in the form of longer waiting times.

The net annual cost incurred by taxi passengers as a result of supply restrictions in the Perth taxi market has been estimated to be between \$13.6 million and \$38.6 million.

Table 36 Costs and benefits of regulating the supply of taxis in Perth

		Lower Bound	Upper Bound
Cost to Passengers	Price	-\$32.7 million	-\$33.7 million
	Waiting Time	-\$13 million	-\$37 million
	Service Reliability	Not Quantified	
Benefit to Plate Holders		\$27.7 million	\$27.7 million
Benefit to Taxi Drivers ⁶⁰⁷		\$4.4 million	\$4.4 million
Net Cost of Supply Restrictions		-\$13.6 million	-\$38.6 million

Mobile phone technology (including, for example, smart-phone applications such as Uber) is infiltrating the market for 'point to point private transport services' and will make it difficult to maintain the status quo in terms of the current protections of the taxi industry. The ERA considers that this new technology is a welcome development and will bring significant benefits for consumers. It is timely for the Government to take steps to adjust regulation of the market for point to point private services in an orderly manner.

Reflecting these considerations, the ERA recommends that the Government should establish a process:

- to effect the complete removal of quantity restrictions on the number of taxis in a single stage; and
- to remove the restrictions on small charter vehicles that prevent them from competing directly with the taxi industry.

The ERA recommends that the Government does not compensate owners of taxi license plates for the loss of value or income.

In the subsequent sections the ERA provides a fuller discussion of:

- the implications of mobile phones technology for regulation of the taxi industry;
- the rationale for deregulating the taxi industry in a single stage, as opposed to a multi-staged deregulation of the industry;

⁶⁰⁷ This benefit is accrued by taxi drivers who lease their taxi plate from the Government.

- the need for adjustments to the regulation of the taxi industry and the small charter vehicle industry to ensure that they face similar conditions, particularly for safety standards; and
- the reasons that compensation for taxi plate owners is not recommended for the loss of value of taxi plates as a consequence of removing quantity restrictions.

7.2.5.1 Mobile technology

The development of mobile personal computing technology has had a profound effect on the manner in which many markets function, including the personal transport market of which the taxi industry is part. In recent years the proliferation of taxi and small charter vehicle booking applications (smartphone applications) has been significant and the extensive capabilities of existing smartphone applications have the ability to generate considerable time and efficiency savings for passengers that have previously been unavailable.

The ERA considers that the Government will need to adjust regulation of the taxi industry in response to this new technology and that consumers will derive significant benefits if the Government does so. To some extent, the full potential benefits of smart phone technology will only be realised if the Government removes quantity restrictions on the taxi industry.

Uber, which operates a smart-phone application, has significant potential to affect the taxi industry and create additional competition. Uber effectively acts as an electronic dispatch service for owners of small charter vehicles who can sell their services through the smart phone application. Uber launched its Uber Black service in Perth in May 2014 (after the publication of the Draft Report).⁶⁰⁸

Currently, small charter vehicles are prevented from competing directly with taxis in Western Australia because they are subject to higher vehicle standards, are not allowed to pick up rank and hail passengers, and must charge a minimum hourly fee of \$60. The Uber Black service meets the vehicle standards, circumvents the rank and hail restriction and the ERA understands that Uber has chosen to disregard the price restriction. Using a smart phone, a potential passenger can order a small charter vehicle to pick them up from their existing location, negating the need for the passenger to hail a taxi on the street or wait at a taxi rank. Uber Black is a premium service⁶⁰⁹ that sets its fares approximately 20 to 30 per cent above the prevailing taxi fares and structures its fares in a similar manner to a taxi, which is primarily on the basis of trip distance and trip time. Accordingly, Uber's pricing does not meet the requirement that fares be charged on an hourly basis at a minimum of \$60 per hour.

Operating outside of the law is a strategic decision by Uber, the purpose of doing so appears to be to highlight the extent to which existing regulations stifle market competition and service innovation and prevent passengers from receiving services they demand.⁶¹⁰

⁶⁰⁸ In some jurisdictions, Uber offers a second 'standard' service called UberX. UberX is not available in Perth, although it is understood that it will be launched in the near future.

⁶⁰⁹ It is for this reason that Uber Black meets the higher vehicle standards required of small charter vehicles.

⁶¹⁰ Uber is operating in more than 100 major cities worldwide. In the majority of these cities, Uber is operating outside of the law.

The ERA understands that Uber also plan to take this approach with the launch of its UberX service in Perth, which will be launched in the near future, and is not expected to comply with the existing regulations in Perth.⁶¹¹

The service provided by Uber is similar to that provided by pre-booked taxis and the ERA considers that there is no objective justification for barriers that prevent Uber or any SCV services from operating in the Western Australian private transport market.

The ERA considers the resources used to monitor compliance with the current SCV regulations could be more productively utilised by amending the regulations, such that they encourage, rather than discourage, competition between SCVs and taxis. Maintaining the status quo will not only constrain competition between SCVs and taxis, but also limit the extent to which passengers can enjoy the benefits that smartphone technology can generate.

The ERA considers that smart phone technology has the potential to generate significant benefits for passengers and drivers, and as such these technologies should be welcomed rather than discouraged. Current and potential benefits include:

- Time savings and certainty: Passengers can use their smart phone to determine the location of nearby available vehicles and can receive an estimate of how long it will take to be picked up. Passengers can also observe the booked vehicle approaching the pick-up point, allowing them to avoid waiting on the street for the vehicle to arrive.
- Fare competition: Passengers may be able to use smart phones to compare fares between providers, driving greater fare competition.
- Reducing fare evasion: Smartphone applications can require all payments be made electronically using credit or debit card details entered during registration. This eliminates the risk of fare evasion.
- Rating information: Smartphone applications allow (and many require) passengers and drivers to rate each other following the conclusion of a trip. Rating information can help passengers select better drivers, encouraging improvements in service. Similarly, drivers can be more selective about the passengers they pick up, discouraging anti-social behaviour.
- Supply responses: Drivers will be able to observe the level of demand for services in real-time and make decisions about whether it will be profitable to work.
- Route certainty: Passengers will be able to use their phone to observe whether the driver has taken the most economical route and submit a complaint if they have not.

The provision of smartphone applications by existing taxi companies has helped to achieve some of the efficiency gains outlined above. However, by reducing competition, quantity restrictions dull the extent of the benefits achieved and the degree of innovation in the provision of taxi smartphone booking apps.

For example, the presence of supply restrictions limits the extent to which existing operators are able to modify their supply decisions in response to demand signals provided by their smartphone apps. Similarly, supply restrictions stifle the extent to which existing taxi companies are required to compete on price. The two major operators in Perth charge the

⁶¹¹ UberX is understood to set its fares 20 per cent to 30 per cent below prevailing taxi fares and is offered in vehicles that are comparable to those used by standard taxi services.

same price, which is also the regulated maximum, primarily, because there is no competitive incentive to lower them.

In conclusion, the ERA considers that the removal of quantity restrictions is necessary to ensure that the taxi industry can respond to new technology.

7.2.5.2 Timing of removal of quantity restrictions

There are two broad potential approaches to the removal of quantity restrictions on the taxi industry: full and immediate removal of quantity restrictions; or a staged removal of quantity restrictions. Both approaches have advantages and disadvantages. However, the ERA considers that full and immediate removal of quantity restrictions should be the preferred approach.

The advantages of full and immediate removal of quantity restrictions relative to staged removal include that it:

- results in the greatest and earliest benefits to taxi passengers in the form of lower prices;
- reduces the chance of the deregulation process being halted or derailed by interest groups that will lobby against the reforms. Ultimately, the reforms may not be fully implemented, leaving residual inefficiencies in the industry; and
- will be the most administratively simple option to implement.

Additionally, reform is difficult to achieve. A large body of international literature exists that describe the benefits of reforming taxi supply, but few jurisdictions have actually achieved full reform. Where it has been achieved, it has been done so with immediate reform, such as in Ireland and New Zealand.

The main advantage of a staged deregulation of the taxi industry is that it will allow a transitional period and minimise disruption by slowing the rate of change experienced by industry, passengers and regulators.⁶¹² The ERA does not consider that restrictions on the number of taxis should be removed slowly over time: a long transition process is not needed to allow the industry to adapt, because this is already occurring in response to new technology.

The most prominent cost associated with immediate reform is the risk that quality and safety standards fall because the Department of Transport will be unable to effectively monitor the influx of new vehicles operating in the market. This has been an issue in other jurisdictions that have undertaken similar reform. The ERA considers that this risk can be addressed by increasing the enforcement of quality and market conduct regulation in the period immediately following reform. In the context of the benefits of immediate reform, the cost of increasing market monitoring is negligible.

On balance, the ERA considers that the full and immediate removal of supply restrictions will deliver significantly more benefit to Western Australia than staged reform.

7.2.5.3 Competition from Small Charter Vehicles

The ERA recommends that regulatory restrictions that prevent SCV operators from competing in the taxi industry be removed. This has the potential to rapidly increase the

⁶¹² Deighton-Smith, *Reforming the Taxi Industry in Australia*, National Competition Council – Staff Discussion Paper, 2000, p.17.

number of vehicles effectively operating as taxis in Western Australia because many operators already meet or exceed most of the quality and market conduct regulations applied to the taxi industry. The ERA notes that there may need to be some adjustments to regulations to ensure the safety of passengers and drivers to facilitate this entry. However, these should be kept to the minimum needed to address safety concerns and should not act as an unnecessary barrier to competition.

In Western Australia, SCVs⁶¹³ are luxury passenger vehicles that can carry fewer than 12 passengers and can only be used for pre-booked work. There are currently around 749 SCVs operating in the Perth metropolitan area.

There are no restrictions on the number of SCVs operating in Western Australia. SCVs are required to purchase a license plate from the Department of Transport. However, the cost of acquiring an SCV plate is less than \$500 (compared to \$300,000 to purchase a taxi license plate on the private market).

SCVs and pre-booked taxis fundamentally offer the same service. That is a private, point-to-point passenger service. However, regulatory differences between taxis and SCVs mean that, irrespective of the fact that they offer the same service, competition between the two services is limited.

The key regulatory differences between the two services are:

- Vehicle Standards: SCVs are subject to higher vehicle standards than taxis. SCVs must fall into one of the following categories;
 - Luxury vehicle (defined as a car costing no less than \$60,316);
 - Modified or stretched vehicle;
 - Vintage or classic vehicle; or
 - Green, petrol-electric hybrid vehicle.
- Fares: SCVs must charge for a minimum of one hour and are subject to a regulated minimum fare of \$60 per hour, or part thereof;
- Safety requirements (cameras, duress alarms, GPS tracking) are higher for taxis;
- SCVs must not display signage that resembles a taxi; and
- SCVs can only be pre-booked (that is, they cannot pick up rank and hail passengers)

Of the key regulatory differences identified above, the higher vehicle standards and the minimum price regulation imposed on the SCV industry act as material barriers to competition between the two services. The ERA considers that the following regulatory changes would be needed to facilitate greater competition between SCVs and taxis:

- equalising the vehicle standards between the two services,⁶¹⁴ although SCVs operators may wish to retain their vehicle standards to differentiate themselves as a luxury product;
- removing the minimum price regulation on SCVs; and

⁶¹³ Known as *Private Taxis* in regional Western Australia.

⁶¹⁴ By setting SCV vehicle standards equal to those applied to taxis.

- allowing SCVs to pick up rank and hail passengers (that is, removing the requirement for SCVs to be pre-booked). It is important to note that Uber is already effectively circumventing this requirement.

Some additional regulations of SCVs may be required if they are to be permitted to pick up rank and hail passengers. For example:

- Some form of external signage (such as that required for taxis) is important for passenger safety because it allows passengers to easily differentiate between registered taxis and private vehicles. Passengers need to be able to identify vehicles that are part of a regulated industry so they do not inadvertently accept a ride from a driver that is not part of that industry.
- SCVs may need to include in-vehicle cameras and GPS, as is a current requirement on taxis.

Smartphone technology allows taxi and SCV booking companies to not only identify passengers,⁶¹⁵ but also use GPS technology to record the exact route of the trip, the length of the trip (time and distance), the final fare charged and pick-up and drop-off times. The collection of this information provides, in real-time if necessary, a comprehensive cache of information about the passenger and the trip if needed.

7.2.5.4 Compensation

Removing restrictions on the number of taxis that are permitted to operate will erode the value of taxi licence plates and the ability of plate owners to generate an income from these plates in the form of lease fees.⁶¹⁶

Organisations that commented on the issue of compensation in response to the Draft Report called for the Government to provide full compensation to all taxi plate owners for any deregulation of the market. The TCWA submitted that any other proposal is unprincipled and completely against established practices in Australia and would have implications for sovereign risk that extend well beyond the taxi industry.

Contrary to the submission by the TCWA, the Victorian Taxi Inquiry noted that there are no established practices in Australia for compensation following policy reforms and that Governments have acted on a case-by-case basis, reflecting the particular circumstances of the industry concerned.⁶¹⁷

The ERA does not consider that there is a case for compensation for the following reasons.

The removal of supply restrictions does not alter the rights that ownership of a taxi plate provides a taxi plate owner. Plate owners are still permitted to operate a taxi, or if they do

⁶¹⁵ By requiring passengers to pre-register their details, including a credit card, operators are capable of confirming that the passenger details match their credit card details, but also confirm the credit card is legitimate by charging and immediately refunding a small transaction upon passenger registration.

⁶¹⁶ Taxi plates 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. The compound annual growth rate of taxi plate values over the last 30 years has been in excess of 8 per cent. When annual lease fees are incorporated the returns increase further. The ERA has been unable to obtain long term data relating to taxi plate lease fees, but observes that the current regulated maximum lease fee for a conventional taxi plate amounts to \$18,460 per year. For a taxi plate purchased at current market values of approximately \$300,000, this represents an annual return of 6.2 per cent on top of capital gains.

⁶¹⁷ Victoria Taxi Industry Inquiry, *Final Report: Customers First – Service, Safety, Choice*, 2012, p.238.

not wish to operate a taxi themselves, lease the taxi plate to a third party. Of course, in a market with no supply restrictions, plate owners are unlikely to generate much, if any, income by leasing their taxi plate.

The ERA considers that investors should be aware of the risks associated with any investment they make, especially investments worth hundreds of thousands of dollars. Similarly, the ERA considers that the National Competition Policy review of 1999⁶¹⁸ and reforms within the industry itself have given sufficient notice that there was no iron-clad guarantee that supply restrictions would never be removed. 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.

Compensation should not be paid to plate owners in the interests of symmetry. Plate holders have been able to reap windfall gains from past government policy choices, without these being appropriated, so it is reasonable to expect plate owners to bear windfall losses due to other policy choices, without compensation.⁶¹⁹ The provision of compensation would effectively render taxi plate ownership a risk-free investment (which generated above normal profits).

Finally, new technologies (such as smart phone applications) are likely to erode the value of plates anyway, irrespective of whether or not the Government removes quantity restrictions and so there is no case for compensation to be provided by the Government.

For these reasons, the ERA concludes that it is not appropriate to compensate taxi plate owners for any fall in taxi plate values that occur following the removal of supply restrictions. The ERA does observe that it is likely that some more recent purchasers of taxi plates will experience financial hardship as a result of reform in the taxi market. In circumstances where considerable financial hardship can be demonstrated, as a result of the recommendations put forward, the ERA considers that financial assistance could be offered to these parties. Funding for which could be derived from the Taxi Industry Development Account.⁶²⁰

The ERA notes that payment of compensation will 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. So deregulation of the taxi industry should take place even if the Government chose to provide full compensation to taxi plate owners.

7.2.6 Recommendations

30. Establish a process to effect the removal of all quantity restrictions on the taxi industry in Western Australia in a single stage.
31. Reduce taxi lease fees such that they reflect the cost of issuing the licence.
32. Remove the restrictions on small charter vehicles that prevent them from competing directly with the taxi industry including the regulations that:

⁶¹⁸ BSD Consultants, *Review of the Western Australian Taxi Industry: Final Report*, 1999.

⁶¹⁹ OECD, *Taxi Services: Competition and Regulation*, Policy Roundtables, 2007, p.38.

⁶²⁰ The 2013 Department of Transport (WA) annual report states that the account had a balance of \$25.4 million at the end of the 2012/13 financial year.

- a. establish different vehicles standards for taxis and small charter vehicles;
 - b. require small charter vehicles to charge a minimum fare price; and
 - c. require small charter vehicle services to be pre-booked.
33. Equalise safety requirements for taxis and charter vehicle services, including requiring small charter vehicles to be fitted with a security camera and a global positioning device.
 34. Do not compensate owners of taxi license plates for the loss of any fall in taxi plate values.
 35. Require all taxis and small charter vehicles to display their fare schedule such that it may be easily observed by passengers from outside the vehicle and within the vehicle.
 36. Require all taxi and small charter vehicle companies to lodge their maximum fare schedules with the Department of Transport 24 hours prior to implementation.
 37. Equalise the driver training requirements between taxis and small charter vehicles.
 38. Remove the mandatory dispatch network affiliation requirements for taxi vehicles.
 39. Make the Department of Transport guidelines on fatigue management compulsory.
 40. Maintain maximum price regulation in the short-term and keep a watching brief on price behaviour to determine whether maximum price regulation can be removed.

7.3 Potato Marketing

7.3.1 Introduction

In Western Australia it is illegal to sell fresh potatoes grown within 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 to control price levels. Virtually every other agricultural industry has since been deregulated, with the Western Australian ware potato market being one of only two regulated agricultural industries remaining in Australia.⁶²¹

The Potato Marketing Corporation undertakes a number of functions under *Marketing of Potatoes Act 1946 (the Act)* that restrict competition in the market for ware potatoes. These functions (among others) include determining the quantity and the colour⁶²² of potatoes produced, issuing licences (Domestic Market Entitlements) to grow potatoes, setting the price that growers will receive, licensing 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, to stop and search vehicles suspected of carrying more than 50 kilograms of potatoes, to impound crops for evidence, and to prosecute farmers.⁶²³ The Potato Marketing Corporation⁶²⁴ and Australian Venture Consultants⁶²⁵ note that these are arcane powers that have not been used for many years. Nevertheless, the Potato Marketing Corporation can and has taken legal action against potato growers that have failed to comply with legislation.⁶²⁶

The ERA considers that restrictions on potato marketing have raised the incomes of potato growers in Western Australia. However, this has been at the expense of Western Australian consumers, who have paid higher prices than they would have otherwise, have had a limited choice of potato varieties, and have endured poor product quality.⁶²⁷ The restrictions have also limited productivity growth in the industry. The ERA estimates that approximately \$43 million per annum would be passed through to consumers in the form of lower prices, should the industry be deregulated.

The Potato Marketing Corporation argues that its activities simply counter-act the market power of Coles and Woolworths in the purchase of wholesale potatoes in Western Australia. In making this argument, the Potato Marketing Corporation states that it is merely

⁶²¹ The New South Wales Rice Board being the other (Australian Bureau of Agricultural and Resource Sciences, *Australian Agricultural Productivity Growth: Past Reforms and Future Opportunities*, 2014, pp.14-15).

⁶²² Potato varieties are grouped into colours such as whites, blues, reds and yellows.

⁶²³ Marketing of Potatoes Act 1946, http://www.austlii.edu.au/au/legis/wa/consol_act/mopa1946232/

⁶²⁴ Potato Marketing Corporation, Submission to the ERA's *Inquiry into Microeconomic Reform in Western Australia: Draft Report*, 2014, p.2.

⁶²⁵ Australian Venture Consultants (on behalf of the Potato Growers' Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, pp.4-5.

⁶²⁶ B. Thompson, 'Tony Galati potato charges dropped', *The West Australian*, July 18 2013, <http://au.news.yahoo.com/thewest/a/18042008/tony-galati-potato-charges-dropped/> (accessed 23 June 2014).

⁶²⁷ McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.iv.

redistributing some of the monopoly rents⁶²⁸ that would be earned by the supermarkets to potato growers. The ERA disagrees. The ERA found that there is substantial, but not perfect, competition in the wholesale market for ware potatoes and that, if farm-gate prices for potatoes fell, most of the price reduction would be passed through to consumers. However, the extent to which any falls in the price of Class 1 potatoes (of which Coles and Woolworths purchase a significant share) would be passed on to consumers is likely to be less than the average for the total ware potato market.

Western Australian consumers have a limited choice of potato varieties relative to their counterparts in eastern Australia. The main reason for this is that the Potato Marketing Corporation has been less effective than a free market in meeting the demands of consumers. For example, the Potato Marketing Corporation is only now planning to shift a large proportion of the State's Domestic Market Entitlements from white to yellow varieties.⁶²⁹ However, yellow varieties have been a large share of consumption for some time in eastern Australia. The ERA considers that a free market will always respond more quickly to consumer demand than a regulated market.

The ERA has also 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 seed exporters are prevented from selling any seed tubers⁶³⁰ that cannot be exported on the domestic ware market unless the exporters have a Domestic Market Entitlement. This constraint reduces profitability and investment in the industry.

Overall, the ERA estimates that the restrictions on the Western Australian ware potato market have a net cost of \$3.8 million per annum. This equates to a present value of \$33.23 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 on Western Australia.

Proponents of the regulation of the ware potato industry have put forward a number of arguments in favour of retaining the restrictions and have made a number of criticisms of the ERA's analysis. The ERA has addressed each of these comments in this Final Report and does not consider that there are any substantive arguments in favour of retaining the regulations.

The ERA has not changed its conclusion that the existing regulations on the potato market are holding back the industry and are not serving the Western Australian public well. As such, the ERA recommends that the *Marketing of Potatoes Act 1946* and *Marketing of Potatoes Regulations 1987* be repealed.

⁶²⁸ 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.

⁶²⁹ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.22.

⁶³⁰ The tuber is the part of the potato plant that is eaten.

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 submissions received on issues related to regulation of the ware potato industry and the ERA's responses to these submissions; and
- an assessment of the costs and benefits of the regulation of the potato industry.

Detailed appendices are also included on the estimation of the impact of farm-gate prices on retail prices, competition in the Western Australian retail potato market, 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 tonnes⁶³¹ of ware potatoes in 2012/13 across four production pools spread between Moora/Dandaragan and Manjimup/Pemberton.⁶³² The Nadine variety is the most common variety of ware potato produced, accounting for approximately 60 per cent of Western Australia's ware potato production⁶³³.

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.⁶³⁴ 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. 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* and the *Marketing of Potatoes Regulations 1987*.

The Potato Marketing Corporation is a statutory marketing organisation of the Western Australian Government. It employs 13 full time equivalent staff to market approximately 1,000 tonnes of potatoes per week. It is governed by a board, which is required under the *Marketing of Potatoes Regulations 1987* to be composed of:

- two grower representatives;
- three members who, in the opinion of the Minister for Agriculture, have 'relevant commercial expertise'; and

⁶³¹ Potato Marketing Corporation, *2012/13 Annual Report*, 2013, p21. The Potato Marketing Corporation's production target of 54,879 tonnes was not achieved.

⁶³² ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.5.

⁶³³ ERA calculations from Potato Marketing Corporation, *2012/13 Annual Report*, 2013.

⁶³⁴ Potato Marketing Corporation, *2012/13 Annual Report*, 2013, p.5.

- a Chair 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 of sales.⁶³⁵

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 of the 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. Domestic Market Entitlements establish the number of tonnes of ware potatoes that the holder can produce during a certain time period in each year.

Under Section 22 of the Act a person other than to the Potato Marketing Corporation (or an agent) acting on its behalf cannot sell ware potatoes in Western Australia. The Act states that it is illegal to sell potatoes or to be in possession of more than 50 kilograms of potatoes without proof that they are part of the official system.

The Potato Marketing Corporation licenses production through four regional pools operating for 13-week periods at different times of the year. These have recently been rationalised from the previous seven pools.⁶³⁶ Growers are required to produce varieties within each tonne of Domestic Market Entitlements consistent with a mix specified by the Potato Marketing Corporation.

In 2012/13, the aggregate mix of potatoes across all pools was 65 per cent white potatoes (of which Nadine is the most common variety), 16 per cent blue or purple potatoes (mainly Royal Blue), 11 per cent red potatoes (of Ruby Lou is the most common variety) and 8 per cent yellow potatoes (mainly Lady Chrystal).⁶³⁷ The Potato Marketing Corporation intends to increase the proportion of yellow potatoes to 40 per cent over the next five years⁶³⁸, mainly at the expense of white varieties.

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”. The Potato Marketing Corporation sets the recommended price to pay growers by engaging

⁶³⁵ Potato Marketing Corporation, *2012/13 Annual Report*, 2013, p.21.

⁶³⁶ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.31.

⁶³⁷ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.22.

⁶³⁸ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.25.

a farm consultant to estimate⁶³⁹ the costs of production of a ‘representative sample’ of its growers.

The recommended pool prices were not achieved in 2012/13. That is potatoes sold, on average, for less than the Potato Marketing Corporation’s recommended price.⁶⁴⁰ The Act does not restrict growers from other States selling ware potatoes into the Western Australian market. However, the ERA understands Western Australian prices are rarely set by imports, as the transport cost of importing potatoes is high relative to farm-gate prices.⁶⁴¹

The Potato Marketing Corporation has the dual mandate of determining supply and ensuring returns to growers. Consequently, it must be mindful of the effect of changes in supply on prices in setting the total volume of Domestic Market Entitlements. Therefore the Potato Marketing Corporation must issue licences consistent with its recommended prices for its representative sample of growers. The presence of a substantial transfer price and lease market shows that quantity has been restricted below, and farm-gate prices raised above, those that would occur in an unregulated market.

Prior to the introduction of Domestic Market Entitlements in 2006, growers were licenced to produce a certain area of potatoes rather than a specific tonnage. This meant that production could vary dramatically depending on the yields achieved by farmers. In the last few years of area licencing, the Potato Marketing Corporation was generally in surplus in terms of deliveries exceeding domestic sales.⁶⁴² The Potato Marketing Corporation exported most of the surplus.

However, the implementation of the Ministerial Implementation Advisory Group (IAG) reforms of 2004 “tightened up supply and took the Corporation out of large surpluses, exports and the fairly small amount sold to processors”.⁶⁴³ The IAG reforms resulted in marketing functions being removed from the Potato Marketing Corporation and given to Western Potatoes.⁶⁴⁴

Figure 39 below shows the significant decline in production and sales of potatoes, with sales contracting by 13 per cent between 2004-05 and 2007/08.⁶⁴⁵ This resulted in a large price rise to growers, with Class 1 Nadinges increasing in price from \$650 per tonne prior to the introduction of Domestic Market Entitlements to \$1,180 per tonne by the end of 2007/08. The chart also shows that this contraction in production caused sales relative to population to drop below previous levels (from which it has yet to recover).

⁶³⁹ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia*, 2014, p.14.

⁶⁴⁰ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia*, 2014, p.17.

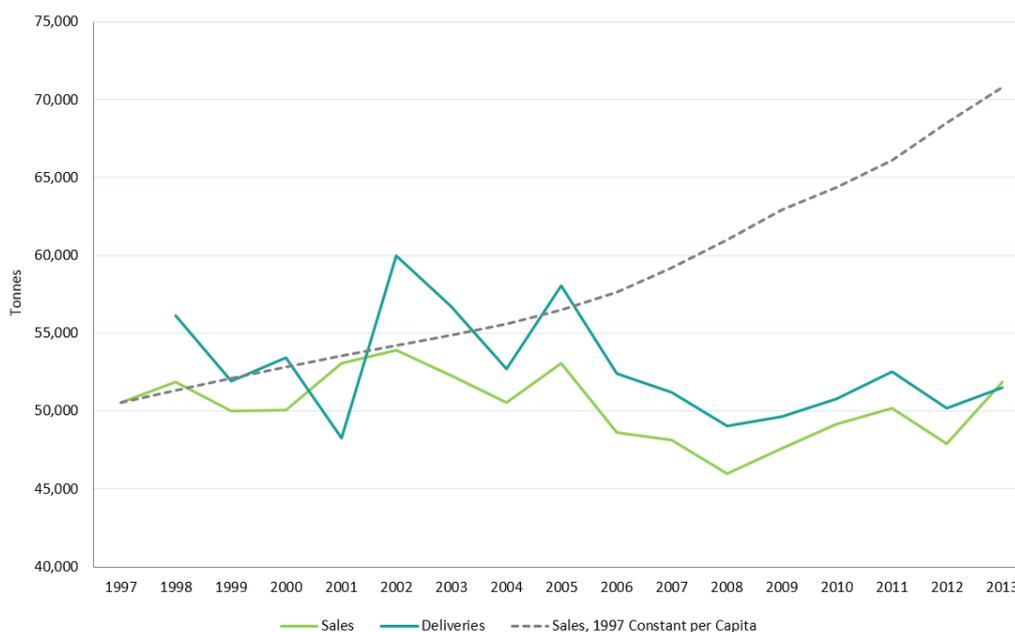
⁶⁴¹ Discussions with industry indicate a cost of shipping ware potatoes from South Australia to Western Australia of \$250 per tonne, McKinna et al estimated \$350 per tonne (McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.23).

⁶⁴² ERA calculations from various Potato Marketing Corporation Annual Reports.

⁶⁴³ McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.16.

⁶⁴⁴ Western Potatoes is a private company that was set up in response to the IAG reforms to manage commercial activities, including collecting royalties from licenced varieties and marketing, while the Potato Marketing Corporation focussed on regulatory functions. Marketing was moved back to the Potato Marketing Corporation as part of the McKinna reforms of 2011.

⁶⁴⁵ The largest drop in production was actually before the introduction of Domestic Market Entitlements in 2005/06, which was unusual year with heavy rain, frost and hail (Potato Marketing Corporation Annual Report 2005/06, p.11). Production would have rebounded the following year under area licencing, but failed to do so under the introduction of Domestic Market Entitlements.

Figure 39 Deliveries to, and sales by, the Potato Marketing Corporation, 1997 to 2013

Source: ERA Calculations from various Potato Marketing Corporation Annual Reports.⁶⁴⁶ Population data from ABS Cat. No. 3101.

In recent years sales have increased, but sales per capita continued to decline until 2011/12, before an increase in 2012/13. Nevertheless, sales per capita would be over a third (approximately 18,000 tonnes) higher in 2012/13 had the per capita level from the late 1990s been maintained.

7.3.4 Submissions to the Draft Report

In this section, the ERA summarises its findings on potato marketing in the Draft Report, the responses of organisations that made submissions on those findings, and the ERA's subsequent analysis.

7.3.4.1 Is there a restriction on competition?

Summary of Draft Report

In the Draft Report the ERA found that a restriction on competition existed in the potato marketing industry because of:

- the need to obtain Domestic Market Entitlements to produce ware potatoes; and
- the Potato Marketing Corporation's restrictions the amount of Domestic Market Entitlements to the point that these entitlements have substantial value.

The ERA concluded that if there was no restriction on competition growers would be able to purchase or lease Domestic Market Entitlements for no cost, or a low administrative fee.

⁶⁴⁶ Sales from 2003/04 to 2005/06 are derived from percentage changes reported in the 2005/06 Annual Report. Sales in 2001/02 were derived from deliveries and published local ware market sales versus deliveries in the 2001/02 Annual Report. Deliveries for 1997/98 to 1999/2000 and from 2006/07 to 2007/08 were derived from sales and the sales to delivery ratio in each year's respective Annual Report.

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 administration fee.

However, the transfer or lease of a licence is not free. ACIL Allen⁶⁴⁷ estimates that a 'permanent transfer' of Domestic Market Entitlement is currently worth between \$150 and \$300 per tonne.⁶⁴⁸ Industry participants have advised the ERA that Domestic Market Entitlements can be sold (on a permanent basis) at a price of \$350 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 of profits that can be generated.

The ERA concluded that growers wishing to expand their operations would not sensibly pay such amounts for a transfer or lease of a Domestic Market Entitlement if they expected the Potato Marketing Corporation to approve any new licence application. Therefore, the ERA has concluded that there is a restriction on competition in the Western Australian ware potato market. Given this conclusion, 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.

Submissions to the Draft Report

Australian Venture Consultants (in a report for the Potato Growers Association) and ACIL Allen (in a report for the Potato Marketing Corporation) made submissions contesting the ERA's conclusion that the activities of the Potato Marketing Corporation restrict competition.

Australian Venture Consultants claims that the Potato Marketing Corporation is not a monopoly because potatoes can be freely imported from interstate.⁶⁴⁹ Additionally, it claims that growers will only pay to lease or purchase a Domestic Market Entitlement to expand their operation outside of the Potato Marketing Corporation's standard 'free' approval cycle for Domestic Market Entitlements.⁶⁵⁰ For example:

"According to the ERA's theory, a Pemberton grower with a spare 100 hectares of land seeking to expand potato production would 'not sensibly pay' for DME from a retiring potato grower in the same region because they could acquire 'free' DME from the PMC (albeit in the Northern region)."

Australian Venture Consultants notes that the Potato Marketing Corporation intends to increase the volume of Domestic Market Entitlements by 10,000 tonnes over the next three years.⁶⁵¹ It notes that this planned increase is more than the increase in production from lifting quantity restrictions (700 tonnes) that the ERA assumed in its Draft Report, so the Potato Marketing Corporation is not restricting supply. As such, the market cannot be undersupplied.

⁶⁴⁷ The Potato Marketing Corporation does not administer this market: it only approves transfers of Domestic Market Entitlements between growers.

⁶⁴⁸ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.25.

⁶⁴⁹ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.5.

⁶⁵⁰ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.11.

⁶⁵¹ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.16.

ACIL Allen submitted that a dispute between the Potato Marketing Corporation and a single grower regarding restriction on production “was taken under a previous era of management of the Potato Marketing Corporation”.⁶⁵² Australian Venture Consultants claims that the links made by the ERA between an extreme example of one grower exceeding his quota by a large amount and “obscure powers in the Act” is irrational.⁶⁵³

Australian Venture Consultants⁶⁵⁴ notes that the presence of interstate imports restricts the monopoly element of the Potato Marketing Corporation, while ACIL Allen⁶⁵⁵ claims that there is no evidence of import-parity pricing, which would be necessary for a profit-maximising monopolist. ACIL Allen appears to be saying that, if the Potato Marketing Corporation were interested in maximising profits, it would set its price just below the cost of importing potatoes from interstate (including transport costs).

ERA response

The ERA considers that there is a restriction on competition in the potato industry in Western Australia. The prosecution of even one grower for exceeding the production volume of Domestic Market Entitlements is evidence that individuals cannot compete and increase market share without the consent of the Potato Marketing Corporation. ACIL Allen and Australian Venture Consultants appear to be arguing that the Potato Marketing Corporation will only enforce large breaches of the system that it regulates.

The ERA notes that the market for Domestic Market Entitlements can only exist when there is a restriction on competition. The ERA has seen confidential documentation that substantial volumes of Domestic Market Entitlements have been traded or leased for considerable value. This is inconsistent with claims made by Australian Venture Consultants that trades mainly reflect regional requirements.

The ERA disputes the validity of the claim by Australian Venture Consultants that attempts by the Potato Marketing Corporation to expand the market⁶⁵⁶ indicate the Potato Marketing Corporation is not a monopolist. The ERA notes that a monopolist has just as much incentive to expand its market as does any firm in a competitive industry.⁶⁵⁷

The ERA disagrees that the Potato Marketing Corporation would set its price just below the cost of importing potatoes from interstate if it were a profit maximising monopolist. The profit maximising price will depend on demand in the market at any one time, which may or may not lead to import-parity pricing.

However, the ERA does agree that the Potato Marketing Corporation is not profit maximising in the way a typical monopolist would be. In this way, the objectives of the Potato Marketing Corporation can be likened to an association (like the Australian Medical

⁶⁵² ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.2.

⁶⁵³ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.8.

⁶⁵⁴ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.5.

⁶⁵⁵ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.6. Import-parity pricing by the Potato Marketing Corporation refers to the situation where it priced ware potatoes at a level just below the cost of imports of ware potatoes (including transport). There is no evidence that the Potato Marketing Corporation behaves in this manner.

⁶⁵⁶ This increase is underpinned by a marketing campaign (ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.7.)

⁶⁵⁷ However, it will restrict production below free market level for any given level of demand.

Association), which may have objectives in addition to profit maximisation, such as increasing the number of its members.

Finally, the ERA understands that any new Domestic Market Entitlements issued will not be tradeable. This will be an even greater restriction on competition because, with tradeable quota, at the most efficient growers may at least expand by trading with less efficient growers, without the involvement of the Potato Marketing Corporation. Instead, with non-tradeable Entitlements, efficient growers will now need to rely on the goodwill of the Potato Marketing Corporation to expand. The ERA considers that the Potato Marketing Corporation cannot allocate licences as efficiently as growers trading amongst themselves. However, the market would be more efficient without Domestic Market Entitlements at all.

7.3.4.2 Value of Domestic Market Entitlements

Summary of Draft Report

In the Draft Report, the ERA estimated 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 varies by pool, reflecting the expectations of growers regarding the level of profits that can be generated.

These estimates were based upon limited consultation that the ERA conducted with industry participants.

For the purposes of its analysis, the ERA assumed an annual lease value of \$50 per tonne.

Submissions

ACIL Allen⁶⁵⁸ submitted that the \$150 to \$300 per tonne cost for a permanent transfer of Domestic Market Entitlement that the ERA quoted in the Draft Report was ACIL Allen's own estimate and not that of the Potato Marketing Corporation. The Potato Marketing Corporation only approves the transfer without being privy to any associated monetary transfer. ACIL Allen notes that it is difficult to determine a value for Domestic Market Entitlements in the absence of a centralised market.

Australian Venture Consultants submits that it has not seen any evidence of trades of \$600 per tonne as claimed by the ERA in its Draft Report.⁶⁵⁹

ERA Response

The ERA acknowledges that the \$150 to \$300 figure for a permanent transfer of Domestic Market Entitlement that it quoted in its Draft Report⁶⁶⁰ was estimated by ACIL Allen rather than by the Potato Marketing Corporation. The ERA agrees that it is difficult to accurately determine a value for Domestic Marketing Entitlements.

The ERA has viewed documentary evidence of sales and transfers of Domestic Market Entitlements. These documents indicated that permanent transfers were occurring in the range of \$350 to \$400 (nominal dollars of the day), with any sales higher than this generally

⁶⁵⁸ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.2.

⁶⁵⁹ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.10.

⁶⁶⁰ Economic Regulation Authority, *Inquiry into Microeconomic Reform in Western Australia: Draft Report*, 2014, p.270.

being for very specific needs (for example, a licence for a particular colour to cover a shortage at a particular time of year).

The ERA has also seen confidential documentation of lease values up to \$80 per tonne. This would represent a 20 per cent return on a \$400 per tonne investment in a Domestic Market Entitlement, which is extremely high relative to returns available on other investments.

The ERA has been unable to determine why such a high return is implied from the data available. There is a possibility that the ERA's data sources are not sufficiently comprehensive and there may be mismatches in data (for example, between varieties or pools). However, a likely explanation is that owners of Domestic Market Entitlements are pricing in a high yield due to the risk of holding an asset created by government that could just as easily be taken away or devalued by government action.

In conclusion, the ERA has not been provided with any compelling evidence to change the estimate of \$50 per tonne to lease a Domestic Market Entitlement across all times of year and colours. The ERA considers the \$50 per tonne estimate to be reasonably conservative.

7.3.4.3 Evidence of a failure in the wholesale market for ware potatoes in Western Australian

Summary of the Draft report

In its submission to the ERA's Discussion Paper, Australian Venture Consultants claimed that the structure of the Western Australian retail fresh food market is not competitive and results in a market failure.⁶⁶¹ It made the following specific points:

- Data from the Australian Bureau of Agricultural and Resource Economics and Sciences (**ABARES**)⁶⁶² 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 to South Australia, which had the lowest costs at \$250 per tonne⁶⁶³.
- 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.
- 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 2014⁶⁶⁴.

⁶⁶¹ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia*, 2014, pp.31-33.

⁶⁶² Australian Bureau of Agricultural and Resource Economics and Sciences, *Australian vegetable growing farms: An economic survey 2010–11 and 2011–12*, 2014, p.35.

⁶⁶³ AUSVEG, *Pricing, Cost Structures, and Profitability in the Australian Vegetable Industry*, 2010, p.3. This survey used Australian Bureau of Agricultural and Resource Economics and Sciences data.

⁶⁶⁴ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.20.

Essentially, ACIL Allen and Australian Venture Consultants argue that Coles and Woolworths have market power in the purchase of wholesale potatoes in Western Australia. They argue that 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 is not greatly affected by the presence of the Potato Marketing Corporation.⁶⁶⁵ The Corporation's activities merely redistribute some of the monopoly rents⁶⁶⁶ earned by the supermarkets to potato growers.
- Excess profits 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 potato growers increases income in Western Australia and is a net benefit arising from the Act.

In response to these claims, the ERA found in the Draft Report that there is competition at the retail level in Western Australia. The ERA's reasoning was as follows:

- The market share of the two largest supermarkets was only 42 per cent of the Potato Marketing Corporation's sales. That means there is substantial competition from other buyers.
- The cost and price data submitted were inconclusive. In particular, the ERA considered that it is not possible to construct a valid spatial price index for different Australian jurisdictions given the differences in varieties produced across States.
- ACIL Allen's online price comparison was not typical of prices because there is currently a drought in South Australia, which is the largest producer in eastern Australia.
- Changes in farm-gate prices seemed to be passed on to consumers, which is indicative of competition.

Submissions to the Draft Report

In its submission to the ERA's Draft Report, ACIL Allen⁶⁶⁷ notes that, while the data show that the two largest supermarket chains account for 42 per cent of the Potato Marketing Corporation's total sales, they account for 84 per cent of Class 1 sales. Australian Venture Consultants⁶⁶⁸ estimated a similar figure of an approximate 75 per cent share of Class 1

⁶⁶⁵ This situation is well-established in economics and called a bilateral monopoly.

⁶⁶⁶ 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.

⁶⁶⁷ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.2.

⁶⁶⁸ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.7.

potatoes. As such, they argue that the supermarkets have substantial market power in that segment.⁶⁶⁹

In response to the ERA's analysis of the pass-through of farm-gate prices to the retail level, ACIL Allen notes that the extent of pass-through in a competitive versus uncompetitive market depends on the type of demand curve and that the ERA's assumption of a linear demand curve is a special case. It submits that the pass-through could be greater than 100 per cent under certain demand assumptions. It also submits that lower values should be used for the demand and supply elasticities in calculating the deadweight loss⁶⁷⁰ of the regulated system.

ACIL Allen is suggesting that deregulation would only result in a fraction of the income earned by growers being transferred to consumers, with the remainder accruing to the major supermarkets. This would result in fewer benefits to Western Australia as the supermarkets are owned largely outside of the State. ACIL Allen suggests a pass-through rate of 50 per cent.

Australian Venture Consultants disputes the ERA's analysis of the pass-through of farm-gate prices⁶⁷¹ through to retail prices on the following grounds:

- It is outdated as it refers to a period eight years ago during the height of the economic boom, when all prices were rising rapidly. Additionally, the industry dynamics have changed since that time.
- The ERA used price data from the Average Price of Selected Retail Items (Cat. No. 6403.0) series produced by the Australian Bureau of Statistics (**ABS**) for time series analysis. Australian Venture Consultants argued that the ABS data is not credible.
- The increase in retail prices was only half of the increase in farm-gate prices, when framed in percentage terms.

Both Australian Venture Consultants⁶⁷² and ACIL Allen⁶⁷³ also claim that the price data collected by the Potato Marketing Corporation's consultant, Fresh Logic, are representative of each market and the data show that Perth potato prices are no higher than in other States. They criticise the ERA for using the ABS data for the time series analysis, stating that the ABS has noted that these data should not be used for such purposes. ACIL Allen also criticised the ERA's rejection of its online price data and suggested that if the ERA is not satisfied with the sample, it should define a new sample period.⁶⁷⁴

⁶⁶⁹ Class 1 potatoes account for approximately 40 per cent of the Potato Marketing Corporation's sales (Potato Marketing Corporation Annual Report 2012/13, p.26), but are much higher priced than other grades.

⁶⁷⁰ Economic deadweight loss refers to the value of production above variable costs and consumption below willingness to pay from the restriction in quantity and higher prices under a monopolist rather than a competitive market.

⁶⁷¹ Technically the Average Potato Marketing Corporation price sold to merchants for Nadine (Class 1) potatoes (McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.21). Exact data supplied by the Potato Marketing Corporation.

⁶⁷² Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.17.

⁶⁷³ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.3.

⁶⁷⁴ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.3.

The Potato Growers Association also disputes the competitiveness of the wholesale market, citing research from the United Kingdom showing that the major supermarkets in that jurisdiction were able to extract substantial cost reductions for manufacturers.⁶⁷⁵ It also notes the recent action by the ACCC against Coles⁶⁷⁶ for unconscionable conduct as proof that the supermarkets have market power.

ERA response

The level of competition for the wholesale purchase of ware potatoes in Western Australia is a critical component of the analysis of potato marketing in Western Australia. If there is competition, then all or most of any reduction in farm-gate prices from the removal of Domestic Market Entitlement restrictions will flow through to consumers. However, if there is no competition, then most of the price reduction will be captured by the supermarkets and may flow out of Western Australia.⁶⁷⁷

The ERA agrees that the Average Price of Selected Retail Items data series produced by the ABS is not suitable for time series analysis and has instead used price data submitted by Australian Venture Consultants from July 2005 to February 2012 in its response to the ERA's discussion paper. These data have some weaknesses⁶⁷⁸ and are not as current as the new price data compiled by Fresh Logic on behalf of the Potato Marketing Corporation. However, the data is for a longer time period and better matches the farm-gate price data provided by the Potato Marketing Corporation.

The ERA makes the following findings in response to the arguments presented above:

- The ABARES data suggesting a high cost of production in Western Australia are inconclusive because the dataset aggregates ware and processing potato growers. Western Australia had a much greater share of ware potato production than the national average in 2010/11.⁶⁷⁹ 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 concluded that it is not possible to construct a valid spatial price index for aggregate potato consumption between cities, after viewing the components of the Potato Marketing Corporation's retail price indices⁶⁸⁰ and examining the varieties sold in different parts of Australia. The differences in varieties and processing are too significant to allow for comparison of the data. The ERA notes that the ABS has declined to construct spatial cost of living indices for the same reason. In this regard:

⁶⁷⁵ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.7.

⁶⁷⁶ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.22.

⁶⁷⁷ This is similar to the classification of benefits used by ACIL Allen as "National" and "WA only" (ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.9).

⁶⁷⁸ The data series do not appear to use fixed weights or undertake correct chaining process.

⁶⁷⁹ Australian Bureau of Statistics, *Agricultural Commodities Australia: 2010/11*, ABS Cat. No. 7121.0, 2012, p.25.

⁶⁸⁰ As submitted by Australian Venture Consultants (Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia*, 2014, p10.)

- The Potato Marketing Corporation⁶⁸¹, ACIL Allen⁶⁸² and Australian Venture Consultants⁶⁸³ all claim that the indices are valid and cite the credentials of the data suppliers. However, none present evidence as to why the ERA is incorrect in its initial assessment on this matter in the Draft Report.
- Western Australia produces a large share of Nadine potatoes relative to other jurisdictions. Average retail prices in Perth may be relatively low because Nadine is a very cheap potato that consumers will only purchase at a discount to other varieties.

Additionally, the Potato Marketing Corporation plans to move towards a greater share of cream/yellow varieties⁶⁸⁴, which will almost certainly increase average retail prices in Perth,⁶⁸⁵ even though the Potato Marketing Corporation claims that consumers will be better off with this shift.

While the ERA considers the use of the indices as spatial comparators to be invalid, it accepts that it is valid to use the indices for a comparison of the average potato price in each city over time.

The ERA considers that where ACIL Allen presents data, such as its one-month online pricing data, then ACIL Allen is responsible for ensuring that the data are of sufficient quality and are representative of a typical situation.

The ERA has examined the competitiveness of the wholesale market for ware potatoes in Western Australia. The detailed analysis is in Appendix 11 and resulted in the following findings:

- There appears to be substantial competition in the wholesale market for ware potatoes based on shares of purchases by major customers. However, the high share of purchases of Class 1 potatoes by Coles and Woolworths may indicate the use of market power in this segment.
- The ACCC has found that the Australian supermarket sector is “workably competitive” with little evidence that price changes at the wholesale level are not being translated to retail prices. The ERA notes that virtually every other farm product is supplied to the major supermarkets without a statutory marketing organisation and the ACCC has found that these arrangements are competitive.

The ERA considers that the recent action by the ACCC against Coles is indicative of competition laws being applied where necessary (as discussed in Appendix 11).

- The ERA examines the pass-through of farm-gate prices to retail prices by using data on the price paid by wash packers for Class 1 Nadine potatoes, and the average potato price index for Perth from the Potato Marketing Corporation for which

⁶⁸¹ Potato Marketing Corporation, *Re: ERA Draft Report Findings on the Regulated System*, 2014, p.2.

⁶⁸² ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, pp.4-5

⁶⁸³ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.18.

⁶⁸⁴ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.22.

⁶⁸⁵ For example, prices for Pool 2 in 2012/13 indicate that the prices paid to growers for yellow varieties are higher than those for whites such as Nadine (Potato Marketing Corporation, *Annual Report 2012/13*, 2014, p.96).

the ERA has obtained data from July 2005 to January 2012 (a period with 79 observations).

- The ERA has found that the data indicate a pass-through to retail prices of 115 per cent⁶⁸⁶ of price changes at the wholesale level. Analysis of this pass-through against plausible assumptions about the demand for potatoes in Western Australia shows that the pass-through is indicative of substantial, but not complete competition in the wholesale market for Western Australian ware potatoes. That is, the major buyers may have some limited pricing power.
- Nevertheless, the ERA concludes that the vast majority of any price reduction of farm-gate prices will be passed on to consumers if supply restrictions are removed.
- The farm-gate price of milk in Western Australia fell after the removal of quotas in the dairy industry in 2000, and after the removal of the industry-adjustment assistance and the Dairy Industry Adjustment Authority in 2008. However, there was a time lag after the 2008 adjustments when many growers left the industry and it took time to rebuild stock numbers.

Overall, the ERA concludes that there is substantial, but not perfect, competition in the wholesale purchase of ware potatoes in Western Australia, and that the vast majority of any fall in farm-gate prices across the entire market would be passed through to consumers. This is detailed in Appendix 11.

Any pricing power is likely to be in the market for Class 1 potatoes, as indicated by the large share of purchases of the two major supermarkets in this category. The pass-through of changes in farm-gate prices in this sector is likely to be less than the average for the total market. The ERA notes that this does not mean that the major supermarkets are acting in a malicious manner, only that they take their impact on prices into account when they make decisions.

7.3.4.4 Market failure: research and development, and industry productivity

Summary of the Draft Report

The ERA concluded in the Draft Report that research and development is conducted for many primary products, in Australia and internationally, without requiring co-ordination by a central marketing body. Industry co-ordinated levies are commonly used in many industries.

Consequently, the ERA considered that the Potato Marketing Corporation provides no benefit over and above that provided by an unregulated industry with a research and development levy co-ordinated through the Horticultural Produce Committee or the State-based Agricultural Produce Committee.

Submissions

The ERA received two letters from Murdoch University staff. One letter (attached to the submissions of the Potato Market Corporation and the Potato Growers Association) was from Michael Jones, Professor of Agricultural Biotechnology. Professor Jones advises that

⁶⁸⁶ That is, any change in costs is passed through to consumers with an additional 15 per cent margin.

the Potato Marketing Corporation and Murdoch University jointly fund the Potato Research Centre of Western Australia (**PRCWA**). He states that a deregulated market would underfund research and development in the industry, and that the Potato Marketing Corporation is uniquely placed to bring growers and researchers together.

Dr Steve Milroy, Research Manager, Potato Research WA, (whose letter was attached to the submission of the Potato Marketing Corporation) outlines a number of key objectives for the Potato Marketing Corporation in increasing grower productivity. He also emphasises the value of the role of the Potato Marketing Corporation in biosecurity and food security.

ACIL Allen also claims that it over-estimated the potential productivity gains from deregulating the potato industry because the Potato Marketing Corporation has recently implemented a quality improvement program that will increase industry productivity by 6 per cent per annum over the next three years.⁶⁸⁷ ACIL Allen is implicitly claiming that only the Potato Marketing Corporation can deliver this productivity gain.

ERA assessment

The ERA accepts that free markets can fail to provide adequate expenditure on marketing, research and development for industries.⁶⁸⁸ However, it is likely that there are alternative means of providing such activities, and the Potato Marketing Corporation is unlikely to be the most efficient means of providing these functions. For example, levies on growers that are co-ordinated by industry organisations are an alternative way of providing for marketing, research and development.

With regard to research and development:

- Industry levies are raised from a number of horticultural industries, which are then used to fund research, development and extension activities, and other industry development. The Western Australian Agricultural Produce Commission (**APC**) facilitates the growth and prosperity of agricultural industries through research and development programs that are initiated and funded by the Producer Committee⁶⁸⁹.
 - The Potato Producers Committee is one of 10 industries that form the APC, collecting funds (fees for service) from processing, seed, ware export and ware domestic growers, and allocating those funds to industry development.
 - The vegetable industry is also part of the APC, which successfully collects funds from members for allocation to research and development activities.
 - The ERA believes that the role of co-ordinating industry research is not dependant on the existence of the Potato Marketing Corporation.
- Potato research and development in Western Australia is not being undertaken solely by the Potato Marketing Corporation in conjunction with Murdoch University. DAFWA has undertaken a number of projects, including the “More dollars per drop”

⁶⁸⁷ The original estimate of a \$72 per tonne cost decrease was due to consolidation and scale, any new productivity or quality benefits,
http://data.daff.gov.au/data/warehouse/9aap/2014/apgpfd9abp_20140220/AgProdGrthPstRfmFtrOppsv1.0.0.pdf.

⁶⁸⁸ The free rider problem occurs because people see that they can benefit from a good or service without paying for it (Nicholson, W. and C. Snyder, *Microeconomic Theory: Basic Principles and Extensions*, 10th Edition, 2008, p.683).

⁶⁸⁹ Agricultural Produce Committee, *Annual Report for the Year Ended 30 June 2013*, 2013, p.3.,
[http://www.parliament.wa.gov.au/publications/tailedpapers.nsf/displaypaper/3910803a3619c10a9bee36d848257bf0002693ff/\\$file/803.pdf](http://www.parliament.wa.gov.au/publications/tailedpapers.nsf/displaypaper/3910803a3619c10a9bee36d848257bf0002693ff/$file/803.pdf)

project, and the “Improving the visual and internal quality of WA ware potatoes to meet consumer needs” project.⁶⁹⁰

- Professor Jones⁶⁹¹ stated in his submission that DAFWA has moved out of potato research and development. However, the ERA has been advised by DAFWA that this is not the case. DAFWA is concentrating its efforts on the development of the seed potato industry, as explained in its *Plan to Support Horticulture Industry Development 2009 – 2012*.⁶⁹²

The ERA considers that ACIL Allen’s claim of 6 per cent productivity gains per annum⁶⁹³ for three years arising from a quality improvement program implemented by the Potato Marketing Corporation is not credible. This is because:

- The potential gains from such a productivity gain are very large, but ACIL Allen did not submit any reference to this in its original submission to the ERA’s Discussion Paper. Instead, a value of \$20 per tonne was attributed to research, development and marketing activities, being well less than the value of research and development of \$27 per tonne implied by Table 1 in ACIL Allen’s submission to the Draft Report.⁶⁹⁴
- ACIL Allen does not provide information as to who the growers were, where they farm, what technical improvements were made, how much productivity improved, and the cost and risk associated with the improvements. Nor does ACIL Allen stipulate extension methods to be used, years from research to adoption, years to peak adoption, percentage of the industry adopting the improved systems, or levels of success.
- Typical rates of gain in productivity for broadacre agriculture⁶⁹⁵ are around one to 1.5 per cent per annum, including the benefit of increasing economies of scale. This is far less than the 6 per cent claimed by ACIL Allen, which appears to relate purely to technical change, and not any economies of scale.
- The adoption rate needed to achieve such a large gain is unrealistic.
 - Horticulture Australia Ltd commissioned AgEcon Plus to conduct a review of a number of its potato research projects in 2009.⁶⁹⁶ This review examined 16 potato agronomy and production management projects funded by Horticulture Australia Ltd. AgEcon Plus concluded that 20 per cent of the Australian industry would adopt the recommendations of the projects over a 10 year period.
 - The ERA notes that levels and speed of adoption are likely to be higher for research and development conducted within a localised industry, such as Western Australia. However, it considers that a 6 per cent increase in

⁶⁹⁰ Department of Agriculture and Food Western Australia.

⁶⁹¹ Murdoch University, *Submission in response to ERA draft report*, State Biotechnology Centre, Perth, 2014.

⁶⁹² Department of Agriculture and Food Western Australia.

⁶⁹³ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.11.

⁶⁹⁴ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.9.

⁶⁹⁵ No similar data exists for horticultural crops.

⁶⁹⁶ Clarke Michael, AgEcon Plus, Program evaluation for processed potatoes & Industry projects return on investment evaluation program – BCA 2009.

productivity across the industry occurring within one to two years of research commencing is highly unlikely.

Overall, the ERA finds no benefit in research and development activities being co-ordinated by the Potato Marketing Corporation over and above the benefits that could be achieved through alternative means such as industry-co-ordinated levies. The ERA considers that the claimed 6 per cent per annum increase in productivity from the quality improvement program implemented by the Potato Marketing Corporation is not credible.

7.3.4.5 Market failure: marketing

Summary of Draft Report

The Potato Marketing Corporation conducts marketing work to promote potato consumption in Western Australia. The Potato Marketing Corporation assumed the marketing function from Western Potatoes in response to recommendations from the McKinna review.⁶⁹⁷

The marketing activities of the Potato Marketing Corporation are aimed at counteracting a general movement away from the consumption of potatoes towards consumption of other forms of starch (for example, pasta and rice).

The ERA considered that a marketing levy, as applied to other agricultural products,⁶⁹⁸ could achieve the same result as the operations of the Potato Marketing Corporation. As such, the benefits arising from the Potato Marketing Corporation's marketing role was not included in the analysis.

Submissions

ACIL Allen⁶⁹⁹ claims that the Potato Marketing Corporation undertakes a marketing role that is unique in the Australian potato industry, and that other industry levies have not been successful in increasing consumer demand. It claims that the expenditure of the Potato Marketing Corporation on marketing is currently \$20 per tonne, and that this expenditure will generate a 100 per cent return, resulting in a net benefit of \$20 per tonne.

ACIL Allen notes that structures exist for industry to co-ordinate marketing without a centralised system, but that there is no evidence that the South Australian potato industry (the largest in Australia) had managed to co-ordinate the introduction of a levy to fund marketing. ACIL Allen also states that Horticulture Australia has not conducted any "category marketing" for potatoes. Its submission also stated that category marketing of potatoes in Western Australia had been successful, but did not provide any evidence to support that conclusion.

ERA response

The ERA accepts that the potato industry, of its own accord, would fail to provide adequate expenditure on marketing. However, the current regulation of the potato industry is not the best way to correct this problem. The effective marketing of ware potatoes is not dependent

⁶⁹⁷ McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011.

⁶⁹⁸ Agricultural Produce Commission, *Committees*, 2014, <http://www.apcwa.org.au/index.php/committees> (accessed 2 April 2014).

⁶⁹⁹ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p7.

on regulation of the price and quantity of ware potatoes sold on the Western Australian market.

Australian Venture Consultants cites the UK Potato Council as an example of an industry co-ordination body similar to the Potato Marketing Corporation in another jurisdiction.⁷⁰⁰ However, ERA notes that the UK Potato Council,⁷⁰¹ which carries out marketing work, operates in a non-regulated industry that accesses funding from compulsory levies.

Further, the ERA notes that:

- there are examples of companies undertaking marketing of potatoes in other jurisdictions. In the Netherlands, Agrico⁷⁰², a co-operative with over 800 growers, markets ware and seed potatoes; and
- agricultural co-operatives in other horticultural industries in Western Australia conduct marketing activities, such as Sweeter Bananas.⁷⁰³

Prior to the recent reforms, marketing was undertaken by Western Potatoes with Agricultural Produce Commission funds⁷⁰⁴. While the form or effectiveness of this marketing may or may not have been effective, it demonstrates that marketing can take place outside of the Potato Marketing Corporation.

However, the ERA accepts ACIL Allen's point that no major category marketing of potato is known to have taken place in South Australia, and so it is not inevitable that such marketing would take place in a deregulated market. However, the ERA also notes that ACIL Allen has not been able to substantiate its claim that category marketing in Western Australia has been successful. As such, the ERA cannot automatically assume that category marketing will be successful.

A recent media article stated that a marketing campaign by the Potato Marketing Corporation achieved success⁷⁰⁵ because of a 5 per cent increase in the number of households purchasing potatoes in the last quarter of 2013, relative to the corresponding period in 2012. However, this gain could also be attributed to an increase in production over the previous year, as data from the Potato Marketing Corporation⁷⁰⁶ show that prices fell by 6 per cent between the periods in question.

In summary, the ERA finds that there is no evidence that the marketing functions of the Potato Marketing Corporation add any value to what could be achieved in a deregulated market with marketing levies applied by relevant industry bodies.

⁷⁰⁰ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.27.

⁷⁰¹ <http://www.potato.org.uk/>

⁷⁰² <http://www.agrico.nl/en/home/>

⁷⁰³ Sweeter Banana, *The Sweeter Story*, <http://www.sweeterbanana.com/contents/about/the-sweeter-story.htm?id=21> (accessed 24 June 2014).

⁷⁰⁴ McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.57.

⁷⁰⁵ B. Thompson, 'Humble spud back in flavour', *The West Australian*, March 18 2014, <https://au.news.yahoo.com/thewest/countryman/a/22034142/humble-spud-back-in-flavour/> (accessed 23 June 2014).

⁷⁰⁶ Data supplied by the Potato Marketing Corporation.

7.3.4.6 Product quality

Summary of Draft Report

In the Draft Report, the ERA noted a decline in the proportion of Class 1 potatoes produced in Western Australia from 49.6 per cent of potatoes in 2008/09, to 40.2 per cent in 2012/13.⁷⁰⁷ In comparison, the South Australian potato industry (which produces 80 per cent of Australia's ware potatoes) typically achieves a 60 per cent share of Class 1 potatoes. The ERA attributed the overall decline in quality of potatoes in Western Australia to the regulated marketing system.

Submissions to the Draft Report

ACIL Allen⁷⁰⁸ submitted potatoes were exported from Western Australia to the eastern states in 2014, and that the fact that potatoes are exported from Western Australia is inconsistent with claims that consumers are worse off in Western Australia due to poor product quality, or that ware potatoes grown in Western Australia are of an inferior quality.

ACIL Allen⁷⁰⁹ notes that the Potato Marketing Corporation establishes a uniform pool price by grade and colour, but individual growers receive a return that reflects their individual performance. The price growers receive for second grade potatoes is around 45 per cent of the price they receive for top grade potatoes, which ACIL Allen considers to be a powerful incentive to improve production. This view is supported by Australian Venture Consultants.⁷¹⁰

ERA response

McKinna⁷¹¹ makes numerous references to quality issues and, in particular, the continual complaints by merchants regarding the poor quality of potatoes in the supply chain.

McKinna⁷¹² has also commented on poor agronomic, harvesting, and logistical practices that affect quality in Western Australia. These problems are ongoing and there is no single, clear explanation as to why quality is declining in Western Australia, particularly since growers have been paid a premium for higher grade potatoes since at least 2008/09.⁷¹³ The Potato Marketing Corporation⁷¹⁴ notes that supermarkets are tightening their quality standards without providing an explanation as to why. However, ACIL Allen⁷¹⁵ notes that a recent review of the standards found that there was no material difference between the pre-existing standard and the standard set by supermarkets.

The ERA acknowledges that Potato Marketing Corporation does reward growers to some extent by paying growers according to grade and compliance reporting from wash

⁷⁰⁷ Potato Marketing Corporation Annual Report, various.

⁷⁰⁸ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.2

⁷⁰⁹ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.2

⁷¹⁰ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p10.

⁷¹¹ McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.14.

⁷¹² McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.49.

⁷¹³ The first reference to different payments by quality was in *Potato Marketing Corporation Annual Report 2008/09*

⁷¹⁴ Potato Marketing Corporation, *2011/12 Annual Report*, 2012.

⁷¹⁵ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.32.

packers.⁷¹⁶ However, the share of Class 1 potatoes is currently lower than when growers were offered no price premium for Class 1 potatoes over Class 2 potatoes in the early 2000s.⁷¹⁷

In fact, since the low point of total sales in 2007/08, sales of Class 1 ware potatoes have declined substantially. However, sales of lower grade potatoes have increased dramatically, more than offsetting the decline in Class 1 sales. That is, at least at this stage, the reforms of the past few years do not appear to have translated to an improvement in quality.

The ERA considers that the grower payments in the current system are failing to effectively reward better growers and deter poorer growers. Better growers are more profitable and can use their profits to expand their operations by purchasing (when available) or leasing Domestic Market Entitlement. However, the allocation of expansion Domestic Market Entitlement per pool has historically been on a pro rata basis,⁷¹⁸ with poorer growers receiving the same percentage of Domestic Market Entitlements as better growers.

The regulations are effectively rewarding poorer growers with additional Domestic Market Entitlement, and the opportunity to lease that Domestic Market Entitlement to better growers. This problem will be exacerbated if new Domestic Market Entitlements become non-tradeable.

7.3.4.7 Variety choice

Summary of the Draft Report

The ERA considered that, while definitive proof was not available, consumer choice was likely to be restricted in Western Australia, relative to the rest of Australia, in terms of the available quantity of different varieties of potato. The ERA noted the dominance of the Nadine variety in Western Australia meant that consumer choice was limited, but agreed with ACIL Allen that comparisons with the rest of Australia were difficult as obtaining data from other States was challenging.

The ERA also noted the radical change in colour share of total Domestic Market Entitlement proposed by the Potato Market Corporation probably meant that the current allocation was not representative of consumer demand, and lagged behind trends in the rest of Australia.

Submissions to the Draft Report

ACIL Allen⁷¹⁹ submits that the ERA did not provide clear, well-documented evidence that there is a lack of variety choice in Western Australia relative to other States and Territories. Australian Venture Consultants claims that consumer choice is not limited because 28 varieties are grown in Western Australia and retailers could easily import other varieties if there was demand.⁷²⁰

⁷¹⁶ McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, pp.87-88

⁷¹⁷ 40 per cent versus 44 per cent in 2001/02. PMC notes there is no material difference in grading.

⁷¹⁸ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.9.

⁷¹⁹ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.4.

⁷²⁰ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.25.

Australian Venture Consultants⁷²¹ submits that Western Australian consumers are not disadvantaged by the varieties produced under the regulated system, and that market research shows that consumers are very happy with the current selection, particularly the Nadine variety.

ERA response

The Nadine variety continues to be the dominant variety of ware potato produced in Western Australia. The number of varieties has increased from the late 1990s, when white varieties such as Delaware and Nadine accounted for around 90 per cent of production.⁷²² Western Australian ware potato production for 2012/13 by variety is shown in Table 37 below.

Nadine, which was introduced in the 1990s, became popular with growers because of its high yields. Nadine is a high-water content potato with substantially less nutritional content than other varieties such as Royal Blue or Ruby Lou.⁷²³ Supermarkets also favoured Nadine at the time, as it presented well.

Table 37 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 Chrystal	2.3%	Cream/Yellow	90%
Laura	1.5%	Red	92%
Carisma	1.3%	White	93%
Mondial	1.2%	Cream/Yellow	94%

Source: Potato Marketing Corporation Annual Report 2012/13

The Potato Marketing Corporation encourages production of different varieties through the classification of Domestic Market Entitlement owned by each grower into different potato colours: for example, 65 per cent white, 16 per cent blue, 11 per cent red and 8 per cent yellow in 2012/13.⁷²⁴ It also offers different prices by finer variety groups (for example, in 2012/13 the Potato Marketing Corporation listed prices for four different groups of white potatoes) and allows growers to select the best variety within each colour group, based on the price premium and ability of individual growers to grow each variety.

McKinna⁷²⁵ considered this to be an inefficient system because growers are forced to meet the required colour quota associated with their Domestic Market Entitlements even though their land might not be suitable for particular varieties, and recommended that:

⁷²¹ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.5

⁷²² Potato Marketing Corporation, *2000 Annual Report*, 2000, pp.11-12.

⁷²³ Beta Spuds, Varieties, <http://www.betaspuds.com.au/varieties> (accessed 27 July 2014).

⁷²⁴ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.22.

⁷²⁵ McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.81. The ERA understands that there is some flexibility in the variety share allotment, but this must be coordinated through the Potato Marketing Corporation.

- Domestic Market Entitlements be allocated by colour, so that each tonne allocated is 100 per cent of one colour that can be traded, rather than a share of different colours; and
- the creation of a sophisticated and transparent trading mechanism for Domestic Market Entitlements.

The Potato Marketing Corporation currently lists this recommendation as pending, due to the complexity of reform.⁷²⁶

The Potato Marketing Corporation intends to substantially 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.⁷²⁷

The ERA has obtained data from the major supermarkets on their receipts and sales of potatoes by variety.⁷²⁸ These data are not presented for commercial in confidence reasons, but the ERA is able to make the following comments:

- Western Australian sales are dominated by a single variety. The production data in Table 37 show that this is almost certainly the Nadine variety. In eastern Australia, the largest categories are a combination of washed and brushed potatoes, which may have similar eating properties. However even when aggregated, these varieties/brands⁷²⁹ still account for a much smaller market share than that of Nadine in Western Australia;
- all major retailers sell substantial quantities of generic washed and brushed potatoes that are not identified by variety. However, the ERA understands that in Western Australia virtually all of these potatoes are Nadines, whereas generic potatoes in the rest of Australia encompass a far wider range of varieties;
- the major varieties/brands in eastern Australia tend to be yellow/cream varieties, compared to white potatoes (e.g. Nadine) in Western Australia. This indicates that the regulated market in Western Australia is producing a substantially different product to that driven by consumer choice in the rest of Australia. It is not clear why consumer preferences would be so different in Western Australia; and
- eastern Australia produces a much larger range of smaller boutique varieties in marketable quantities than does Western Australia. That is, the regulated system in Western Australia tends to concentrate production into four to five major varieties, whereas eastern Australia produces a far wider range of potatoes.

From these data, the ERA concludes that variety is significantly more limited in Western Australia relative to other regions, which it attributes to regulated marketing in this State. It considers that the claim by Australian Venture Consultants⁷³⁰ that the production of

⁷²⁶ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.32.

⁷²⁷ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.22.

⁷²⁸ One supermarket provided delivery data, rather than sales. While there will be some wastage between the delivery and retail sale of potatoes, the ERA considered the retail value of potatoes delivered to the supermarket to be an sufficiently accurate proxy for sales in that case.

⁷²⁹ The major supermarkets have brands of potatoes which comprise of a number of different varieties.

⁷³⁰ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.5.

28 varieties is proof of sufficient choice is misleading as many of these varieties are produced in extremely small quantities.

The ERA considers market research showing that consumers regularly consume Nadine is a function of the fact that Nadine is the most common variety sold, rather than an indication of any desire to consume so much of one variety of potato.

Additionally, the ERA does not agree that varieties would be imported on any consistent scale if consumer demand existed, due to the cost of transporting potatoes from other jurisdictions relative to the farm-gate price.

The ERA also has concerns that the regulated system appears to be slower to react to consumer demand 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. In contrast, the deregulated market in eastern Australia already has cream/yellow as a major colour category, and this appears to have been the case for at least several years.

The ERA considers that variety allocations in the Domestic Market Entitlements are unlikely to ever reflect consumer demand as well market shares in a deregulated system. Proposed reforms to the system could make the Western Australian ware potato industry more market orientated, it is not clear whether such systems could replicate a deregulated market.

7.3.4.8 Impact on the Export Seed Potato Industry

Summary of the Draft Report

In the Draft Report, the ERA concluded that producers of export seed potatoes are constrained by the regulated marketing system. This is because they are prevented from selling seed potato crops that are unsuitable for export onto the domestic ware market. This has two effects:

- it is a cost to existing seed potato exporters; and
- it is constraining the industry from expanding, despite Western Australia's ideal conditions for growing export seed potatoes.

The ERA considered the potential expansion of the seed potato industry as potentially a very large benefit from reform. However, its scale and the length of time it would take to develop are uncertain, and so the ERA did not attempt to quantify this benefit in the cost-benefit analysis presented in the Draft Report. (The potential of the export seed potato industry in Western Australia is examined further in Appendix 12).

Submissions to the Draft Report

The Potato Marketing Corporation,⁷³¹ Australian Venture Consultants⁷³² and ACIL Allen⁷³³ all state that the ERA ignored evidence provided by the Western Australian Seed Potato

⁷³¹ Potato Marketing Corporation, *Covering Letter for Submission to the ERA Draft Report Findings on the Regulated System*, 2014, p.2

⁷³² Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014, p.24

⁷³³ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.8.

Producers Association in response to the ERA's Discussion Paper. For example, the Potato Marketing Corporation states that:

“the ERA has used what appears to be a single, unidentified source and totally ignores the evidence of the WA Seed Potato Producers (WASPP) submission, which not only states that the PMC does not have any negative effects, but also provides a number of positive benefits to the seed industry in WA. These benefits as outlined by WASPP include biosecurity, certainty of payment which means certainty for business decisions and investment, certainty of income for the industry via collection of levies, research and development, and introduction of new varieties.”

Australian Venture Consultants claims that the ERA's analysis of the seed potato industry is incorrect because any tubers too large for export are not suitable for domestic consumption.⁷³⁴ Additionally, it claims that rejected seed crops are the same as rejected crops from any other part of the industry, and should have no value in the ERA's analysis.

The Western Australian Seed Potato Producers reiterated its stance that the Potato Marketing Corporation has no negative effects on the Western Australian seed potato industry.⁷³⁵ It also notes that many of its members once owned Domestic Market Entitlements but have chosen to sell them.

ERA response

The ERA considers that the comments received are correct when applied to the domestic seed potato industry, but are invalid when applied to the export industry. In the course of this Inquiry, the ERA has obtained evidence that:

- export seed tubers need to be of a certain size range and must be disease free;
- a key part of the profitability of export seed potato production is the ability to sell tubers that are oversized or have diseases that affect their productivity as seed tubers (but not their safety or quality for human consumption) onto the domestic market; and

Mauritian seed import requirements, the British Potato Council seed potato marketing reports^{736 737} and scientific literature⁷³⁸ all confirm that international customers prefer small to medium sized tubers. However, Western Australian growers, who are the main clients of the Western Australian Seed Potato Producers, are more accepting of larger tubers.

DAFWA has sought to assist Western Australian seed potato exporters sell oversize (that is, larger than 60mm) tubers into export markets by conducting cut seed trials on projects

⁷³⁴ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Submission to ERA Draft Report Inquiry into Microeconomic Reform in Western Australia*, 2014, p.25.

⁷³⁵ WA Seed Potato Producers, *Submission to ERA Draft Report Inquiry into Microeconomic Reform in Western Australia*, 2014, p.1.

⁷³⁶ British Potato Council, *Report on the Inward Mission from Egypt on Scottish Seed Potatoes 28 July – 1 August 2008*, p.7.

⁷³⁷ British Potato Council, *Report on the Inward Mission from Morocco on Scottish Seed Potatoes 15 – 17 January 2007*, p.5.

⁷³⁸ P. C. Struik and S. G. Wiersema, *Seed Potato Technology*, 1999, p.74.

in Vietnam,⁷³⁹ Mauritius⁷⁴⁰ and Indonesia.⁷⁴¹ Research shows that larger tubers can be cut and achieve good yields with correct management. However, importers still much prefer small round seed as it minimises risk.

Additionally, a seed crop that fails certification standards⁷⁴² cannot be exported because exporters cannot bypass import protocols. However, seed growers producing for the domestic market can negotiate with their buyer and sell their seed outside the certification or registration system.

International seed exporters in Western Australia 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). These exporters will only be able to sell their seed crop as ware potatoes interstate at a low price.

The 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 early 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 high transport costs and competition from low cost South Australian producers.

If only a small quantity of seed is affected, it is not feasible to send the affected seed to the eastern states, and so the seed is often used as cattle feed. This reduces the profits of existing seed potato exporters, increases the price of Western Australian seed potatoes on international markets, and potentially prevents the expansion of the seed potato industry.

The ERA rejects claims that oversized and diseased tubers unsuitable for export are unsuitable for domestic consumption. Export crops may be rejected because of diseases that affect the productivity of those tubers as seeds, but these diseases do not affect the quality or safety of the potatoes for human consumption.

The ERA notes that sale of oversized and diseased tubers onto the domestic market is common practice across the world, except within Western Australia. For example:

- the ERA has confirmed with sources in the industry in the rest of Australia and has confirmed that it is not an unusual practice in that industry;
- the ERA has received confirmation from a world-leading academic expert on the seed potato industry that the practice is common around the world, provided the potatoes meet the specifications of the particular market. This expert has visited Western Australia, funded by DAFWA's visiting Scientist Program, so is familiar with Western Australian conditions; and

⁷³⁹ Increasing the capacity of the Food Crops Research Institute to enhance the production and management of potatoes in the Red River Delta 2000 -2003, funded by Ausaid.

⁷⁴⁰ I. McPharlin & A. Taylor, *Improving Australia's competitiveness in the Mauritian export seed sector*, 2012, p.8.

⁷⁴¹ A partnership to build Indonesian crisping potato capacity and Australian seed potato sales.

⁷⁴² Due to disease.

- the Scottish Agricultural College Farm Management Handbook details gross margin for seed growers selling a proportion of their crop as ware.⁷⁴³

Western Australian Seed Potato Producers state that most seed growers have relinquished their Domestic Market Entitlement.⁷⁴⁴ The inference being that the sale of oversize tubers or reject seed crops is not an issue. However, the ERA does not believe that holding Domestic Market Entitlements is an effective risk management strategy, as it is a contract to supply a quantity of ware potatoes each and every year (with an associated cost), while the annual quantity of oversize tubers in a crop can vary considerably and so it is not possible to plan for a crop failing seed certification.

The ERA has not changed its conclusion that the inability of Western Australian export seed potato growers to sell oversize and diseased tubers onto the domestic market without Domestic Market Entitlement increases costs to this industry and prevents its expansion.

7.3.4.9 ERA process

Submissions

The Potato Marketing Corporation notes that the ERA selected reform of the potato market as an issue for consideration in the Microeconomic Reform Inquiry based on a single submission from an organisation with a well-known ideological bias (**CCIWA**). The Potato Marketing Corporation also states that the ERA has used out-of-date and inappropriate data and has only attacked submissions in favour of the Potato Marketing Corporation rather than generating new analysis. The Potato Marketing Corporation is also dissatisfied with the ERA's process because the Potato Marketing Corporation was not notified of the review and because the ERA did not conduct sufficient consultation with the Potato Marketing Corporation and the industry.

ERA response

The ERA chose topics for consideration in the Microeconomic Reform Inquiry from a variety of sources, of which public submissions were just one. Other sources included a scan of Western Australia's legislation and review of National Competition Policy outcomes.

The ERA acknowledges that the process of examining the marketing of potatoes in Western Australia has not been ideal because of the large number of topics covered in this Inquiry, and because the Potato Marketing Corporation was not initially aware of the ERA's Discussion Paper, which delayed its submission and shortened the time available for analysis and consultation. However, the ERA believes this has not adversely affected the quality of its analysis or its conclusions.

⁷⁴³ Scottish Agricultural College, *Farm Management Handbook 2013/14*, 34th Edition, pp. 55 & 57.

⁷⁴⁴ WA Seed Potato Producers, *Submission to ERA Draft Report Inquiry into Microeconomic Reform in Western Australia*, 2014, p.2.

7.3.4.10 *Potato Marketing Corporation compliance with Act*

Submissions

ACIL Allen⁷⁴⁵ claims that the ERA is suggesting that the Potato Marketing Corporation is not compliant with the Act by claiming that the Potato Marketing Corporation restricts production to achieve the recommended pool price.

ERA response

The ERA did not suggest that the Potato Marketing Corporation was non-compliant with its Act, merely that it faced a dual mandate of supplying potatoes and ensuring that growers remain profitable. The fact that tradeable Domestic Market Entitlements have a substantial value is definitive proof that production has been restricted below the level that would occur without the current regulations.

7.3.5 *Cost-benefit analysis*

7.3.5.1 *Background*

In this section the ERA quantifies the costs and benefits of the regulation of the ware potato market in Western Australia and calculates the annual net benefits and a 15-year present value of net benefits. A detailed account of the cost-benefit analysis calculations are given in Appendix 11.

In the Final Report, the ERA has attempted to identify to whom these costs and benefits will accrue, as the ERA has now assumed less than 100 per cent pass-through changes in farm-gate prices to retail.

The ERA considers that a large share of the economic benefits accruing to the major supermarkets will not be retained in Western Australia. Consequently, in this analysis, the ERA considers only the benefits from any reform accruing to Western Australians. This is essentially the same method as used by as ACIL Allen,⁷⁴⁶ which classifies benefits into Western Australian and Australian.

7.3.5.2 *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, less an allowance for pricing power of the major supermarkets. From analysis in Appendix 11, the ERA assumes that the limited pricing power of retailers in potato purchase and retail sales enables them to drive a 10 per cent wedge between the prices received by growers and the price that they pass on to consumers. This means that, while retailers gain some economic rents through market power, most of the benefits of deregulation would accrue to consumers and remaining growers in the industry.

⁷⁴⁵ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, pp.3-4.

⁷⁴⁶ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.9.

The ERA analysis assumes that the excess profits for retailers will accrue to the most concentrated sector of the market, being the major supermarkets. The ERA further assumes that Western Australian shareholders will gain a share of these profits in line with Western Australia's share of the Australian population (10.9 per cent⁷⁴⁷).

Grower productivity

ACIL Allen estimates that the cost to productivity arising from the Act is \$72 per tonne per annum.⁷⁴⁸ 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 estimate is reasonably optimistic as a range of different sized growers are likely to remain if deregulation was to occur. However, it does not consider any productivity gains from the current larger growers increasing in scale, should deregulation occur.

Additionally, the ERA considers the plan to make new Domestic Market Entitlement issues non-tradeable, may impact productivity even further than the initial estimate. However, the ERA has not been able to calculate a reasonable estimate as to the exact impact. Additionally, the ERA acknowledges that the Potato Marketing Corporation is examining reforming the allocation of Domestic Market Entitlements into tradeable colour permits.⁷⁴⁹

For this report, the ERA has used the ACIL Allen estimate of \$72 per tonne, which equates to \$4 million per annum (based on current production of 54,000 tonnes⁷⁵⁰ per annum).

Efficient levels of production

The value of the efficiency cost from under-production of potatoes 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 their consumption in response to a fall in price.⁷⁵¹ In the Draft Report the ERA noted that this was supported by the limited econometric research that the ERA could find.

However, more recent research estimates a higher long-run elasticity of 0.8.⁷⁵² In this regard competition between potatoes and other sources of starch such as rice and pasta is quite vigorous.

Additionally, a low elasticity implies large price movements relative to changes in quantity. There is no indication of such movements in the Western Australian market. While not

⁷⁴⁷ Australian Bureau of Statistics, Australian Demographic Statistics, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/BCDDE4F49C8A3D1ECA257B8F00126F77?OpenDocument>, (accessed 19 June 2014).

⁷⁴⁸ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.26.

⁷⁴⁹ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.332

⁷⁵⁰ Approximately the Potato Marketing Corporation's 2012/13 production target (Potato Marketing Corporation, *2012/13 Annual Report*, 2013, p.21).

⁷⁵¹ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia*, 2014, p.17.

⁷⁵² R. Tiffin, K. Balcombe, M. Salois and A. Kehlbacher, *Estimating Food and Drink Elasticities*, University of Reading, 2011.

definitive, the ERA estimates that the retail price elasticity of demand is most likely in the -0.5 to -1.0 range, with a mean of -0.75. An elasticity for the farm-gate market of -0.6 is used in this analysis, as the farm-gate value of potatoes is only a part of the retail price. This is discussed further in Appendix 11.

The ERA was not able to locate any research on how responsive supply would be to the removal of any artificial supply restriction.

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 processing)⁷⁵³ was roughly double today's levels, with ware production reaching a peak of 6,000 tonnes above today's levels in 2004/05. Additionally, the Potato Marketing Corporation intends to increase production within the regulated system by 10,000 tonnes over three years.⁷⁵⁴

Based on the fact that supply is artificially restricted, the ERA uses a supply elasticity of 2.0 for this analysis. ACIL Allen⁷⁵⁵ contends that 2.0 is higher than many studies of agriculture suggest. However, most of these studies were conducted in markets where supply is not artificially constrained by regulation and so would be expected to be lower than the elasticity of current Western Australian production.

In estimating potential production gains from removing quantity restrictions, the ERA has assumed a starting point of an average \$730 per tonne grower return,⁷⁵⁶ a \$50 per annum per tonne licence value, and ware potato production of 54,000 tonnes per annum. The ERA estimates that production of ware potatoes would increase to 57,800 tonnes per annum in response to the removal of restrictions. This impact includes the effect of improved productivity flowing from deregulation.

Seed potato industry costs

The ERA has found that regulation of the ware potato industry imposes three types of cost on the Western Australian seed potato industry. (Refer to Appendix 11 for more detail.)

- 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, its contribution is uncertain. Consequently, the ERA has only quantified the effects of regulations on the yields of existing growers, and on the lower prices for oversize/reject seed. The potential benefits of expanding the export sector are discussed in Appendix 12.

⁷⁵³ Australian Bureau of Statistics, *Historical Selected Agriculture Commodities, by State (1861 to Present), 2010-11*, ABS Cat. No. 7124.

⁷⁵⁴ The B. Thompson, 'Humble spud back in flavour', *The West Australian*, March 18 2014, <https://au.news.yahoo.com/thewest/countryman/a/22034142/humble-spud-back-in-flavour/> (accessed 23 June 2014).

⁷⁵⁵ ACIL Allen Consulting (May 2014) A review of the Draft ERA Report on Microeconomic Reform, Report to the Potato Marketing Corporation, p.8.

⁷⁵⁶ 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.

With regard to existing growers, 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 as a result of spraying off the crops early to avoid excess oversized tubers. This gives an annual cost of approximately \$280,000 per annum, based on growers receiving \$200 per tonne for crops of oversized tubers and failed seed sold interstate instead of for \$400 per tonne on the domestic market. The entirety of this gain should be retained by growers.

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.⁷⁵⁷ 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 marketing costs for other horticultural products are typically 15 to 19 per cent of the gross sales price.⁷⁵⁸

The ERA has used the ACIL Allen estimate, and notes that 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 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.

7.3.5.3 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 directly valued at \$50 per tonne per annum, the annual cost of a one-year lease of Domestic Market Entitlement.

Social impacts

The ERA recognises that regulation of the ware potato industry may have some social benefits for regions where potatoes are grown, with regulation supporting smaller growers compared with the large scale farming that occurs in South Australia (where a similar number of growers to Western Australia produce over five times Western Australia's output).⁷⁵⁹ The social benefit of supporting small growers is not quantified in this analysis,

⁷⁵⁷ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.25.

⁷⁵⁸ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia*, 2014, p.29.

⁷⁵⁹ The number of growers in South Australia also includes processing potato growers. Source: Potatoes South Australia, *Snapshot*, <https://www.potatoessa.com.au/> (accessed 30 June 2014).

but nevertheless should be considered in weighing up the costs and benefits of deregulation.

In the course of this Inquiry the ERA has been made aware of the difficulties faced by Western Australia's milk producers when dairy quotas were removed in June 2000, and subsequently when adjustment assistance ceased in December 2008. The number of Western Australian dairy farms fell by approximately 60 per cent from before deregulation, with many regional centres being particularly hard hit. The ERA notes that, while the adjustment was large, the industry was deregulated because the benefits of deregulation were estimated to outweigh the costs.

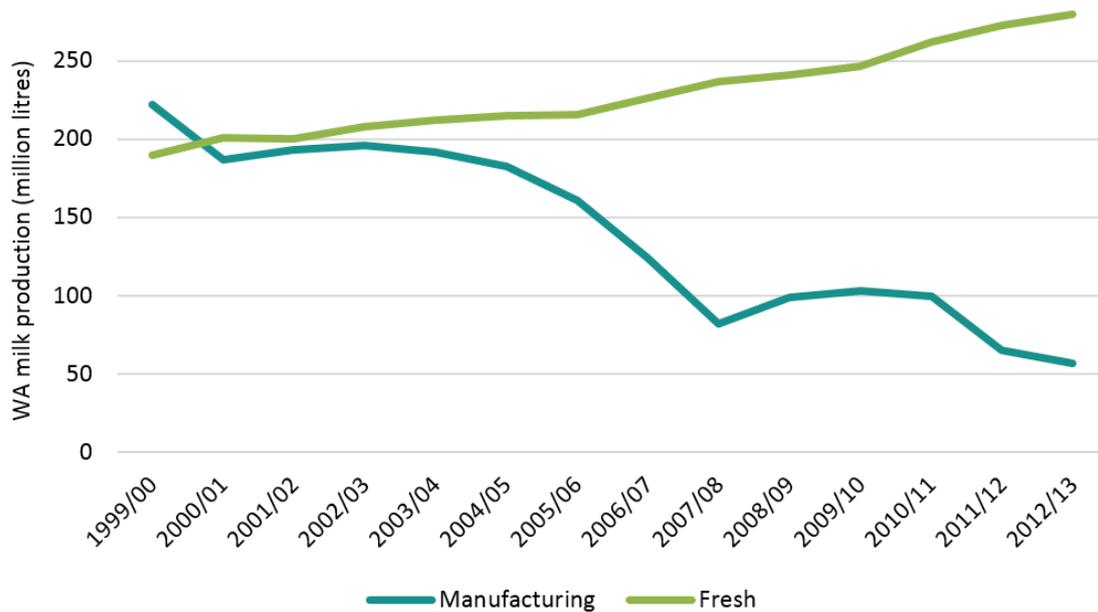
Figure 40 Dairy farms and milk production, 1999/2000 to 2010/11



Source: Department of Agriculture

However, the ERA notes that much of the adjustment in the Western Australian dairy industry was driven by changes in market conditions (which were also occurring around the time of deregulation). In particular, the cessation of export subsidies and improvements in transportation technology enabled eastern states producers to access the Western Australian market for long-life dairy products (for example, cheese and yogurt). As shown in Figure 41, fresh milk production in Western Australia increased after the removal of production quotas in 2000 and the cessation of assistance in December 2008.

Figure 41 Milk production in Western Australia – fresh milk v milk sold for manufacturing, 1989/90 – 2012/13



Source: Department of Agriculture

Prior to deregulation, growers held quotas for fresh milk but were free to produce as much milk for manufacturing purposes as they wished. The ERA understands that smaller growers tended to be more reliant on fresh milk production backed by quotas, while the larger and more efficient growers had developed into substantial producers of milk for manufacturing purposes. Competition from imports would likely have affected the production of milk for manufacturing purposes in Western Australia, but deregulation may have affected which growers were affected by that competition.

In summary, the ERA considers that deregulation of the industry undoubtedly reduced the number of dairy farmers in Western Australia, with flow-on effects for regional communities. However, industry trends at that time also played a major role in this reduction.

The ERA also notes that the price adjustment in the dairy industry was much more severe than the price adjustment expected for the Western Australian ware potato industry. Western Australian milk prices fell by 30 per cent between 1999/2000 and 2000/01.⁷⁶⁰ In contrast, the removal of the estimated \$50 per tonne value of Domestic Market Entitlements is expected to result in a 7 per cent decrease in farm-gate prices, while productivity improvements could see a total reduction in farm-gate prices of 16 per cent.

Overall, the ERA expects that any consolidation of growers in the ware potato industry will not be as great as that in the dairy industry because there is no pressure from interstate import competition at this stage, and because expected reductions in farm-gate prices are not likely to be as large as those in the dairy industry.

⁷⁶⁰ ACCC, *Impact of farmgate deregulation on the Australian milk industry: study of prices, costs and profits*, 2001, p.31, <https://www.accc.gov.au/system/files/Impact%20of%20farmgate%20deregulation%20on%20the%20Australian%20milk%20industry.pdf>

Deregulation of the Western Australian potato industry may hasten the adjustment in the ware potato industry, but the ERA considers that adjustment is inevitable even if the industry remains regulated. 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 2014.⁷⁶¹ Additionally, the net cash losses (that is, before repaying any capital) of a number of growers in the 2013 calendar year suggests that this adjustment will continue.⁷⁶²

It may be easier for growers to exit an industry that remains regulated because they may be able to sell their Domestic Market Entitlements to other growers, and because land prices may not depreciate as significantly if growers exit the market steadily over time. Further, the incomes of supporting businesses in regional centres will adjust proportionally to the speed of the exit of growers from the industry.

The sale of Domestic Market Entitlements does not affect the aggregate net cost of the regulation as it is simply a transfer between parties. However, being able to sell a Domestic Market Entitlement does enable a grower to exit the industry while retaining a source of income. It also means that the remaining growers who wish to expand their operations must find capital to purchase Domestic Market Entitlements, rendering them financially vulnerable if deregulation were ever to occur.

7.3.5.4 Cost and benefits submitted but not accepted

Marketing and research and development have been discussed above, and have not been included in this analysis. This is because the ERA considers that similar outcomes can be achieved through an industry levy structure such as that of the Agricultural Produce Commission.

ACIL Allen submits a benefit of \$5 per tonne per annum for other benefits from regulation of the ware potato industry, including the price stability offered by the Potato Marketing Corporation. The ERA used this estimate in its Draft Report, although ACIL Allen provided insufficient evidence to justify the estimate. The ERA has not used the estimate in its Final Report because ACIL Allen did not provide any further evidence in support of the estimate.

ACIL Allen also submitted the costs of holding Domestic Market Entitlements under the existing system.⁷⁶³ 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.

ACIL Allen also submitted the benefits of retaining the existing system arising from the avoided costs of compensating growers for the loss of capital value of Domestic Market Entitlements.⁷⁶⁴ ACIL Allen submitted 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.

⁷⁶¹ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.16.

⁷⁶² ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.8.

⁷⁶³ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.25.

⁷⁶⁴ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.27.

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 purchased Domestic Market Entitlements from other growers in the recent past, will be adversely affected by deregulation. Therefore the rationale for some compensation and the means to do so are discussed in section 7.3.6.

7.3.5.5 Net cost/benefit

Table 38 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.

The table shows that the net present value of the Act over the next 15 years is a cost of \$33.23 million dollars in 2013/14 values, based on a real discount rate of 5 per cent. The benefit-cost ratio of the Act is 0.46, indicating that the cost of regulation to Western Australia is more than twice the value of the benefits.

The majority of the costs from regulation accrue through decreased productivity relative to a deregulated industry as calculated by ACIL Allen.⁷⁶⁵

Table 38 Cost benefit analysis of the *Marketing of Potatoes Act 1946*

Category	Net Present Value (15 years, \$m 2013/14)
Costs	
<i>Consumers Surplus</i>	\$43.88
<i>Retailer Monopoly Profits</i> ⁷⁶⁶	\$2.41
<i>Retailer Monopsony Profits</i>	\$20.51
<i>Growers Surplus</i>	\$11.70
<i>Supermarkets Share</i>	-\$20.42
<i>Seed</i>	\$3.18
Total Costs	\$61.26
Benefits	
<i>Transfer</i>	\$28.03
Total Benefits	\$28.03
NPV	-\$33.23
Benefit Cost Ratio	0.46

Source: ERA analysis

⁷⁶⁵ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p.26.

⁷⁶⁶ The ERA's analysis assumes market power on farm-gate purchase and retail sales of ware potatoes, as market power in the retail market is taken as an indicator in market power in the purchase of ware potatoes. This is discussed in Appendix 11. Monopoly profits on the retail sales of ware potatoes do not change as much as monopsony profits on the purchase of potatoes because deregulation does not affect the retail market as much as the farm-gate market.

7.3.6 Compensation

Removing the requirement for quantity restrictions (in the form of Domestic Market Entitlements) on ware potatoes produced in Western Australia for the domestic market will result in losses in income and wealth for holders of Domestic Market Entitlements.

However, as for the removal of quantity restrictions in the taxi industry, the ERA does not consider that there is a case for general compensation of potato growers for the loss of Domestic Market Entitlements.

The ERA observes that the deregulation of the Western Australian ware potato market does not alter the property rights that Domestic Market Entitlements provide their owner. Potato growers will still retain the right to grow the same volume of potatoes (and more, without restrictions on quantities) as their Domestic Market Entitlement allowance, should they wish to do so.

The purchase of Domestic Market Entitlements by potato growers was an investment decision and there are no guarantees on investment returns. The risk of deregulation of the market was known to growers as reform was considered during the National Competition Policy review of 2002. Additionally, Domestic Market Entitlements are technically re-issued every year by the Potato Marketing Corporation and could be removed from individuals, even if this had not been done in the past. Growers may already be incorporating this risk into leasing decisions, with the relatively high lease yield reflecting the inherent risk of holding a regulated asset that could be removed at any time.

Furthermore, compensation should not be paid in the interests of symmetry. Domestic Market Entitlements have provided potato growers with the opportunity to reap windfall gains from past government policy choices, so it is reasonable to expect holders of Domestic Market Entitlements to bear windfall losses due to other policy choices, without compensation.

The ERA also understands that it is likely that many growers have been allocated Domestic Market Entitlements at no cost, and so have no grounds for compensation. Others have paid for at least some of their Domestic Market Entitlements. Those that have paid for their Domestic Market Entitlement may have held it for such a period that they have received a good return on the asset.

However, there may be a case for compensation in some limited circumstances. In terms of equity, the ERA acknowledges two specific cases where compensation may be warranted:

- One grower who wanted to expand their potato growing operations outside of the regulated system was taken to court by the Potato Marketing Corporation on at least three occasions⁷⁶⁷ and eventually decided to purchase substantial Domestic Market Entitlements. Not only did Government create the property right, but the Potato Marketing Corporation took an individual to court to prevent them from expanding their production in any way other than by purchasing more Domestic Market Entitlements.

⁷⁶⁷ B. Thompson, 'Tony Galati potato charges dropped', *The West Australian*, July 18 2013, <http://au.news.yahoo.com/thewest/a/18042008/tony-galati-potato-charges-dropped/> (accessed 23 June 2014).

- The Potato Marketing Corporation has recently encouraged the establishment of lower-return growing areas. These regions may not be viable if Domestic Market Entitlements are removed.

The ERA notes that there are precedents in the payment of compensation for the removal of production quotas. In the case of dairy deregulation, an 11 cents per litre consumer levy⁷⁶⁸ was placed on milk which funded a program consisting of:⁷⁶⁹

- 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 a 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. Funds were largely distributed on the basis of the impact of the changes on previous farm income. Despite this scheme, there was still considerable hardship within the industry and regional centres. 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.

7.3.6.1 Principles for compensation

The ERA does not recommend compensation for potato growers for the loss of the value of Domestic Market Entitlements, but does suggest principles upon which any assistance be based for those adversely affected by the repeal of the *Marketing of Potatoes Act 1946*:

- Any assistance be provided on an individual needs basis rather than a general basis. This could include assistance to individuals or regions.
- The onus will be on the individual or region to provide evidence to justify compensation (for example, the price paid for Domestic Market Entitlements and period held) as information on the price of such transactions is not collected by the Potato Marketing Corporation.
- Greater assistance is warranted in cases where Domestic Market Entitlements have been purchased recently. In contrast, a grower that paid for Domestic Market Entitlements some time ago may already have received a sufficient return on their investment through higher potato prices.

The ERA has not conducted detailed analysis of the value of compensation that would be required, because this would depend on the structure of the particular compensation package. However, the ERA considers that the claim by the Executive Officer of the Potato

⁷⁶⁸ This was a national scheme so there was no restriction on placing a 'tax' (excise) on goods under s90 of the Australian Constitution.

⁷⁶⁹ Department of Agriculture, 'Deregulation of the Australian dairy industry', <http://www.daff.gov.au/agriculture-food/meat-wool-dairy/dairy/deregulation-of-the-Australian-dairy-industry>, 2012, (accessed 23 June 2014).

Growers Association in the media⁷⁷⁰ of \$80 to \$100 million is an outlandish claim with no basis.

Any compensation should be well below the current market value of Domestic Market Entitlements, which the ERA estimates to be between \$16 million and \$21 million,⁷⁷¹ but would need to be formally estimated with a full audit of recent transfer values if any compensation were to be paid.

Ideally, any compensation should be funded by the beneficiaries of the reform (that is, consumers) as was the case with the consumer-levy funded dairy assistance measures. However, interpretations of Section 90 of the Constitution prevent State Governments from levying taxes on goods. Furthermore, collection of an industry levy will delay benefits to consumers from reform.

Alternatively, compensation could be funded from public sources. This would not affect the economic benefits of reform, but it will impose the burden of compensation on taxpayers.

7.3.7 Conclusion

The ERA finds that the *Marketing of Potatoes Act 1946* and the *Marketing of Potatoes Regulations 1987* impose a net cost to the Western Australian economy and, even with some market power held by retailers and some adjustment costs, deregulation would lead to a net benefit to the economy.

ACIL Allen submitted that reform in this area will be difficult and the efficiency gain from deregulation will be small.⁷⁷² The ERA accepts that reform will be difficult (as is reform of any industry), but the expected gains from deregulation are worth pursuing.

The net cost to the Western Australian economy of the regulated potato market is a present value of \$33.23 million over the next 15 years. Consumers will benefit by \$43 million over the same time period, but the growing sector will be worse off by \$16 million. While this is not large in the context of the Western Australian economy, excluding an industry from reform 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 costs to the economy.

The ERA recognises that the Potato Marketing Corporation has undertaken significant reforms to remove many of the historical problems associated with the regulation of the industry. However, in the absence of any substantial externalities, a regulated market can never achieve the efficiency of a well-functioning free market.

Consequently, the ERA recommends that the *Marketing of Potatoes Act 1946* and the *Marketing of Potatoes Regulation 1987* should be repealed. The ERA does not offer a recommendation on whether this should be phased in or immediate, but does note that the process should be irreversible.

⁷⁷⁰ B. Thompson, 'Spud men spit chips over free market', *The West Australian*, 12 April 2014, <https://au.news.yahoo.com/thewest/a/22582648/>, (accessed 23 June 2014).

⁷⁷¹ The \$15 million is permanent transfer value of \$300 per tonne on 54,000 tonnes while the \$21 million is \$400 per tonne on the same quantity. The lease values would imply a higher figure, but the ERA considers it likely that capital values are low relative to lease values due to the risk of holding a government-created asset. The ERA considers that compensation should be based on the capital value of Domestic Market Entitlements.

⁷⁷² ACIL Allen Consulting (March 2014) Regulation and the potato industry in WA, p35

The ERA does not provide a recommendation on compensation as this will not significantly affect the distribution of economic benefits from deregulation. However, Government may choose to change the distribution of costs and benefits if it so chooses.

7.3.8 Recommendation

41. Repeal the *Marketing of Potatoes Act 1946* and *Marketing of Potatoes Regulations 1987*.

7.4 Domestic Gas Reservation Policy

7.4.1 Introduction

In October 2006, the Government of Western Australia adopted the Western Australian 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.⁷⁷³ 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”.⁷⁷⁴

The ERA notes that other issues, such as the joint marketing arrangements of domestic gas supply and retention leases may also affect the domestic gas market in Western Australia, but has particularly focussed on the DGR policy.

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. However, after careful consideration of the current gas market, the ERA is of the view that the DGR policy is not required; indeed, the DGR policy is likely to inhibit development of the Western Australian gas market in the long term.

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.

However, introducing a policy that artificially restrains price rises does not necessarily provide a sustainable approach to achieving efficient outcomes. Rather, removing barriers and providing incentives for more investors to enter the market is more likely to achieve an efficient and sustainable market to the long term benefit of consumers in Western Australia.

The ERA also notes that Fortescue Metals Group, which is a major gas user, has recently called for a transition away from the DGR policy to a transparent and rigorous “use it, or lose it” approach to retention leases.⁷⁷⁵

The ERA believes that the DGR policy should be rescinded as soon as practical. 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, the DGR policy has the following negative consequences:

⁷⁷³ 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.

⁷⁷⁴ Department of Premier and Cabinet, *Western Australian Government Policy on Securing Domestic Gas Supplies*, 2006.

⁷⁷⁵ This was a result of research done by Deloitte Access Economics on behalf of Fortescue Metals Group into the Western Australia’s gas sector. For more information please see *Deloitte Access Economics, Fortescue Metals Group: Western Australia gas sector analysis, 2014 and Fortescue Metals Group Ltd, Australia must maximise its natural gas advantage, 2014*.

- 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.
- 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 inhibits dynamic efficiency and technological innovation. For example, the policy artificially depresses domestic prices, which discourages domestic gas users from investing in technologies to lower or substitute their gas consumption.
- It increases reliance on subsidised gas prices, leading to over consumption of the resource.

The ERA acknowledges that rescinding the reservation policy may involve some structural adjustments in the domestic market. Gas will go to its highest market 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; and 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 in response to the Discussion Paper and Draft Report;
- the ERA’s assessments in response to public submissions;
- a discussion of other issues affecting the domestic gas supply market in Western Australia; including joint-marketing arrangements and retention lease policy; and
- the ERA’s conclusions and recommendation.

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.⁷⁷⁶

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

⁷⁷⁶ 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.

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.⁷⁷⁷

SECWA also entered into a contract with the NWSJV 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**).⁷⁷⁸

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.⁷⁷⁹ 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 GJ at the field gate.⁷⁸⁰

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 gas consumption is forecast to have nearly doubled since 1990.⁷⁸¹
- Increasing development of LNG facilities, which have reduced barriers to export and make the export parity price more relevant than 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.⁷⁸²
- 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 market conditions at the time the

⁷⁷⁷ The Economic and Industry Standing Committee (WA), *Inquiry into Domestic Gas Price*, Western Australian Legislative Assembly, 2011, p. 5.

⁷⁷⁸ The Economic and Industry Standing Committee (WA), *Inquiry into Domestic Gas Price*, Western Australian Legislative Assembly, 2011, p. 6.

⁷⁷⁹ The Economic and Industry Standing Committee (WA), *Inquiry into Domestic Gas Price*, Western Australian Legislative Assembly, 2011, p. 5.

⁷⁸⁰ The Economic and Industry Standing Committee (WA), *Inquiry into Domestic Gas Price*, Western Australian Legislative Assembly, 2011, p. 6.

⁷⁸¹ T. Wood and L. Carter, *Getting gas right, Australia's energy challenge*, Grattan Institute, 2013.

⁷⁸² T. Wood and L. Carter, *Getting gas right, Australia's energy challenge*, Grattan Institute, 2013.

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 GJ reportedly under the legacy contracts to around \$6 to \$7 per GJ – 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 supply. In other words, the Government intervention was in response to 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.⁷⁸³ Both Apache's and Woodside's operations produce gas from the Carnarvon Basin.⁷⁸⁴ The balance of domestic gas comes from a range of smaller projects in the Perth Basin.⁷⁸⁵

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.⁷⁸⁶ 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 Western Australian 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:⁷⁸⁷

- 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;
 - 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.

⁷⁸³ The Economic and Industry Standing Committee (WA), *Inquiry into Domestic Gas Price*, Western Australian Legislative Assembly, 2011, p. 4.

⁷⁸⁴ The Carnarvon Basin is a geological basin located in the north west of Western Australia. 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.

⁷⁸⁵ 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.

⁷⁸⁶ The Economic and Industry Standing Committee (WA), *Inquiry into Domestic Gas Price*, Western Australian Legislative Assembly, 2011, p. 3.

⁷⁸⁷ Department of State Development (WA), *Domestic Gas Reservation Policy*, available at <http://www.dsd.wa.gov.au/8482.aspx>, accessed on 24th March 2014.

- 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.
- 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.⁷⁸⁸

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) of the DGR policy to the economy as a whole is limited. Two studies were commissioned by participants on the demand side of the market and 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 applied.

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 (**NIEIR**), 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

⁷⁸⁸ Australian Government, 2012, *Energy White Paper 2012 – Australia's energy transformation*, 2012, pp. 143-144.

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.

“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.”⁷⁸⁹

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 Australian Petroleum Production and Exploration Association (**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 Western Australian 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);

⁷⁸⁹ National Institute of Economic and Industry Research, 2012, *Large scale export of East Coast Australia natural gas: Unintended consequences - A study of the national interest effects of the structure of the Australian gas industry*, A report to The Australian Industry Group and the Plastics and Chemicals Industries Association.

- 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's report prepared for the ERA.⁷⁹⁰

7.4.3 Submissions

The ERA received six submissions on the DGR policy in response to its Draft Report. Three supported the ERA's position in the Draft Report and three disagreed with it. This is in addition to seven submissions that were received on this topic in response to the Discussion Paper released in November 2013. All submissions received in response to the Discussion Paper, as well as those received in response to the Draft Report, are summarised below.

7.4.3.1 The Australian Petroleum Production and Exploration Association

The APPEA opposed the continued application of the DGR policy in its submission in response to the ERA's Discussion Paper.

The APPEA argued that there is no identifiable market failure in relation to the supply of gas to the domestic market. The 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, the 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."

In response to the ERA's Draft Report, the APPEA submitted that there is a misuse of the term "market failure" by the proponents of the DGR policy. APPEA considers that the term "market failure" has a clear technical meaning that can be used to assess three different aspects of the domestic gas reservation argument:

- (i) Some parties experiencing the consequences of a market in disequilibrium does not necessarily mean that there is a market failure. Suppressing market signals will aggravate rather than resolve any imbalance.
- (ii) In economies that are broadly in equilibrium, the fact that some parties believe that they are not getting as good a deal as they might does not mean there is a market failure.
- (iii) Even where there are market failures, it does not necessarily follow that society would be better off seeking to correct the situation. All forms of government intervention involve costs, and those costs may exceed the efficiency benefits achievable from correcting the market failure.

The APPEA also argued that the DGR policy results in uncertainty for both domestic gas producers and users. For domestic gas producers, development plans can be adversely affected by the sanctioning of an unrelated LNG project and by "reservation gas" being allocated for the domestic market. For domestic gas consumers, they may defer making

⁷⁹⁰ ACIL Allen's report is available on the ERA's website www.erawa.com.au

commercial arrangements with domestic suppliers for gas because of the prospect that “reservation gas” will be secured by government policy and be available on better commercial terms.

The APPEA also argued that the proponents of DGR policies are incorrect to use an increase in expenditure on exploration following the introduction of the Western Australian DGR policy as evidence to support the conclusion that the DGR policy is not a disincentive to upstream producers.

“...annual expenditure on offshore exploration drilling is indeed increasing, however the number of exploration wells drilled offshore is in decline. This is clear evidence of the increasing costs of exploration activity. The average offshore exploration well now costs over \$130 million to drill. In 2003, the average cost was \$8.8 million. Exploration budgets are linked to work program licence obligations, often in three or four year cycles. The impacts of policy decisions made today, for example, are often seen in the exploration sector three or four years later”.

7.4.3.2 The Chamber of Commerce and Industry of Western Australia

In response to the ERA’s Issues Paper, the Chamber of Commerce and Industry of Western Australia (**CCIWA**) stated:

“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.”

7.4.3.3 The Civic Contractors Federation of Western Australia

In response to the ERA’s Draft Report, the Civic Contractors Federation of Western Australia (**CCFWA**) is of the view that the DGR policy is in effect a tax on production and a disincentive for gas producers to invest in new infrastructure. As a consequence, CCFWA agrees with the ERA’s Draft Report to remove the DGR policy.

7.4.3.4 The Department of State Development

In its submission in response to the Draft Report, the Department of State Development (**DSD**) stated that the intent of the DGR policy is to ensure that exporters of LNG also make gas available to the domestic market. This is the case whether processing of the gas for export occurs in conventional shore-based processing facilities or, in the future, on offshore vessels using one of a number of FLNG technologies under development.

In its submission, the DSD also noted that there are no pipeline or electricity connections with markets outside the State. LNG developments are large and require large upfront capital outlays. Producers exhibit a strong preference for a long term, high volume contracts in both domestic and international markets. The DSD concluded that due to an existence of the DGR policy in WA, gas made available from the Gorgon and Wheatstone LNG facilities will secure the State’s energy supply until 2020.

7.4.3.5 Bunbury Wellington Economic Alliance

In its submission in response to the Draft Report, Bunbury Wellington Economic Alliance (**BWEA**) submitted that companies with business operations in the South West include those with a heavy reliance on gas for industrial processing. BWEA argued that there is considerable support amongst these users for the retention of the DGR policy.

7.4.3.6 Alinta

Alinta favoured the continued application of the DGR policy.

In its response to the ERA's Discussion Paper, Alinta also supported 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."

7.4.3.7 The Domestic Gas Alliance

It is not clear from the submission of the DomGas Alliance what it considers is the market failure 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."

In addition, 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 response to the Draft Report, the DomGas Alliance submitted that the ERA gave no consideration to the broader economic benefit that users of natural gas provided and that the ERA did not identify any real-world cases of the current policy having a detrimental impact on investment, production or export decisions in a Western Australian context.

The DomGas Alliance presented what it considers to be the three facts about the real world outcomes in Western Australia under a DGR policy: (i) investment in exploration for oil and gas has continued to grow to record levels; (ii) the LNG export industry continues to post record levels of LNG exports; and (iii) investment in new projects in 2013 alone stood at an estimated \$116 billion.

The DomGas Alliance also argued that removal of the policy would have significant and serious implications for domestic industry in Western Australia and that the market for gas is already tight and the advent of FLNG will only exacerbate the problem.

In addition, the DomGas Alliance was of the view that there is no evidence of over consumption of gas in the Western Australian domestic market. They also argued that there is no evidence that the policy has resulted in any projects being deferred or abandoned. The DomGas Alliance submitted that all of the evidence points to the fact that the policy has allowed strong growth in exploration, production and LNG exports.

The DomGas Alliance also noted that the existence of the policy did not prevent investment decisions such as production facilities coming on-stream with the Devils Creek and Macedon projects.

“The ERA’s draft report regrettably does not consider or analyse the reverse of the argument. While the Deloitte argument is that higher domestic prices (linked to global prices) will attract new investment into projects (particularly on-shore projects) aimed at supplying the domestic market, it makes no reference to the effects of demand destruction. Higher domestic prices would inevitably destroy demand and this impact must be considered. In other words, removal of the domestic reservation policy may suit the off-shore based LNG exporters but would do nothing to encourage on-shore production for the domestic market.”

The DomGas Alliance also argued that joint marketing is one of the factors that is distorting the Western Australian market and the ERA was silent on this issue in the Draft Report.

7.4.3.8 The Energy Supply Association of Australia

The Energy Supply Association of Australia (**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 about 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 the DGR policy.

7.4.4 ERA’s assessment

The above public submissions can be grouped into the following topics:

- Insufficient domestic gas supply in Western Australia leads to a market failure that then requires a DGR policy to respond to the failure.
- There is no evidence to prove an adverse effect due to the presence of the DGR policy in Western Australia.
- A DGR policy is effectively a subsidy to gas intensive business at the expense of other businesses.

In conducting its assessment of the DGR policy in response to the above groups of submissions, the ERA has focussed its analysis on:

- whether there is a market failure that warrants government intervention in the domestic gas market;
- whether there is any evidence to demonstrate that the DGR policy has adverse effects; and
- whether there is a theoretical and practical evidence to support the argument that the DGR policy is a subsidy to gas intensive businesses.

7.4.4.1 Is there a market failure?

Proponents of the DGR policy such as the Domgas Alliance and Alinta submitted that there is not enough domestic supply of gas into the Western Australian economy. As a result, the DGP policy is needed to ensure that demand for domestic gas is fulfilled.

Private sector investors undertake gas exploration and production based on their assessment of future demand and the likely returns that they may earn. The risks of earning lower than expected returns (by attracting lower than expected prices, for example) lies with the investor alone. Any intervention in the market dynamics must therefore be based on well-grounded reasons to ensure that investment in this industry is not compromised.

The DGR policy intervenes in the market dynamics by requiring investors to provide gas to the domestic market. This policy is based on the premise that, left to their own accord, investors in the gas market will not supply sufficient gas to the domestic market, thereby endangering Western Australian industries that rely on gas as the energy source. That is, the policy is based on the premise of market failure.

In this section, the ERA assesses whether this justification (of market failure) is valid such that it warrants a government intervention through the DGR policy.

It is important to note that the presence of high prices in a market is not indicative of market failure. For an internationally traded commodity, such as natural gas, it is economically efficient to let world prices influence 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.”⁷⁹¹

Due to the reasons outlined above, the ERA rejects the notion 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, not a reflection of any current 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.

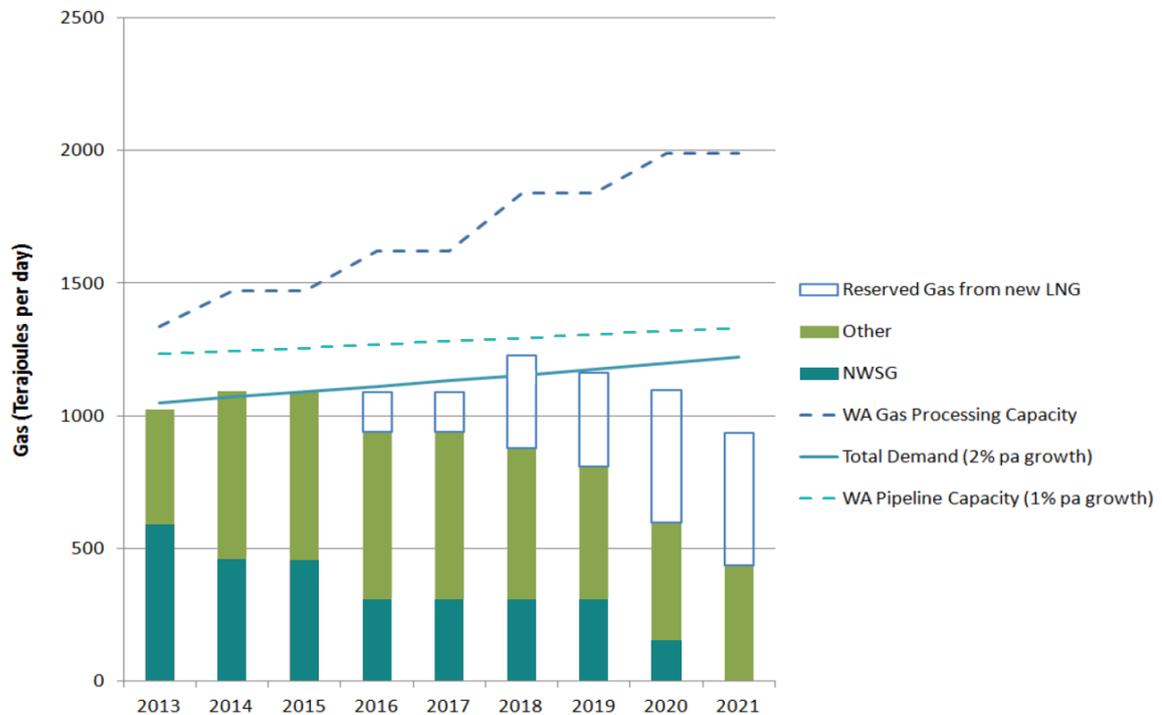
It is argued that the Western Australian domestic gas market faces an ongoing lack of supply and that the supply of gas currently coming from the North West Shelf JV might decrease by two-thirds by 2020, leading to higher prices for local consumers and businesses. The DomGas Alliance estimates that, 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.⁷⁹²

⁷⁹¹ Department of Resources, Energy and Tourism, *Energy White Paper, 2012: Australia's energy transformation*, 2012. pp. 143-144.

⁷⁹² DomGas Alliance, *Submission to the ERA's Inquiry into Microeconomic Reform in Western Australia*, 2014, p. 3.

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.⁷⁹³

Figure 42 Gas supply, demand and infrastructure capacity in Western Australia, as projected by the DomGas Alliance

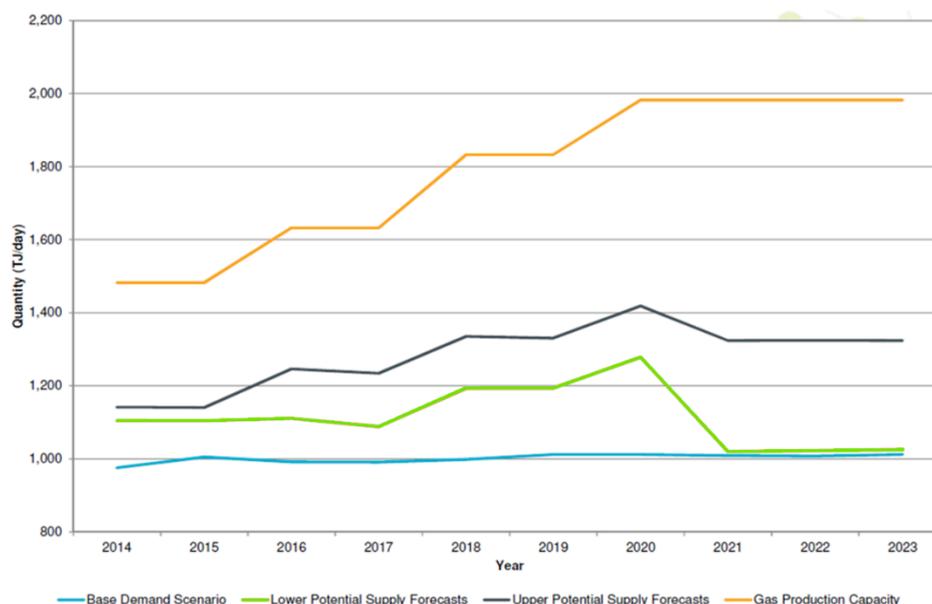


Source: DomGas Alliance

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 42.

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).

⁷⁹³ DomGas Alliance, *Submission to the ERA's Inquiry into Microeconomic Reform in Western Australia*, 2014, p. 5.

Figure 43 Gas supply and demand balance, 2014 - 2023, as projected by the IMO

Source: Gas Statement of Opportunities, Independent Market Operator, January 2014.

The IMO states that the NWS 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 NWS JV 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 NWS JV 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”.

The IMO concluded that:

“the domestic gas market will be well supplied for the period from 2014 to 2020, the year in which the last of the existing NWS domestic gas supply contracts are estimated to expire.

However, for the 2021 to 2023 period, the balance of gas supply and demand in the WA domestic market is contingent on the continuation of supply from the NWS. The Upper potential supply forecasts suggest that the market will continue to be well supplied if the NWS continues to supply to the domestic market. However, the Lower potential supply forecasts suggest tight market conditions (at forecast prices) with the relatively small gap between demand and supply being within the margins of error of the forecasts.”⁷⁹⁴

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:

⁷⁹⁴ The Independent Market Operator, Gas Statement of Opportunities, January 2014.

- 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 generation⁷⁹⁵ 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 being particularly strong.⁷⁹⁶ 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.

Over the last few years, a number of significant domestic gas plants have commenced operations in Western Australia, including Devil Creek (operated by Apache Energy) and Macedon (operated by BHP Billiton). These two projects are designed to supply gas into the Western Australian domestic market only. There are no exports of gas coming from these two projects. A study by Deloitte Access Economics estimates that the prices required to achieve a commercial return (considered to be 12 per cent) for both these projects is below the likely net back international prices, which are estimated within a range of \$10-\$12 per GJ.⁷⁹⁷ This gives further credence to the argument that the domestic gas market performs well.

In consultation with Apache Energy, it was noted that Devil Creek could be further expanded. However, Apache Energy noted that expansion of Devil Creek, at this stage, is not commercially feasible due to lack of domestic demand.⁷⁹⁸ This further demonstrates that there is gas supply available in the domestic market. It is argued by Deloitte Access Economics that if prices are not suppressed (directly, or indirectly through DGR policy), domestic projects are likely to evolve to meet the expected domestic demand in the future.

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 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 assumption that the other inputs have no opportunity cost 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:

⁷⁹⁵ The Independent Market Operator, *Electricity Statement of Opportunities June 2013*, 2013.

⁷⁹⁶ G, Barbose, N. Darghouth, and R. Wiser, 2012 *Tracking the Sun V An Historical Summary of the Installed Price of Photovoltaics in the United States from 1998 to 2011*, and National Renewable Energy Laboratory, *IER Wind Task 26: The Past and Future Cost of Wind Energy*, Work Package 2, 2012.

⁷⁹⁷ Deloitte Access Economics, *Western Australia gas sector analysis: Final Report*, for Fortescue Metals Group, 2014.

⁷⁹⁸ Email communication with Apache Energy, 18 June 2014.

“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 unemployed and (b) the activities displaced by the project would not also have made use of the idle resources.”⁷⁹⁹

Equally, other credible studies have commented on this flawed assumption used in the ‘multiplier’ argument. Deloitte Access Economics have stated that:

“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 (NIEIR 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.”⁸⁰⁰

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:

“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.”⁸⁰¹

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.⁸⁰²

⁷⁹⁹ Commonwealth of Australia, *Handbook of Cost Benefit Analysis*, 2006, p.118.

⁸⁰⁰ Deloitte Access Economics, *The Economic Impacts of a Domestic Gas Reservation*, 2013, p.16

⁸⁰¹ T. Wood and L. Carter *Getting gas right, Australia’s energy challenge*, , Grattan Institute, 2013, p.16

⁸⁰² Productivity Commission, *Review of Regulatory Burden on the Upstream Petroleum (Oil and Gas Sector)*, 2009.

All onshore and offshore gas regulated by the Western Australian Government under the PGERA and the PSLA falls under the DGR policy.

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. FLNG facilities located in Commonwealth waters are not subject to the Western Australian DGR policy.⁸⁰³

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 notes in its report⁸⁰⁴, 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 shares that determine how reallocation of activity between sectors affects the distribution of income between Western Australians and non-Western Australians. Nevertheless, it is likely that the effect on domestic economic welfare will depend as much on the relative welfare weights attached to the winners and losers in the income transfer 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.⁸⁰⁵ 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.

Overall, the ERA agrees with APPEA's view that when the market for domestic gas is in disequilibrium, it does not necessarily mean that there is a market failure. This disequilibrium may be due to market signals being suppressed. The ERA is of the view that as long as market signals are allowed to "work", then any imbalance in the Western Australian domestic market will be corrected and the DGR policy is not needed.

7.4.4.2 Impact of DGR policy on Investment

In response to the Draft Report, the Domgas Alliance submitted that there is no evidence to support the view that the presence of the DGR policy hinders the development of gas producing industry in Western Australia. The Domgas Alliance argued that there are three facts about the real world outcomes in Western Australia under a DGR policy: (i) investment in exploration for oil and gas has continued to grow to record levels; (ii) the LNG export industry continues to post record levels of LNG exports; and (iii) investment in new projects in 2013 alone stood at an estimated \$116 billion.

The Domgas Alliance considers that the DGR policy does not have any adverse effects on the gas production industry in Western Australia and that the purpose of the policy is to ensure there is sufficient supply of domestic gas into Western Australians market. As a

⁸⁰³ A. Haylen. and D. Montoya, *Gas: Resources, Industry Structure and Domestic Gas Reservation Policies*, New South Wales Parliamentary Research Service, 2013.

⁸⁰⁴ ACIL Allen, *Domgas Reservation Policy, Review of Literature And Policy Recommendations*, 2014.

⁸⁰⁵ 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, 2006.

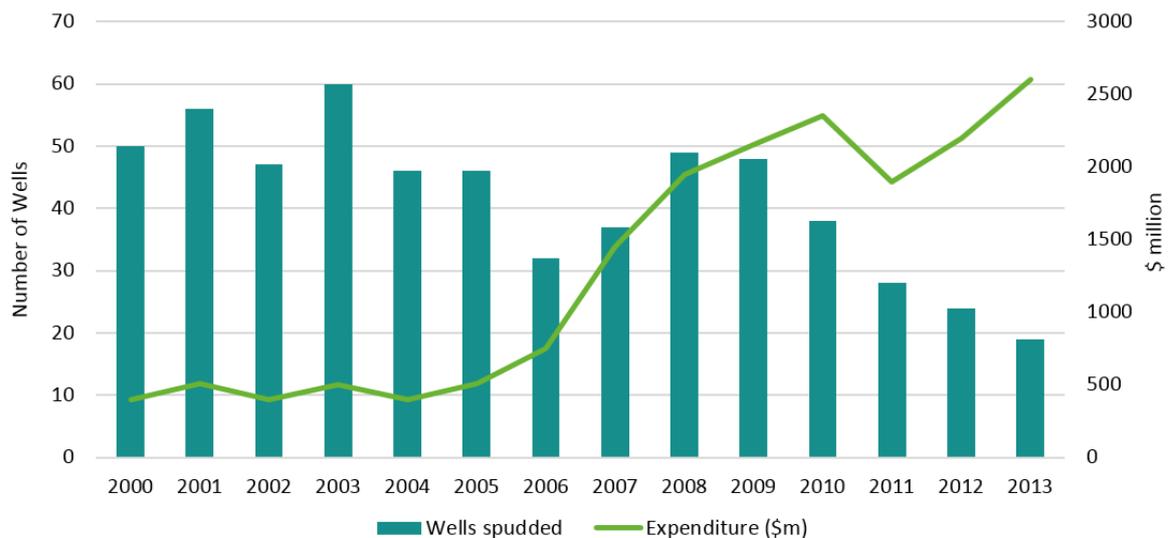
result, the Domgas Alliance considers that the DGR policy should be maintained in its existing form.

These statements, and their implications for the DGR policy, are discussed below.

Continued growth in exploration for oil and gas

The ERA agrees that annual offshore exploration expenditure has significantly increased since 2006 – the year when the DGR policy was adopted in Western Australia.

Figure 44 Annual offshore exploration expenditure and activity, 2000 - 2013



Source: APPEA, 2014.

However, the ERA holds the view that increased investment in the annual exploration expenditure, in itself, does not suggest that the DGR policy is not affecting further potential growth.

The expenditure may be due to various other reasons. In its submission to the ERA, the APPEA stated that:

“... annual expenditure on offshore exploration drilling is indeed increasing, however the number of exploration wells drilled offshore is in decline. This is clear evidence of the increasing costs of exploration activity. The average offshore exploration well now costs over \$130 million to drill. In 2003, the average cost was \$8.8 million. Exploration budgets are linked to work program licence obligations, often in three or four year cycles. The impacts of policy decisions made today, for example, are often seen in the exploration sector three or four years later.”

Since there is no evidence of any causal relationship between the DGR policy and annual expenditure on gas exploration, the ERA rejects the notion that the increased expenditure demonstrates that the DGR policy is not having an adverse effect on the industry.

Record levels of LNG exports

The ERA is aware that natural gas has steadily risen in prominence as a component of the global energy mix. Since 2000, total global demand for natural gas is estimated to have increased by about 2.7 per cent per year. Forecasts for growth in demand for liquefied natural gas (LNG) are even more bullish. In its report, Ernst & Young forecast that ‘a broad consensus of industry analysts/observers sees average annual LNG demand growth of

around 5 per cent to 6 per cent per year. By 2030, global LNG demand is expected to be almost double that of the estimated 2012 level of about 250 million metric tonnes.⁸⁰⁶

In addition, China is widely regarded as an emerging market for natural gas. It is reported that the Chinese Government aims to carry a larger share of gas in the energy mix; from about 4 per cent in 2010 to 10 per cent in 2020.⁸⁰⁷

The ERA considers that global demand, and the consequential LNG prices, have been the primary drivers of LNG growth. Again, this does not demonstrate that the DGR policy has not had an adverse effect on the industry and as such, the ERA rejects this argument by the Domgas Alliance.

Increasing Investment

Finally, the ERA considers the argument that significant investment in new projects in 2013 demonstrates that the DGR policy does not have an adverse effect on the industry, is also void of any causal relationship. An increase in investment activities could be influenced by various factors. The suggestion that the DGR policy is not having any impact on investment is speculative at best. It fails to demonstrate that the counterfactual, where no DGR policy exists, may have led to an even greater investment in the industry.

In conclusion, whilst the ERA agrees with the three statements submitted by Domgas Alliance, it does not accept the suggestion that these statements demonstrate that the DGR policy does not hinder economic activities from gas producing sector.

7.4.4.3 DGR policy as a subsidy to gas intensive businesses

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 18. Deloitte Access Economics concludes that a DGR policy:

“...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.”

⁸⁰⁶ Ernst & Young, *Global LNG: Will new demand and new supply mean new pricing?* 2013

⁸⁰⁷ The Economic and Industry Standing Committee, *The Economic impact of floating LNG on Western Australia*, Western Australian Legislative Assembly.

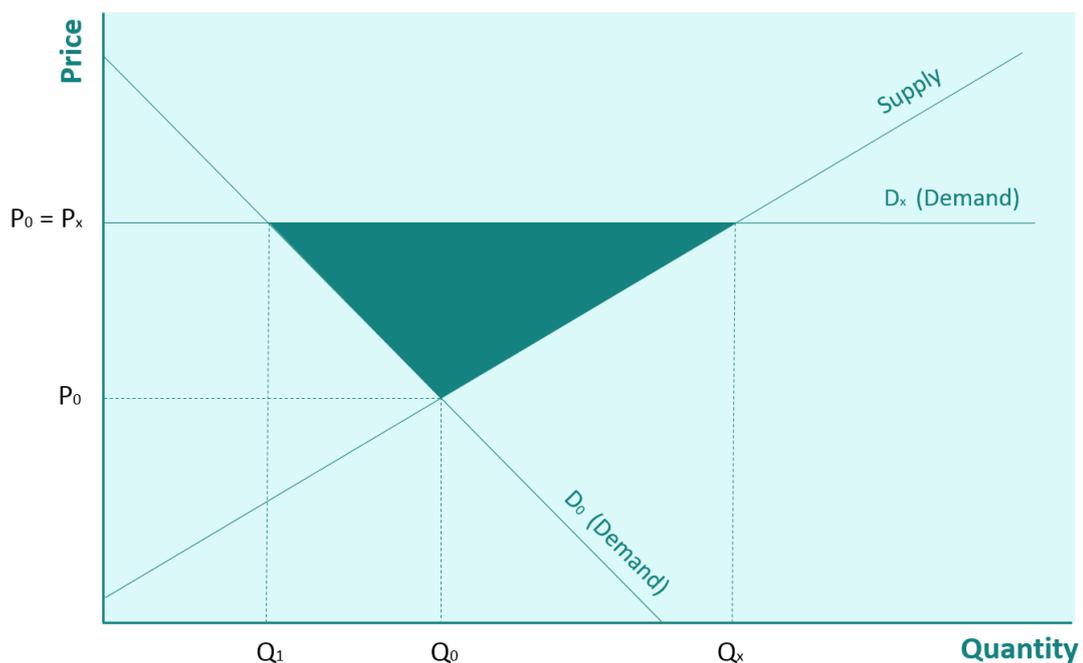
Box 18 Report findings of Deloitte Access Economics

A free, open market for gas

In a free, open market, facing an export parity price (P_x) above the domestic non-trade price (P_0), 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. $P_D = P_x$).⁴ Domestic users respond to this price by reducing the amount they purchase (from Q_0 to Q_1 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 Q_0 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 dark shaded area in Figure 3.1). Intuitively, in the absence of trade, the domestic price of gas represents the value of a unit to the economy. When facing a higher export price, the country realises more value by exporting that unit to where it is more highly valued than using it domestically. In this sense, prices guide resources to their most valuable use and the economic value realised is maximised. This value flows not merely to directly affected industries, but is diffused across the economy via wages to workers, profits to shareholders, income to interlinked sectors and tax revenues to government.

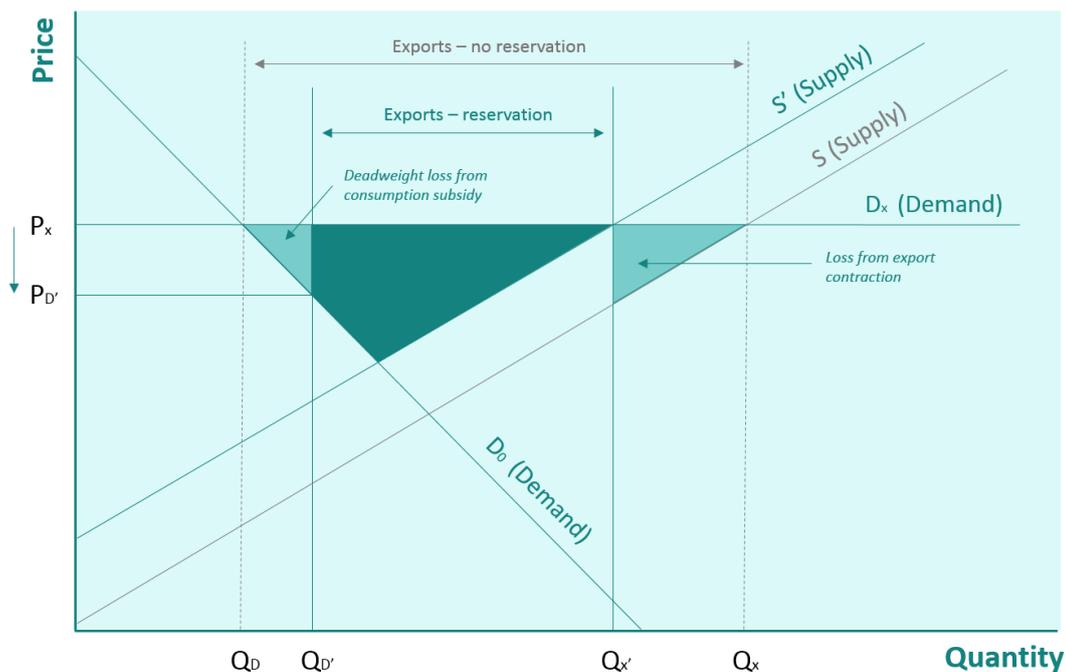
A gas reservation policy imposed

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 $Q_X - Q_D$ to $Q_X' - Q_{D'}$ 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 blue-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 blue-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.

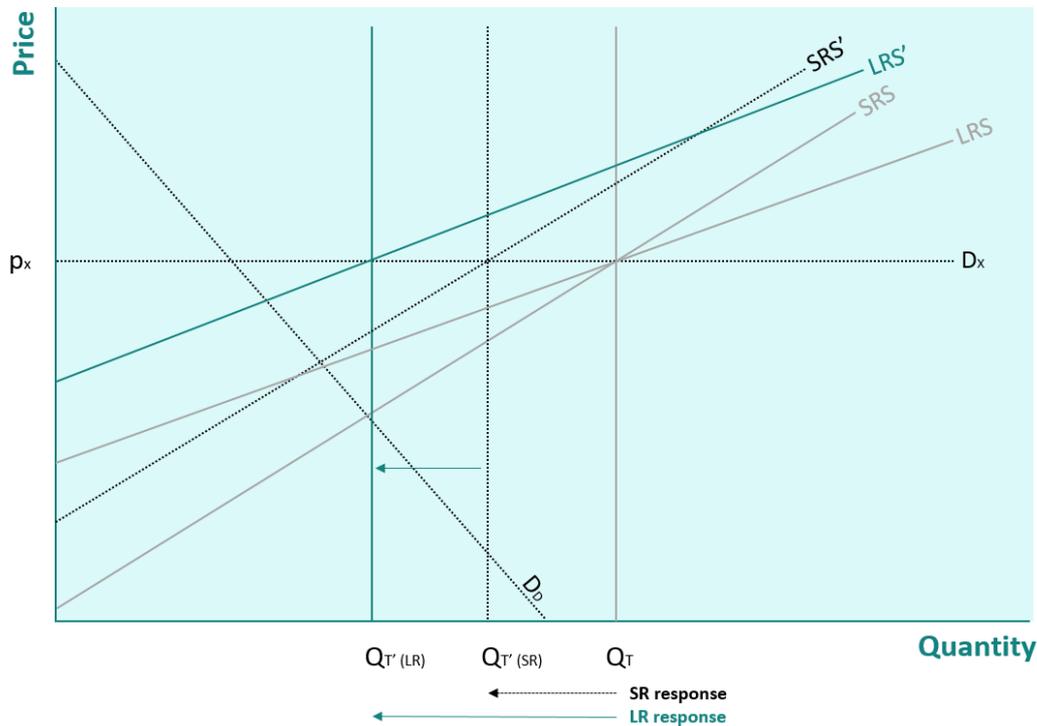
In the long run, however, domestic producers will respond to the lower return on gas production through their investment decisions. Less profitable gas production will lead to a reduction in investment in the industry and, as a result, total supply will fall even further.

The recent experience in Western Australia stands as testament to this. 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.

Figure 3.3: Short and long run responses to a production tax



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: Deloitte Access Economics, *The Economic Impacts of a Domestic Gas Reservation*, 2013, pp 10-13

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, a DGR 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 expenditure 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.

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 in gas production 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 that shows that total gas exploration in Western Australia has increased after the announcement of the DGR 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 driven by high international oil and gas prices. Indeed, exploration for gas specifically for the domestic market would likely have been higher had the DGR policy not been in place.

In a recent report by Deloitte Access Economics, commissioned by Fortescue Metals Group (**FMG**), a member of the DomGas Alliance, it was stated that “in hindering the ability of markets to function effectively, domestic gas reservation policies are generally likely to create adverse economic outcomes in the longer term.” It goes on to say that, “for these reasons, we do not advocate domestic gas reservation policies.”⁸⁰⁸

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 DGR 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.

⁸⁰⁸ Deloitte Access Economics, *Western Australia Gas Sector Analysis*, prepared for the Fortescue Metals Group, 2014.

- 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 DGR 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 those 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.

7.4.5 Other issues affecting the domestic gas supply market in Western Australia

There are two other arrangements that exist in the domestic gas market, which would impact on domestic gas supply in Western Australia: (i) the joint marketing arrangements; and (ii) the retention lease policy. These arrangements are discussed below.

7.4.5.1 The joint marketing arrangements

The Australian Competition and Consumer Commission (**ACCC**) is the independent Australian Government agency responsible for administering the *Competition and Consumer Act 2010* (the Act). A key objective of the Act is to prevent anti-competitive conduct, to encourage competition and efficiency in business and enhance the welfare of Australians.

The Act, however, allows businesses to obtain protection from legal action in certain circumstances for conduct that might otherwise raise concerns under the competition provisions of the Act. One way businesses may obtain protection is to apply for what is known as an 'authorisation' from the ACCC.

Under certain circumstances, the ACCC may authorise entities to engage in conduct that would ordinarily be considered anti-competitive and be in breach of the Act, where it is satisfied that the public benefit outweighs any public detriment. Joint marketing of domestic gas falls under this category.

The ACCC has authorised the joint marketing of domestic gas in Western Australia for 30 years (since 1984). Its latest authorisation approval was granted in 2010, for a period of five-years; 1 January 2010 to 31 December 2015.

In its determination, the ACCC considered that joint marketing or separate marketing by the NWS project, in and of itself, is unlikely to have a significant impact on gas prices in Western Australia under the prevailing conditions. However, the ACCC also recognised the potential for anti-competitive detriment to arise if confidential gas marketing and sales information were transferred between producing joint ventures in Western Australia. The ACCC argued that this potential concern can be substantially mitigated by effective ring fencing arrangements.⁸⁰⁹

The ACCC also noted that the expected commencement of new domestic gas supplies in Western Australia is an opportunity for the market to develop. As such, the ACCC concluded that 2015 is an appropriate time to review whether it is commercially viable for domestic gas in Western Australia to be separately marketed.

The ERA is of the view that the net benefit cost assessment of joint marketing arrangements of domestic gas supply in Western Australia has been undertaken by the ACCC; the relevant body authorised to make this decision. The current decision expires in 2015 and arguments for any further extension of the arrangement will be considered by the ACCC next year. However, the ERA considers that the DGR policy is independent of the joint marketing arrangement, although the authorisation of joint marketing arrangement by the ACCC may be dependent on whether the DGR policy remains or not. Accordingly, the joint marketing arrangement is not considered any further by the ERA.

7.4.5.2 The retention lease policies

Gas exploration is an expensive exercise. Once explorers find gas reserves, in some cases the prevailing market conditions may be such that it is not commercially viable to extract and sell gas immediately. This leaves them exposed to losing the title over the reserves, and is therefore a disincentive to invest in gas exploration. To overcome this problem, the Government has introduced retention leases.

A retention lease provides security of title for petroleum resources that are not currently commercially viable but which have genuine development potential (i.e. development is likely to be commercially viable within 15 years).

A key criteria for the issuance of retention leases is the commercial viability test. This test requires that the lease should only be renewed if the lease area is not currently commercially viable but is likely to become commercially viable within the next 15 years.

The commercial viability test is interpreted to mean that the gas could be developed:

- a) given existing knowledge of the field
- b) having regard to prevailing market conditions, and
- c) using proven technology readily available within the industry

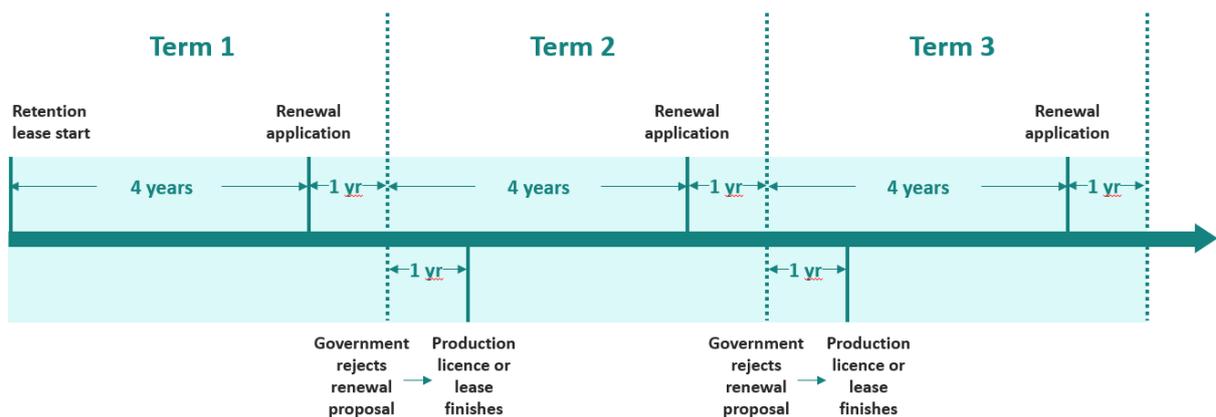
such that the commercial rates of return from recovery of the gas meet or exceed the minimum return considered acceptable for the type of project under consideration by a

⁸⁰⁹ The Australian Competition and Consumer Commission, *Determination – Applications for Authorisation*, 2010, p.76.

reasonable petroleum developer and by investors or lenders to the industry (i.e. an acceptable rate of return).⁸¹⁰ This return is considered to be 12 per cent or more.⁸¹¹

The commercial viability test will be assessed by the Joint Authority - an Authority comprising of a Commonwealth Minister (currently the Minister for Industry) and the relevant State or Northern Territory Minister for a field in Commonwealth waters. When a field is in State waters, the commercial viability test will be assessed by the State Minister. The initial term of retention lease is for 5 years and a lessee must apply for renewal every 5 years. Where the Joint Authority refuses to grant a retention lease, the applicant has 12 months to apply for a production licence.

Figure 45 Australian retention lease operation



Source: NOPTA

Although renewal may be refused, the renewal process has been criticised as lacking transparency and only being reliant on input from the lessor. It is suggested that this non-transparent process of assessing lease renewal applications has allowed gas producers to “hoard” gas for some commercial advantage.

It is argued that prospective acreage for gas fields suitable for supplying the domestic markets, are being “warehoused” by companies to supply the LNG market many years in the future. This is holding back a significant amount of gas that would otherwise be available in the domestic market.⁸¹²

On the other hand, companies argue that it is important for them to be able to hold on to gas reserves to meet their future LNG commitments. Without the lease, they would not be able to enter into long term contracts, which is essential to LNG markets. For example, Mr Chris Sorensen from Gorgon Domgas Marketing defended retention leases as a vital component in the commercial considerations of LNG proponents negotiating long-term contracts.⁸¹³

⁸¹⁰ The National Offshore Petroleum Titles Administrator (NOPTA), *Offshore Petroleum Guideline for Grant and Administration of a Retention Lease*, 2012

⁸¹¹ Department Of Resources, Energy And Tourism, *Offshore Petroleum Guideline For Grant And Administration of a Retention Lease, Guidance Note On Retention Leases Over Petroleum Fields*, Updated May 2012

⁸¹² This argument is made by Apache Energy in its submission to the parliamentary inquiry on domestic gas prices.

⁸¹³ Mr Chris Sorensen, Marketing Manager, Gorgon Domgas Marketing, *Transcript of Evidence to the Economics and Industry Standing Committee Inquiry on Domestic Gas Prices*, 10 November 2010, p.7.

“Retention leases are all about providing gas at the end of the contract. If retention leases are not available, that risks our ability to meet long-term contracts, which is what our customers are looking for.”

With regard to retention leases, the ERA considers that they are an important tool in ensuring the effective functioning of the gas market. However, the process of renewal should be made more open and transparent, so as to allow the lease to be held, or transferred to, those who value it the most and can seek the greatest benefit from them.

In the submission to the Parliamentary Inquiry into domestic gas prices,⁸¹⁴ the ERA stated that there is a need for government to ensure that retention lease arrangements and acreage management are appropriately balanced to provide sufficient time for the upstream gas industry to commercialise discoveries, but not to allow these arrangements to be used to warehouse acreage and thereby sterilise resources that might otherwise be available to the domestic market. The ERA maintains this view on retention lease policy and encourages an open and transparent process for renewing them, ensuring that the market has an opportunity to bid for them.

The ERA also notes that Fortescue Metals Group (**FMG**), has recently called for the enforcement of Retention Lease “Use it, or Lose it” policies to encourage the rational and market-based development of Western Australia’s abundant gas reserves.⁸¹⁵

However, the ERA notes that revising the process of renewing the retention lease may not, in itself, lead to higher domestic gas sales. Existing or new holders of retention lease, may continue to benefit from not extracting the gas. This is because although the value of gas reserves may have increased after the first period of 5 years in which an initial retention lease is granted, it is still not commercially viable for the owners of the retention lease to exploit gas. In principle, a gas reserve should only be exploited to meet the demand if doing so is commercially viable for gas explorers; and if the gas reserve has achieved its full potential of supply. As such, the retention policy may not have a direct or material impact on the DGR policy.

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 clear evidence that there will be a future shortage of domestic gas at any price.

The ERA believes that the DGR policy should be rescinded as soon as practicable. At the very least, it has the following negative consequences:

- It reduces the incentive for investors to invest in the gas industry in the longer term, leading to potential future gas shortages.
- It perpetuates the existence of industries that may not have a comparative advantage in Western Australia at the expense of investment in other industries.

⁸¹⁴ Economic Regulation Authority, *Submission to the Economics and Industry Standing Committee Legislative Assembly*, 1 July 2010 p.32.

⁸¹⁵ Fortescue Metals Group, *Australia must maximise its natural gas advantage*, 2014.

- It inhibits dynamic efficiency and technological innovation.
- It increases reliance on subsidised gas prices, leading to over consumption of the resource.

The ERA notes that, without the DGR policy, gas will go to its highest-value use. To the extent there are differences in the returns gas producers earn from domestic and international markets, prices should adjust to achieve an equilibrium. This should lead to more sustainable prices, more competition and greater security of supply. It will ultimately lead to a more resilient Western Australian economy.

7.4.7 Recommendation

42. Rescind the domestic gas reservation policy as soon as practicable.
43. Ensure the renewal of retention leases process is open and transparent so that it is not used to warehouse acreage.

7.5 The Housing Sector

7.5.1 Introduction

The Housing Authority is tasked with increasing the range of affordable housing options available in Western Australia guided by the Affordable Housing Strategy 2010-2020. The Housing Authority applies a number of policy instruments to increase the availability of affordable rental and home ownership opportunities, including land and housing developments, shared-equity arrangements and loans for rental bonds and the purchase of a property.

The Housing Authority is active in a number of commercial markets in order to deliver these policy instruments, exposing the State Government to financial risk. Major risk areas include the market risk associated with completing housing developments and the credit risk associated with Keystart Loans Limited (**Keystart**), the Government's low deposit home loan scheme. The ERA expressed concerns about these risks in its Draft Report and recommended greater transparency and accountability in the Housing Authority's development activities and the abolition of Keystart.

In response to the Draft Report, the ERA received 19 submissions opposing its recommendation to abolish Keystart. Submitters disputed the ERA's assertion about the risk that is posed by Keystart and were of the view that Keystart helped households transition from public housing to home ownership.

Notwithstanding these submissions, the ERA considers that it is unlikely that Keystart is having a net impact on the level of home ownership amongst low income households. The reason why the ERA holds this view is because the housing market in Western Australia has a supply constraint – it is therefore likely that when a Keystart client is successful in making a purchase, another buyer is unsuccessful. In addition, by adding to demand in a market with constrained supply, Keystart may be inadvertently increasing housing prices.

Further, the ERA considers that there is no compelling reason why Keystart should be publicly owned if all the risks are accounted for in Keystart's current business process, as the private sector could replicate this model. Accordingly, the ERA recommends that the Government explore options for the divestment of Keystart.

In the Draft Report, the ERA expressed concerns that the Housing Authority's development activities expose the Government to significant risk and could lead to significant financial losses for Government. The ERA received one submission disputing its analysis of the Housing Authority's development activities. A key concern was the lack of consideration given to the mandate and strategy that governs the activities of the Housing Authority and the analysis of the One on Aberdeen project.

The issues raised about the activities of the Housing Authority have been responded to in this Final Report. Further consultation with the Housing Authority indicates that it has obtained returns on its development activities that are consistent with the returns that would be expected by the private sector.

However, the ERA observes that direct investment in infrastructure may not always be the most efficient way for the Government to achieve policy objectives. For example, the Housing Authority's range of development activities are designed to respond to the fact that affordable dwellings are not typically built by the private sector. This may in part be caused by other Government policies (such as State and local government regulations that increase the cost of housing developments and encourage the development of higher cost

dwelling). Addressing regulatory burden could help to improve the supply of affordable housing without the cost and risk to Government that is associated with development activities. Reflecting this, the ERA considers that a review into State and local government regulation of dwelling construction and residential land development should be undertaken.

The ERA considers that the Housing Authority's current activities in increasing the supply of affordable housing should be temporary (given the current market conditions and the apparent lack of incentive for the private sector to construct an adequate supply of affordable housing); and, ideally, the Housing Authority's activities would be restricted to the demonstration of new and innovative designs.

Overall, the ERA has concerns about the effectiveness of the policy instruments that the Housing Authority applies to improve housing affordability and the risk that some of its activities pose to Government finances. The ERA considers that these issues warrant further investigation by the Government, reflecting the complexity of housing affordability issues and the policy response of the Housing Authority.

7.5.2 Overview

7.5.2.1 The mandate of the Housing Authority

The Housing Authority is a statutory authority of the Western Australian Government, established under *The Housing Act 1980 (the Act)* and tasked with increasing the range of housing options that are affordable for households on low-to-moderate incomes. The Act contains heads of powers that provide the Housing Authority with a mandate to undertake activities to ensure that housing is affordable.

Amongst other things, the Act provides the Authority with the power to borrow and lend money and to purchase, develop and sell housing and land in Western Australia.

Part III of the Act, *Acquisition, development and disposal of property*, enables the Housing Authority to acquire land and develop this land for the purpose of providing public housing, rental accommodation or the sale of property. The Housing Authority is able to determine rents, leasing arrangements and sale prices for all properties in question. In accordance with its development powers, the Housing Authority is permitted to enter into joint ventures with the private sector.

Part IV of the Act, *Provision by the Authority of financial assistance for housing*, confers powers on the Housing Authority to issue loans to eligible persons for the purchase, construction, or improvement of a house, with loans to be secured by a mortgage in a form approved by the Housing Authority. The Minister for Housing determines the limit on the amount of a loan and approves any interest rate changes determined by the Housing Authority.

The Affordable Housing Strategy (**the Strategy**) provides guidance to the Housing Authority on the use of the powers set down in the Act. The goal of the Strategy is to increase the range of housing opportunities for low-to-moderate income earners⁸¹⁶ that are affordable; and appropriately meet the needs of individual circumstances. Sitting under this goal is a specific objective to facilitate a minimum of 20,000 affordable dwellings by 2020. The Strategy focuses particularly on providing a range of housing options along the housing continuum to address the decline in affordable housing entry points.

⁸¹⁶ In the Strategy, low-to-moderate income earners are defined as households earning between 50 and 120 per cent of the median income. With a median household income of \$82,271, the low-to-moderate income range would be \$41,135 to \$98,725.

7.5.2.2 Policy instruments

The Housing Authority has developed a number of policy instruments to improve housing affordability. These instruments are aimed at either increasing the supply of affordable land and housing or removing barriers that prevent low-to-moderate income earners from maintaining stable housing.

A number of instruments are aimed at assisting eligible households to transition from public housing to private rental accommodation. This is achieved through: mixed tenure developments, where portions of the development are reserved for rental accommodation; issuing interest free loans to assist with bond requirements; and the rental pathways scheme in which the Authority provides private investors with incentives to let their property to households that exceed the income limits for public housing.

The Housing Authority assists households to achieve home ownership through instruments designed to improve the affordability of home ownership. The Housing Authority undertakes activities to increase the affordability of housing and land by increasing its supply. This is achieved through:

- broad acre land development, conducted either by the Authority or in a joint venture arrangement;
- redeveloping existing locations with a high portion of public housing to provide more sustainable suburbs;
- infill development or rezoning of sites in existing suburbs; and
- undertaking housing developments that contain a portion of affordable housing available for sale.⁸¹⁷

In combination with these supply-side initiatives, the Housing Authority attempts to decrease barriers to home ownership by offering shared-equity arrangements and low deposit home loans to low-to-moderate income earners. Shared-equity arrangements offer the buyer an opportunity to own the majority of a property while the Housing Authority retains ownership of the remainder. Buyers are not required to pay rent on the Housing Authority's share and thus the only potential return the Housing Authority earns is through capital gains.⁸¹⁸

Further, the Housing Authority owns Keystart, which provides low deposit home loans to eligible households. The low deposit requirement removes a significant barrier to home ownership for low income earners.

In conducting this Inquiry, the ERA has examined the commercial risks posed by the Government's housing infrastructure activities. In particular, the ERA has examined the Housing Authority's development activities and Keystart to investigate the effect that the activities have on housing affordability and the risks that the activities pose to Government finances.

⁸¹⁷ The Housing Authority (WA), *Annual Report 2012/13*, 2013.

⁸¹⁸ In general, and over the long term, it is expected that capital gains are approximately zero in real terms.

7.5.3 Keystart

7.5.3.1 Introduction

Keystart was established in 1989 as an incorporated company wholly owned by the Housing Authority (through its Chief Executive Officer). 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 purchase.

Since its inception, Keystart has assisted more than 80,000 Western Australians into home ownership.⁸¹⁹ The program expanded rapidly following the Global Financial Crisis (**GFC**) in the late 2000s, with Keystart approving 20,000 loans in the period from 2008 to 2010. As of October 2013, the Keystart loan book consisted of over 16,000 loans at a total value of almost \$3.5 billion.⁸²⁰

The operations of Keystart are intended to help address a market failure in home ownership. Home ownership results in positive externalities for society, with associated benefits including higher education outcomes for children, stable employment, social inclusion and a range of better health outcomes⁸²¹. To the extent that individuals do not factor in these positive externalities when purchasing homes, home ownership occurs at rates below the socially optimal level. Keystart may therefore provide a social benefit by facilitating an increase in home ownership over and above what would have happened had it not been present. Such government intervention in the housing market may be justified if the benefits of this externality exceed the risks posed by Keystart and if Keystart is the most cost-effective way of addressing the externality.

There are several features of Keystart's operations that appear to be high risk, particularly when compared to the operations of private sector lenders.

- Keystart clients are inherently riskier than those serviced by the private sector. This is because the purpose of Keystart is to assist individuals who otherwise would not be able to access finance from the private sector, and as such lends to: individuals on lower incomes; individuals with smaller deposits relative to the value of the property they are purchasing; and some home buyers in regional areas.
- Interest rates charged by Keystart are higher than the average of the home lending market (but the same as the average of the four largest lending institutions). For this reason, Keystart clients tend to seek finance from the private sector at lower interest once they are able to meet the lending criteria, leaving Keystart with the higher risk borrowers.
- Keystart issues a greater number of loans during economic downturns, when other lenders generally reduce the number of loans that they issue.

⁸¹⁹ Keystart, *About Us*, 2014 <http://www.keystart.com.au/about-us/about-us> (Accessed 20 June 2014).

⁸²⁰ 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.

⁸²¹ See, for example, D. DiPasquale and E. Glaeser, 'Incentives and Social Capital: Are Homeowners Better Citizens?', *Journal of Urban Economics*, vol. 45, no. 2, 1999, p.354. and G. Engelhardt et al, 'What are the social benefits of homeownership? Experimental evidence for low-income households', *Journal of Urban Economics*, vol. 67, no. 3, 2010, p. 249.

Keystart is underwritten by the State Government, and as such, the State Government bears the risks associated with the Keystart loan book.

In the Draft Report, the ERA recommended that Keystart be abolished, primarily on the basis of the risk that Keystart poses to State Government finances.

The ERA received a large number of submissions from organisations defending the role of Keystart and arguing against its abolition. The main arguments made in favour of the retention of Keystart include that it:

- assists people into home ownership, which has a broader benefit to society by freeing up accommodation for others, and is of particular benefit in the regions where private lenders are generally less willing to offer finance;
- generates an income for government and does so at low risk (as reflected by a low arrears rate amongst Keystart borrowers); and
- supports the construction industry by increasing demand for new houses and by smoothing the cyclical nature of housing construction by maintaining lending during economic downturns.

The ERA has considered and responded to these, and other, arguments in favour of Keystart in this Final Report.

The ERA is still of the view that Keystart is likely to represent a significant risk to the finances of the State Government, but has not been able to conclusively determine whether this is the case.

The ERA considers that, if the risks are fully internalised⁸²² into the rate of return, then there is no compelling reason why the private sector would not be interested in owning Keystart. Accordingly, the ERA recommends that the Government explore options for divesting Keystart.

However, should the Government attempt to divest Keystart and find that there is no private sector interest then this is indicative that the risks have not been internalised. If this is the case, the Government is not being fully compensated for the risks, and if the Government wants to continue operating Keystart, it should review how it can best manage this risk and reflect the risk on its balance sheet. One of the ways to do this would be to contract for private sector provision of the service. The arrangement would need to establish clear accountabilities and responsibilities between the Government and any private sector provider.

7.5.3.2 Overview of Keystart

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 requirements being significantly below those of private lenders. The financial conditions

⁸²² The rate of return for an asset (in this case a home loan) should account for the downside risk associated with that asset. Lending to riskier clients is typically done so at a higher interest rate to compensate the lender for the extra risk. If a rate of return is adequate to compensate for risk, then risk is said to be internalised.

required of borrowers obtaining a Keystart loan differ substantially to those typical of private lenders. For example, Keystart⁸²³:

- requires a minimum deposit of 2 per cent of purchase price. Private lenders typically require a minimum of 5 per cent;
- requires a minimum of 1 per cent of the purchase price in genuine savings.⁸²⁴ Private lenders typically require 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 must⁸²⁵:

- 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 cent⁸²⁶ of households or individuals in the Greater Perth area could be eligible for Keystart financing.⁸²⁷ This estimate is not an indication of Keystart's potential market penetration, but an illustration that a portion of Keystart's activities are targeted at households that are outside of the low-to-moderate income earning bracket identified as the Housing Authority's target in the Affordable Housing Strategy. Eligibility requirements that are so broad are an indication that the activities of Keystart go beyond the Housing Authority's policy objectives.

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 are likely to be able to obtain a lower interest rate. Keystart's interest rate is set as the average of the big four banks, which is typically higher than the market average. Borrowers will

⁸²³ Keystart, *Keystart Home Loan Fact Sheet*, 2014. <http://www.keystart.com.au/home-loans/fact-sheet-keystart-home-loan> (accessed 20 June 2014).

⁸²⁴ Typically, savings are considered genuine if they 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.

⁸²⁵ Keystart, *Keystart Home Loan Fact Sheet*, 2014. <http://www.keystart.com.au/home-loans/fact-sheet-keystart-home-loan> (accessed 20 June 2014).

⁸²⁶ 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, *2011 Census of Population and Housing: Greater Perth Basic Community Profile, 2013*; and Australian Bureau of Statistics, *Wage Price Index, Australia, 6345.0, 2013*.

⁸²⁷ Australian Bureau of Statistics, *2011 Census of Population and Housing: Greater Perth Basic Community Profile, 2013*.

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.

7.5.3.3 Findings of the Draft Report

In the Draft Report, the ERA raised a number of concerns regarding Keystart's impact on the housing market and the risk that it poses to Government finances. These issues are summarised in the sections below.

Risk to Government finances

Keystart clients are typically buyers who have been unable to obtain finance from a private lender because they do not meet the criteria imposed by the private sector. These buyers are able to gain financing from Keystart, which has a much lower deposit requirement than that typical in the private sector. As a result, Keystart clients are typically of a higher default risk because they generally have less equity in their homes and lower incomes than those borrowing from the private sector.

Lenders generally charge those at a higher default risk a higher interest rate to compensate the lender for the increased risk. In a home mortgage context, lenders typically charge Lenders Mortgage Insurance (**LMI**) to low deposit borrowers to insure against the increased risk of default. Keystart does not charge LMI and has an interest rate that is the average of the big four banks. Considering this, the ERA was of the view that it is unlikely that Government is being adequately compensated for the risk of lending to higher risk clients.

Risk exposure is exacerbated by the fact that many Keystart clients switch to other loan providers with lower interest rates once they have a proven credit history and have developed sufficient equity in their homes. This process where the lower risk clients switch to an alternate lender could lead to an adverse selection problem where only the higher risk clients remain and the quality of Keystart's loan book deteriorates.

Additionally, Keystart's lending criteria remains constant during economic downturns, whereas its private sector competitors typically apply more stringent lending criteria during such periods. This leads to an increase in Keystart lending as more borrowers are excluded from financing in the private market. At the beginning of the GFC, as the private sector restricted lending, Keystart lending increased by 45 per cent.⁸²⁸ In the period following the GFC, Keystart lending decreased as private lenders eased restrictions. The ERA considered that Keystart further exacerbates the risk it imposes on government finances by increasing lending during periods where economic conditions are poor because it is during these periods that defaults are more likely to occur.

Keystart has historically had low default rates and has delivered dividends to the State Government. However, the chance of default would increase dramatically if Western Australia was to experience a recession. In the event of default, Keystart would be forced to sell the client's property to recover the balance of the loan. Given that Keystart clients typically have low equity, there is less room for housing prices to fall before Keystart, and therefore the State Government, is forced to make a loss on the mortgage. This is what happened to the lending institutions Fannie Mae and Freddie Mac in the United States during the GFC.

The ERA concluded in the Draft Report that Keystart exposes the State Government to an unacceptable level of risk for which it is insufficiently compensated.

⁸²⁸ The Housing Authority (WA), *Annual Report 2008/09*, 2009.

Effect on housing affordability

Keystart is used by the Housing Authority as a means of delivering on social policy. Housing affordability in Western Australia has declined in recent times making it particularly difficult for low-to-moderate income earners to achieve home ownership.

Keystart attempts to address this problem by reducing the upfront costs of purchasing a home. These reductions are in the form of lower deposit requirements and not charging LMI. By removing these costs, Keystart clients are able to pay less for a property than private buyers. This increased competition for housing may force privately financed buyers to pay more to purchase the same property than they would have if Keystart buyers were not present. There is the potential for marginal private buyers to pay higher mortgage repayments for the same purchase price due to the requirement for LMI.

By increasing demand in the market for low-end housing, Keystart potentially disadvantages privately financed buyers by putting inflationary pressure on housing prices. This demand increase is in contrast to the supply increase that is facilitated by other Housing Authority initiatives.

A number of the activities of the Housing Authority are focussed on addressing the likely cause of declining housing affordability: constrained supply. However, at the same time as these policies increase the supply of housing, Keystart increases demand. The ERA was of the view in the Draft Report that increases in demand resulting from Keystart are likely to be offsetting the effect of supply-side policies to some extent.

Draft conclusions

In the Draft Report the ERA concluded that, with Keystart's current interest rates and the absence of LMI, the Government is not adequately compensated for the risk that it is exposed to by providing Keystart loans. The ERA considered that this was evidenced by the fact that the private sector is unwilling to provide finance to this section of the market. Additionally, providing loans to households who would otherwise be unable to access finance increases the demand for low-end housing to the detriment of privately financed buyers in that section of the market and reduces the effectiveness of supply-side policy initiatives.

Reflecting these considerations, the ERA's recommendation in the Draft Report was that Keystart be abolished.

7.5.3.4 Response to Draft Report submissions

The ERA received 19 submissions in response to its recommendation on Keystart in its Draft Report. The organisations that made submissions all argued in favour of retaining Keystart. The ERA received one submission, from Keystart, that contained information that Keystart considered to be commercial in confidence. In the following sections, the ERA has summarised the main points made in these submissions and responded to the points raised.

Role of Keystart in addressing a market failure

Keystart submitted that its activities address a market failure by increasing the level of home ownership.⁸²⁹

As noted in the Draft Report, the ERA considers that there may be a market failure in home ownership on the basis that home ownership results in a positive externality for society. To

⁸²⁹ Keystart, *Submission to the Draft Report of Microeconomic Reform in Western Australia*, pg. 2.

the extent that individuals do not factor in these positive externalities when purchasing homes, home ownership occurs at rates below the socially optimal level. As such, it is possible that Keystart provides a social benefit by facilitating a net increase in home ownership rates over and above what would have happened had it not been present.

Academic literature supports the view that stable housing, particularly home ownership, provides significant social benefits. As noted above, benefits include improved education outcomes for children, stable employment, social inclusion and a range of health benefits. These benefits arising from home ownership result in a positive externality (to the extent that they are captured by the community generally, rather than just individual home buyers) and provide the only market failure that may justify government intervention in the form of Keystart. Societal benefits of this nature have led to the development of government policies that attempt to promote home ownership in many countries.⁸³⁰

However, for government intervention to be justified:

- the positive externality benefits arising from Keystart would need to exceed the costs (including risks) to Government that are associated with delivering the benefit; and
- Keystart would need to be the most cost-effective way of achieving these benefits.

These are significant hurdle criteria and submissions to the ERA have provided little evidence that these two criteria are being met.

The ERA considers that housing affordability is primarily a supply-side issue and believes that measures that increase the supply of housing will make home ownership more affordable and are likely to have a greater impact on the rate of home ownership. Demand-side policies, such as Keystart, are likely to have less impact because they displace other buyers within the market. This point is expanded on in the following section.

Transitioning households along the housing continuum

A number of submitters⁸³¹ argued that Keystart has a positive effect on society by transitioning people through the housing continuum. By transitioning households from the rental market into home ownership, it is argued that Keystart:

- reduces pressure on the private rental market; and
- reduces the reliance on government rental subsidies and public housing, freeing up government funds to be used elsewhere.

Relationships exist between the various forms of housing available to households. Changes that effect the ability of a household to access one form of housing (for example, home ownership) can have flow on effects that make it difficult for other households to access other forms of housing (for example, rental accommodation). These relationships are best illustrated through the housing continuum shown in Figure 46.

⁸³⁰ National Association of Realtors, *Social Benefits of Homeownership and Stable Housing*, 2012.

⁸³¹ Alcock Brown-Neaves Group, BGC Residential, Housing Industry Association, Keystart, Master Builders Australia, the Property Council of Australia, Satterley Property Group, Shelter WA, Urban Development Institute of Australia and the Western Australian Local Government Association.

Figure 46 The Housing Continuum

The desired progression for households is upwards towards outright home ownership. As a household transitions along the continuum, the improved stability of their housing results in a number of social benefits. It is for this reason that governments are concerned with progressing households along this continuum. Each stage of the continuum, from homelessness through to outright home ownership, is directly related to the stages above and below. Economic events that impact on all households at the same stage of the continuum are likely to have flow on effects that impact on households throughout the continuum.

Increases in rent as a share of the disposable income of low income households, for example, may lead to some of these households being unable to afford to rent in the private market. These households must then seek government housing assistance, which increases demand for this service. In an environment where the level of public housing is limited and in high demand this may lead to an increase in the number of people that are either homeless or in inadequate housing.

Conversely, if there is a decrease in rent as a share of the disposable income of low income households then more households are able to move up the continuum, ultimately reducing homelessness and the pressure on the public housing wait list.

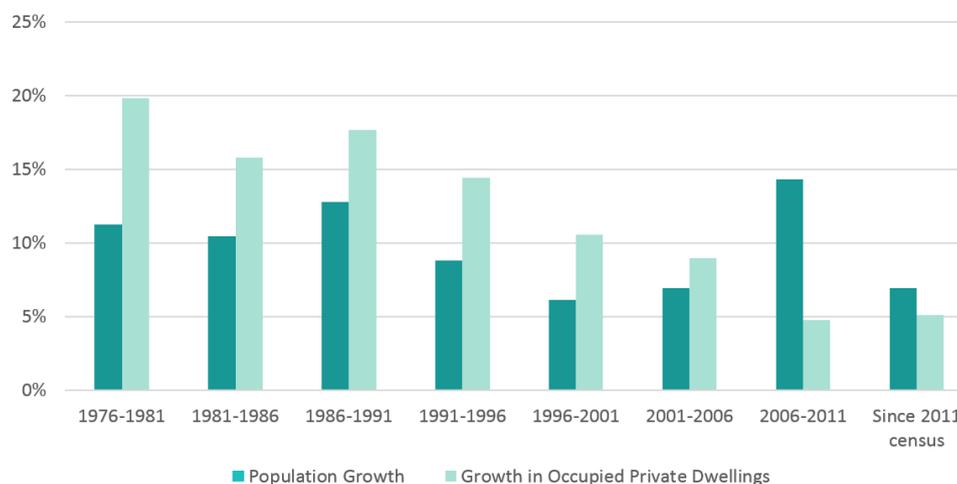
A key determinant of rent is the supply of rental housing. If there is a limited supply of rental housing, then rents will be high. In that event, any policy that facilitates a household's transition into a rental property is likely to prevent another household from making the same transition.

More broadly, if there is a limited supply of housing at any particular stage of the housing continuum, including at the home ownership stage, then policies that facilitate a household's transition into that stage are likely to prevent another household from making the same transition.

The ERA considers that there is evidence that the supply of housing is constrained in its ability to respond to demand, which impacts on the transition of households along the continuum. Over the past decade high population and income growth and persistently low unemployment rates have significantly increased demand for housing in Western Australia. The State's population has grown by 22 per cent since 2006, median household income has increased by 45 per cent over the same period and unemployment has not been above 5.5 per cent for a decade. These factors, combined with a preference for home ownership, have added considerable demand side pressure to the market. In an efficient market,

supply is able to respond to demand quickly and minimise the impact of increased demand on price. However, the construction of new dwellings has failed to keep pace with increasing demand, with the dwelling stock falling relative to population. Figure 47 depicts changes in the housing stock and population in Western Australia since 1981.

Figure 47 Population growth vs growth in housing stock



Source: ABS 3101 and 8752.

The stock of housing grew at a faster rate than population in all periods from 1976 to 2006. However, in the period from 2006 to 2011, the State's population grew at almost triple the rate of its housing stock. This trend has continued in the period since the 2011 census. Since 2006 the population has grown by 444,000⁸³², but only 76,000⁸³³ dwellings have been completed.

This increase in demand has been compounded by demographic changes including a decrease in family sizes; increased family breakdowns; and an aging population that has resulted in more people living alone.⁸³⁴ These demographic changes have resulted in the need for a greater number of dwellings to house any given population – the average number of people per dwelling has decreased from 3 in 1991 to 2.6 in 2011.

Assuming that the preferred housing occupancy rate remains at 2.6, then 171,000 new dwellings would be required to house the increase in population since 2006. The construction of only 76,000 dwellings implies there has been a shortfall of 95,000 dwellings.

The responsiveness of supply to demand is affected by a number of factors. Supply in housing markets is inherently unresponsive to demand as it takes time for increased demand to impact on the market (for example, for developers to react to this impact and to then complete a new development). A range of supply side constraints exist in the Western Australian market including the length and cost of the approval process, issues relating to infrastructure provision and funding and other challenges relating to infill development.⁸³⁵

⁸³² Australian Bureau of Statistics, *Australian Demographic Statistics*, Category 3101.0, 2013

⁸³³ Australian Bureau of Statistics, *Building Activity, Australia*, Category 8752.0, 2013

⁸³⁴ Saul Eslake, *Submission to the Senate Economics References Committee Inquiry into Affordable Housing*, 2014.

⁸³⁵ W. Hsieh, D. Norman, and D. Orsmond, 'Supply-side Issues in the Housing Sector, Reserve Bank of Australia Bulletin – September Quarter', 2012, <http://www.rba.gov.au/publications/bulletin/2012/sep/2.html> (accessed 20 June 2013).

Significant cost and time imposts associated with gaining development approval significantly constrain the housing supply response. Research undertaken by the Urban Development Institute of Australia, Western Australia division (**UDIWA**) found that the minimum timeframe taken from identifying a suitable tract of land to receiving approval to start construction on a new development is approximately 5 years and can be as long as 10 years.⁸³⁶ Compounding this issue is the fact that housing completion takes longer in Western Australia than in any other jurisdiction in Australia.⁸³⁷

Increases in the demand for housing, in a market with constrained supply, put downward pressure on households throughout the continuum. As a considerable portion of the State's population increase can be attributed to skilled migrants looking to take advantage of the mining boom, it could be expected that these migrants would seek housing at the mid to higher end of the spectrum. In a market where supply is constrained, the increased demand results in an increase in housing prices and rents, putting downward pressure on households along the housing continuum and potentially causing an increased reliance on government assistance for housing.

Downward pressure on households across the housing continuum is an undesirable outcome and, naturally, the Housing Authority has attempted to reverse or relieve this pressure. One such method that is utilised for doing so is providing assistance to low income households through Keystart. However, as Keystart increases demand, it is not likely to assist in relieving or reversing downward pressure across the housing continuum.

The ERA considers that Keystart is unlikely to have any net impact on transitioning households along the housing continuum in a market with constrained supply. Given the supply constraints, there is significant competition for properties between buyers. This competition extends to newly constructed properties and new house and land packages that constitute ██████ per cent of Keystart lending.

In the event that a Keystart client is successful in acquiring a property, it is likely that another buyer has been unable to make a purchase as a result. In this way, it is likely that as Keystart transitions one household into home ownership, another household is blocked from making the same transition.

If Keystart is not affecting the housing continuum then it is not assisting in reducing the pressure on the State's public housing waiting list.

Housing Market Impact

Submissions on Keystart's effect on demand and supply in the housing market focussed on two issues; facilitation of supply and overall market impact.

Facilitating supply

Master Builders Australia of Western Australia (**MBAWA**) and the Housing Authority submitted that Keystart facilitates additional entrants into the housing market, encouraging new construction and an increase in housing supply. MBAWA considers that this delivers considerable benefits to the State through increased home ownership, reduced pressure on public housing and rental markets, more affordable housing, the generation of economic activity and increasing redevelopment opportunities.

⁸³⁶ Business News Western Australia, *Red tape stifling affordability*, 12 May 2014, <http://www.businessnews.com.au/article/Red-tape-stifling-affordability> (accessed 20 June 2014).

⁸³⁷ Australian Bureau of Statistics, *Building Activity, Australia*, Category 8752.0, 2013.

In response the ERA considers that policies that result in an increase in the housing supply, given the current housing market conditions, have a number of benefits for housing affordability. However, the ERA considers that policies that increase housing demand in the current market are unlikely to improve housing affordability because they are unlikely to lead to an increase in construction. The reason for this is that developers already have a substantial incentive to build new dwellings due to the level of excess demand that exists. Given the inability of construction to respond to demand increases in recent years, it is unlikely that further demand increases will facilitate an increase in supply.

In any event, increasing supply by increasing demand will not result in housing becoming more affordable, unless supply increases at a greater rate than demand (as the increased supply is simply met by the increased demand).

The ERA notes the Housing Authority's view that the private sector, for whatever reason, has not been building affordable houses and that its commercial activities, including Keystart, support the construction of these houses and are not displacing private construction. The ERA considers that this construction does not need to be financed by Keystart clients as it is likely that privately-financed buyers would be interested in purchasing these properties.

Impact on housing prices

Keystart, the PCA and Shelter WA submitted that Keystart represents only 4 per cent of the housing market in Western Australia and is therefore not of a scale capable of distorting the market. The PCA also notes that the cap on Keystart's loan book means that the growth in its exposure and influence is limited.

The ERA considers that Keystart's market impact should be assessed in the context of the First Home Owner market of which Keystart accounts for approximately █ per cent.⁸³⁸ First Home Owners typically purchase properties that are at the low-end of the housing market. Almost all of Keystart's loans issued since July 2012 were for properties below █. As such, Keystart has contributed significantly to demand in this section of the housing market.

Demand increases can have a significant impact on prices in markets with constrained supply. There is evidence that increases in the value of low-value properties can have a flow on effect on demand in higher valued properties as current occupiers are encouraged to upgrade.⁸³⁹

Existing owners of low valued properties will benefit from an increase in price and resultant increased equity in their own homes. This increased equity provides them with an increased borrowing capacity, which they can utilise to move to a more expensive property. This process increases demand at price points higher than those in which Keystart is active, potentially causing a flow on effect on prices.

The ERA considers that while Keystart's share of the overall housing market is small, its share of the low-end of the market is significant. The concentrated nature of Keystart's clients may mean that it is in a position to influence that section of the market and may influence other sections as buyers upgrade properties accordingly. As Keystart's activities are concentrated on one section of the market it may have a greater distortionary impact than it would if its activities were spread evenly across the housing market.

⁸³⁸ Keystart data provided on request and Australian Bureau of Statistics, *Housing Finance Commitments*, Category 5609, 2013.

⁸³⁹ BIS Shrapnel, *Australian Housing Outlook 2013-2016 Prepared by BIS Shrapnel for QBELMI*, 2013, p.15.

Smoothing the housing construction cycle

HIA, PCA, SPG and UDIA all argued that Keystart lending practices has a positive effect on the housing construction industry by smoothing the peaks and troughs.

Keystart has a smoothing impact on the construction industry because it does not tighten its lending criteria during economic downturns. In contrast, private lenders increase deposit and savings requirements, thereby reducing the number of borrowers who are eligible for financing, and reducing their lending. As a consequence, more borrowers seek Keystart loans during economic downturns and Keystart increases its share of the home loan market and the number of loans that it issues. For example, Keystart increased its lending by 45 per cent at the start of the GFC in 2008-09.⁸⁴⁰

To the extent that these loans contribute to new construction, Keystart plays a role in maintaining activity and employment in the housing construction industry. Since July 2012, ■ per cent of Keystart loans have been for new house and land packages or properties purchased off the plan.⁸⁴¹

The ERA recognises that the construction industry is an important component of the State's economy, employing almost 16 per cent of the population in 2011.⁸⁴² However, the counter-cyclical lending practices that assist the industry expose the Government to significant risk. The ERA considers that it is not the role of the Government to take on commercial risks to support industries.

Risk exposure

The Draft Report findings regarding the risks associated with Keystart's activities were disputed by a number of organisations.⁸⁴³ These organisations argued that Keystart presents a low risk to the Government's financial position because:

- Keystart applies more stringent assessment standards than those common in the private sector. Submitters consider that Keystart has developed a method that adequately guards against the risks in lending to low-deposit borrowers; and
- Keystart has historically had a low arrears rate and has consistently delivered a profit to the State Government.

Keystart submitted that, as clients are assessed on a ■ per cent buffer⁸⁴⁴ (that is, clients could meet repayments if interest rates are increased by ■ per cent) and ■, the risk posed to government is low.

Further, Keystart states that the risk of its clients is appropriately accounted for in the interest rate that Keystart charges. Keystart's current policy is to charge an interest rate that is the average of that of the big four banks.⁸⁴⁵ Keystart submits that this interest rate

⁸⁴⁰ The Housing Authority (WA), *Annual Report 2008/09*, 2009.

⁸⁴¹ Keystart data provided on request.

⁸⁴² Australian Bureau of Statistics, *2011 Census of Population and Housing: Western Australia Basic Community Profile*, 2013.

⁸⁴³ Alcock Brown-Neaves Group, BGC Residential, Housing Industry Association, Keystart, Master Builders Australia, Property Council of Australia and Shelter WA.

⁸⁴⁴ Keystart submits that major banks typically adopt a 1 per cent buffer.

⁸⁴⁵ Keystart, *Keystart reduces its interest rates*, <http://www.keystart.com.au/about-us/news/view/keystart-reduces-its-interest-rates3> (accessed 20 June 2014).

includes a provision that compensates for any losses that could be incurred in the event of default.

The ERA considers that if Keystart has indeed identified a method for assessing and accounting for risk that makes lending to low-deposit borrowers viable, then the question should be asked as to why the private sector does not undertake the same practices.

The ERA has concerns that, given the higher risk profile of Keystart's clients and the interest rate that Keystart charges, the risks associated with lending may not be fully internalised into an interest rate that appropriately accounts for such risk. The ERA considers that if all risks were internalised, private sector entities would be willing to lend to low deposit customers without the requirement for LMI. The fact that private lenders are unwilling to do so is an indication that Keystart's risks may not be fully internalised.

Presumably the private sector does not consider more rigorous saving justification as sufficient in guarding against the risks posed by low deposit borrowers, otherwise they too would be lending to this market segment.

The ERA acknowledges that Keystart's arrears rate has historically been below that of private lenders, averaging approximately █████ per cent since July 2008.⁸⁴⁶ However, the ERA does not consider that this necessarily means that Keystart is low risk for the following reasons:

- Keystart's lending has not been tested by negative growth in the Western Australian economy since the early 1990s. In the early 1990s, during the recession, a significant portion of Keystart clients required assistance to prevent them defaulting and some clients sold their homes for less than the outstanding balance on their mortgages;
- Experience in the United States demonstrates that arrears rates can deteriorate very rapidly with an economic downturn; and
- It is not clear to the ERA what practices Keystart is undertaking to manage its arrears rate; and how these practices are accounted for when it calculates its arrears rate.

Each of these points are elaborated upon below.

Generally, arrears rates amongst home lenders are low and lenders operate profitably unless there is a major economic event. Home owners begin to have difficulty with their mortgages when economic conditions are poor, house prices fall, and people are unable to make their repayments (for example, because they lose their jobs). As house prices fall, households with relatively little equity in their homes may go into negative equity.⁸⁴⁷ It is at these times that risks are realised and financial institutions make systemic losses.

The ERA considers that Keystart has not been tested by a significant economic event since the recession in the early 1990s. Western Australia has been through a unique period of sustained economic growth since 1991, not recording negative growth in a single year (including during the GFC).⁸⁴⁸ The risk that Keystart poses should not be examined in the context of this economic period. In reality, economic growth will not always continue to be positive and will experience periods of negative growth that will greatly test the ability of

⁸⁴⁶ Keystart data provided on request.

⁸⁴⁷ A household is considered to be in negative equity when the amount owed on their mortgage exceeds the value of their property.

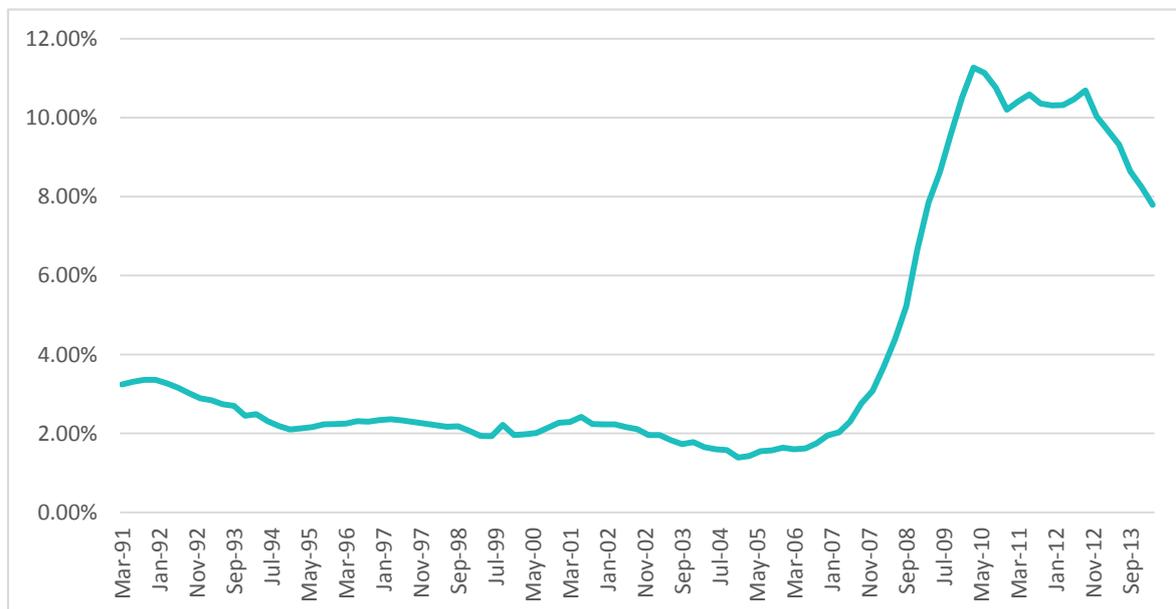
⁸⁴⁸ Australian Bureau of Statistics, *Australian National Accounts: State Accounts, 2012-13*, Category 5220.0, 2013.

households to meet their mortgage repayments. It is in these economic downturns that significant risks could be realised, potentially resulting in significant losses for Government.

The ERA notes that Keystart clients had considerable trouble meeting their mortgage repayments in the period from 1989 (Keystart's inception) to early 1993, which included a recession. During this time, 214 clients (3.9 per cent) sold their homes for less than the outstanding balance on their mortgages and a further 958 (16.7 per cent) had interest payments totalling \$7 million written off to prevent default.⁸⁴⁹ While this period did not result in large losses to government, future downturns have the potential to have a greater impact.

The fact that Keystart's arrears rates have historically been low does not mean that the associated risk is low, just that it may not yet have materialised. In the United States, arrears rates before the GFC were low, but increased rapidly when the economy slid into recession, resulting in major defaults and losses to financial institutions. The arrears rate on US residential mortgages is shown in Figure 48.⁸⁵⁰

Figure 48 United States residential mortgage arrears rates



Source: Board of Governors of the Federal Reserve System.

The experience in the United States, while different to Keystart practices in a number of ways, illustrates that historically low arrears rates are not necessarily an appropriate assessment of risk. Arrears rates can grow rapidly in the face of poor economic conditions and can lead to significant losses to financial institutions and financial stress for families.

Finally, it is not clear to the ERA what practices Keystart is undertaking to manage its arrears rate and how these practices are accounted for when it calculates its arrears rate. The ERA understands that Keystart offers safety net assistance to allow borrowers to continue to meet their mortgage repayments when they experience financial difficulties.

The ERA asked Keystart for details on how they assist borrowers at these times. The information that Keystart provided did not describe how its safety net assistance operates

⁸⁴⁹ Parliament of Western Australia, Hansard: Legislative Assembly - Grievance, Wednesday 27 August 1997, pg.5507.

⁸⁵⁰ Board of Governors of the Federal Reserve System, *Charge-off and Delinquency Rates on Loans and Leases at Commercial Banks*, <http://www.federalreserve.gov/releases/chargeoff/delallsa.htm> (accessed 20 June 2014).

and whether they provide any assistance that private sector competitors do not. In the past, Keystart has written off interest rate payments for its clients to prevent default.⁸⁵¹

Keystart did advise that:



- the safety net has been offered to an average █ per cent of the total loan portfolio over the past decade; and
- █ per cent of borrowers have returned to normal borrower status from the commencement of the safety net program.

The ERA was of the view that Keystart's low arrears rate could be partly explained by the effect of the safety net scheme and that the arrears rate would be higher but for this policy. Keystart advises that the impact of the safety net is taken into account when calculating the arrears rate, but has not demonstrated how. The ERA notes that, even if the effect of the safety net program is not fully accounted for, Keystart's arrears rate would still remain below that of the private sector average.

The ERA acknowledges that it has been unable to conduct a thorough review of the risks that are associated with Keystart, but considers that a number of risks are present that require further assessment to ensure that the Government is adequately compensated for its exposure. The ERA is in no way suggesting that Keystart is insolvent, but its activities could result in losses to Government.

Regional Lending

A number of organisations⁸⁵² argued that Keystart is important for regional home buyers who have difficulties in accessing private finance. Approximately █ per cent of Keystart lending since July 2012 has occurred in areas outside of the Perth and Peel regions. Reasons these organisations cited for unwillingness of private lenders to finance purchases in the regions included; a lack of economies of scale in establishing branches in regional area and the failure of many regional buyers to meet private lending criteria.

The ERA does not consider that the absence of bank branches in regional area will prevent regional buyers from accessing private finance.

There are a number of ways that private lenders service customers in the regions. Major lenders have branch offices in the regions. For example, the Commonwealth bank has ten major regional centres across the state.⁸⁵³ Other lenders, such as Bankwest, have home loan specialists that will visit households in regional areas to discuss their financing options.⁸⁵⁴ Additionally, independent private mortgage brokers are able to provide assistance to regional buyers. Private lending in the regions is not constricted by the availability of regional branches.

⁸⁵¹ Parliament of Western Australia, Hansard: Legislative Assembly - Grievance, Wednesday 27 August 1997, pg.5507.

⁸⁵² MBA, HIA, Keystart, and the Shires of Jernamungup and Wiluna.

⁸⁵³ Commonwealth Bank, *Locate us*, <http://service.commbank.com.au/locate-us/> (accessed 20 June 2014).

⁸⁵⁴ Bankwest, *lending specialists*, <http://www.bankwest.com.au/personal/home-loans/how-to-apply-for-a-home-loan/lending-specialists> (accessed 20 June 2014).

The ERA considers it more likely that private lenders are reluctant to lend in the regions because the borrower does not meet lending requirements because they are considered to be of too high a risk. Regional economies are inherently less stable than metropolitan economies because regional economies (and hence property prices in those regions) are more heavily reliant on a narrow set of industries and are vulnerable to changes in conditions that have an adverse effect on those industries (for example, seasonal conditions and commodity price changes).⁸⁵⁵

For this reason, borrowers from the regions are of a higher risk as employment, income and house prices are less stable in regional economies. On this basis, the ERA considers that private lenders have legitimate reasons for regarding regional buyers as riskier. This further demonstrates that Keystart is lending to riskier clients than the private sector and exposing the State Government to additional risk.

Governance and Accountability

The ERA has concerns regarding the clarity surrounding Keystart's governance and accountability practices. While the ERA appreciates that the Keystart board is responsible for its operations, it notes that, as the sole shareholder, the Housing Authority appoints the board members and as such is likely to have some influence over Keystart's decision making. In addition, it is possible that the activities and decisions of Keystart may be influenced by the Minister for Housing to address housing affordability issues and, at times, broader economic conditions.

While these arrangements may be sufficient, they are lacking in clarity and accountability. The ERA considers that these would be improved in an arrangement where Keystart were operated as a private company contracted to Government. Such an arrangement would clearly set out accountabilities and would specify each party's exposure to risk.

The ERA also has concerns about the lack of transparency regarding Keystart's activities and the associated risk exposure of government. The ERA notes that Keystart has not made an annual report available publicly since 2007-08; instead, Keystart's activities are summarised briefly in the Housing Authority's annual report. Typically, government owned trading enterprises publish their own annual report detailing their activities, and publish Statements of Corporate Intent. The ERA considers that, if it remains publicly owned, Keystart should at least publish its own annual report publicly to improve the transparency and accountability of its activities.

Keystart's Borrowing Rate

Typically when Government owned entities raise capital in debt markets they do so through the Western Australian Treasury Corporation (**WATC**). The WATC, leveraged by the State's credit rating, is able to raise funds at a lower cost than private entities.

The WATC has provided the Housing Authority with a \$5 billion debt facility that is used to fund Keystart. The Housing Authority uses this facility to purchase redeemable preference shares in Keystart, with the terms and conditions of the shares reflecting those of the debt facility. Keystart is required to meet all principal and interest payments and any other costs associated with the facility.⁸⁵⁶

Public agencies and publicly-owned enterprises that borrow funds through WATC are required to pay a fee to compensate the WATC for its service and to ensure that the entity

⁸⁵⁵ The Housing Authority (WA), *Country Housing Authority Annual Report 2012/13*, 2013.

⁸⁵⁶ The Housing Authority (WA), *Annual Report 2012/13*, 2013.

is not able to take advantage of a borrowing cost that is lower than that of its private sector competitors. (This is consistent with the State Government's policy on competitive neutrality).

The Housing Authority, and by extension Keystart, is not required to pay this fee. The consequence is that Keystart's financial accounts may overstate the profitability of Keystart's activities and may not adequately reflect the economic costs associated with its business. In addition, the lower borrowing costs may give Keystart a significant competitive advantage over the private sector as Keystart is able to lend to higher risk clients at the same average interest rate.

The ERA considers that, if Keystart remains publicly owned, it should appropriately account for its borrowing costs in a manner that is consistent with the State Government's policy on competitive neutrality.

Potential to divest Keystart

In the Divestment of Government Assets section of this report (Section 4.3), the ERA created a set of criteria for assessing whether the Government should divest an asset. In Section 4.3, the ERA provides justification for why private sector ownership of commercial operations is generally preferable to government ownership. This justification is based on the view that private sector ownership of assets is generally more efficient, results in better risk management and is less likely to involve the conflicts of interest that are often experienced under government ownership.

In this section, the ERA conducts a preliminary survey of whether Keystart would be suitable for divestment.

The ERA considers there are several reasons why the Government should consider divesting Keystart.

First, the ERA has considered whether competition in the low deposit loan market is conceivable. As noted above, in its submission to the ERA, Keystart maintained that all of the risks incurred by Keystart for its lending activities have been internalised. That is, Keystart considers that the mortgage interest rate it applies is sufficient compensation for the default risk of its clientele. If this is the case, the private sector would be willing to compete in this market as there would be a profitable return after accounting for all costs and risks. The only way that the private sector would be unwilling to compete is if Keystart is able to benefit from its lower cost of borrowing.

Second, if the private sector provides the same product as Keystart, then it too would provide the same positive externalities previously discussed in this chapter. Externalities are often used as a reason to justify government involvement in the market. However, in this case, the Government is not operating in a way that would differ from the private sector. As such, the ERA considers that the benefits from the externalities would still be captured by private sector provision.

Third, private provision of Keystart, and potentially the introduction of other participants in the low deposit mortgage market, should result in benefits to consumers beyond those that currently occur. Competition generally leads to cost reflective prices and greater quality services provided to customers. As such, the State Government should not need to regulate the market as there would be incentives for entities to compete for customers and act efficiently. In addition, federal legislation provides for regulation by the Australian Securities

and Investment Commission (**ASIC**) to ensure compliance with the *National Consumer Credit Protection Act 2009 (Cth)*.^{857,858}

Fourth, the divestment of Keystart would resolve current conflicts of interest. An example of a conflict of interest occurred during the GFC. The economic downturn resulted in an increased risk of defaulting loans. Private lending businesses became more conservative and increased their requirements for minimum deposits and savings. Keystart, however, did not alter its lending criteria. As a result, Keystart's lending increased by 45 per cent,⁸⁵⁹ which exposed it to a greater level of default risk. It is likely that Keystart's actions reflected, implicitly or explicitly, a government policy of supporting the construction industry⁸⁶⁰ during the economic downturn. This example shows how government ownership can present a conflict of interest between the commercial interests of the owner of a business and general government objectives.

Fifth, the private sector generally has a better capacity to manage risks. The risks faced by an entity providing low deposit loans include:

- Financial risks which include market risk (interest rate risk), credit risk and liquidity risk.
 - The ERA considers that the private sector is better placed to manage financial risks due to its flexibility to implement mitigation strategies, insurance or self-insurance.
- Economic risks which influence people's ability to repay loans and the general borrowing environment.
 - Both private and public sector entities should be equally efficient at managing economic risk. However, the conflict of interest discussed above indicates that Keystart has not managed its economic risk well during economic downturns due to conflicting government objectives.
- Operational risks such as cost blow outs and operational inefficiencies.
 - The private sector is inherently more efficient and flexible in its operations, which gives it a greater ability to react to changes in the operational environment.

The conclusion from this analysis is that if the risks are fully internalised and Keystart is returning a genuine dividend to the Housing Authority there is no reason why the Government should be operating in this market.

However, should the Government attempt to divest Keystart and find that there is no private sector interest then this is indicative that the risks have not been internalised. If this is the case, the Government is not being fully compensated for the risks. If the Government wants to continue operating Keystart, it should review how it can best manage this risk and reflect the risk on its balance sheet.

⁸⁵⁷ ASIC currently regulates Keystart to ensure that it complies with the National Consumer Credit Protection Act. Source: *Keystart Home loans, Privacy Policy and About Us*.

⁸⁵⁸ Keystart is not regulated by the Australian Prudential Regulation Authority (**APRA**) but it has stated that it abides by the APRA requirements. (Source: Parliament Assembly, Extract from Hansard: Thursday 3 June 2010, p4941-497a.)

⁸⁵⁹ The Housing Authority (WA), *Annual Report 2008/09*, 2009.

⁸⁶⁰ As indicated by the Keystart submission to the Draft Report.

One option to better account for risk could be to have Keystart operated as a private company under contract to the Government. Such an arrangement would clearly identify the risks posed by Keystart and would make explicit the extent to which Government is responsible for such risks.

7.5.3.5 ERA conclusions

The ERA received 19 submissions opposing the draft recommendation to abolish Keystart. These submission raised concerns regarding the ERA's assessment of Keystart's market impact and the risk that it poses to government finances. Several arguments were put forward in counter to the Draft Report that have been responded to in this Final Report.

After addressing these concerns, the ERA still believes that Keystart's activities are likely to pose an unacceptable level of risk and do little to assist with the affordability of housing.

The ERA does not consider that the historically low arrears rates is evidence of low risk. Additionally, the counter-cyclical support of the construction industry further exacerbates its risk exposure and is not an appropriate activity for the Government.

The ERA has reviewed Keystart's activities in the context of its impact across the entirety of the housing continuum and concluded that, in an environment of constrained supply, Keystart has little impact in alleviating pressure along the continuum. Additionally, Keystart facilitates increased demand and therefore competition for housing which must have some negative impact on other buyers in the market and result in higher house prices.

If the Housing Authority and Keystart's assertion that all of the risks have been internalised is correct, there appears to be no compelling reason for why Keystart should be publicly owned. Accordingly, the ERA recommends that the Government explore options for the divestment of Keystart. However, if the risks are not being fully accounted for, and if the Government wants to continue operating Keystart, it should review how it can best manage this risk and reflect the risk on its balance sheet. One option could be to have Keystart operated as a private company under contract to the Government.

7.5.4 Housing Authority development activities

7.5.4.1 Introduction

The Housing Authority undertakes substantial residential developments as part of its policy response to address housing affordability. These developments were of particular interest because of their large scale, and because the level of risk that they pose to Government finances, and whether that risk is compensated for adequately, was not clear.

The fact that the Housing Authority receives limited operating and capital appropriation funds from the Government's consolidated revenue raises the question of whether there may be instances where developments are of a commercial nature sufficient enough to fund other Housing Authority activities.

In the Draft Report, the ERA expressed concern that such activities expose the Government to significant risk and, in the event that markets were to move against the Housing Authority during a development, could lead to significant financial losses for the Government. The ERA has subsequently viewed information from the Housing Authority that indicates, to date, the Housing Authority has achieved returns consistent with a private developer.

As housing development is a high risk, high return industry, at some stage it is likely that there will be a development that makes a large loss. Therefore there may be some impact on the budget if a particular project does not work out as expected. However, with prudent

project management, the activities should deliver positive returns on average over the long term.

The ERA notes that the Housing Authority receives limited contribution from Government consolidated revenue. The Government could increase the public housing stock available to households on the waiting list by providing the Housing Authority with a cash contribution, which would allow it to retain a greater proportion of housing for this purpose in its developments.

7.5.4.2 Overview

The Government outlined the importance of residential land and housing development under the Affordable Housing Strategy⁸⁶¹, 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.”

The scale of the Housing Authority’s development activities make it the largest developer of residential land in Western Australia.⁸⁶² In the 2013-14 budget the Government set aside more than \$2 billion for asset investment, primarily to undertake land and housing developments over the next four years, spread between six programs.⁸⁶³ This formed a significant portion of the State’s overall asset investment program. In the 2014-15 budget two major components of this program, SharedStart and the Public Stock Redevelopment Program, were reclassified as operating expenditure as the bulk of the expenditure is for new housing construction, funded by working capital, and recouped through sales.⁸⁶⁴

7.5.4.3 Findings of the Draft Report

In the Draft Report, the ERA expressed concerns regarding the commercial activities of the Housing Authority. The main concern raised that, at times, these development activities are semi-commercial in nature and the risk that is undertaken, the return on investment and subsidies given are unclear. Despite the fact that these developments have not yet caused significant losses, if markets should move against the Housing Authority during such activities, substantial losses could be realised as hidden risks become apparent.

Developments undertaken by the Housing Authority include the construction of low cost housing that can form part of the public housing stock or to expand the supply of affordable housing in the State. 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.⁸⁶⁵ 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

⁸⁶¹ The Housing Authority (WA), *Affordable Housing Strategy 2010-2020: Opening Doors to Affordable Housing*, 2010, p33.

⁸⁶² Colin Barnett, *Submission to the Senate Economics References Committee Inquiry into Affordable Housing*, 2014.

⁸⁶³ Department of Treasury (WA), *Budget Statement: Budget Paper No.2, Volume 2*, 2013, p.680.

⁸⁶⁴ The Housing Authority (WA), *Submission to the ERA Draft Report on Microeconomic Reform in Western Australia*, 2014.

⁸⁶⁵ Department of Treasury (WA), *Budget Statement: Budget Paper No.2, Volume 2*, 2013, p.680.

lack of information that is made available by the Housing Authority regarding such development activities.

Often these activities are undertaken in a joint venture arrangement and are as such subject to commercial confidentiality. In the Draft Report, the ERA profiled one such development, One on Aberdeen.

One on Aberdeen commenced construction in 2012 under a joint venture arrangement between the Housing Authority and Diploma Properties Pty Ltd (**Diploma**) and was expected to be worth \$73 million on completion. As part of the deal, the Housing Authority supplied Diploma with a block of land in which it had an equity share of \$6.45 million. This land was then used by Diploma to secure a senior debt facility. In return the Housing Authority was to receive approximately \$10 million worth of assets consisting of public housing units, co-ownership of shared equity units and a cash balance.

In the absence of a publicly available business case, it is difficult to ascertain whether the Housing Authority received an appropriate commercial return that compensated it for the risks that were undertaken. These risks are exacerbated by the fact that the Housing Authority would have been required to complete the development in the event that Diploma was unable to do so. It is difficult to ascertain whether the Housing Authority is being adequately compensated for its risk in a commercial sense or whether it is forgoing appropriate capital returns in order to provide more affordable housing. Consideration should also be given to whether the development was the best use of the land or if it could have been used to fund more public and affordable housing units.

In the Draft Report, an assessment was undertaken that concluded that the development at One on Aberdeen was only affordable to households at the top-end of the low-to-moderate income bracket. The analysis questioned whether the development was more likely to be commercially orientated than it was to address social policy issues.

Draft Conclusions

In undertaking its analysis, the ERA considered that any Government agency undertaking commercial developments that pose substantial risk should account for such risk explicitly. Such activities should cost developments fully, ensuring that the true opportunity cost of the activity is taken into account. Any operating subsidies required should then be noted explicitly.

7.5.4.4 Response to Draft Report submissions

The ERA received one submission regarding the commercial activities of Government Departments. The submission was by the Housing Authority and commented on its own activities; it stated that:

- the range of commercial activities it undertakes are done so in accordance with the mandate and role of the Housing Authority as set out in the *Housing Act 1980* and the policy directions in the Affordable Housing Strategy 2010-2020.
- the money approved in the Housing Authority Asset Investment Program (**AIP**) for commercial activities is mostly generated internally and is unlikely to significantly impact on the availability of funds for other capital works.
- its activities are predominately funded through internal working capital revenues and rental incomes, not government consolidated revenue. Many of these have recently

been reclassified as operating expenditure and removed from the AIP in the 2014-2015 State Budget.

- it expressed concern that the One on Aberdeen project was the only commercial activity scrutinised in the Draft Report. It is the view of the Housing Authority that the One on Aberdeen development is a successful and innovative partnership with the private sector.
- it disputes the analysis of One on Aberdeen's affordability, submitting that almost half of the project consisted of affordable housing including 17 public housing units, 17 units sold under the National Rental Affordability Scheme (**NRAS**), 18 shared equity units, 14 essential worker units and 14 units that were sold privately at an affordable price.

In response to this submission, the ERA has included information regarding the mandate of the Housing Authority and its guiding strategy, the Affordable Housing Strategy, in the overview of this chapter.

The ERA also notes that a number of the Housing Authority's development activities have been reclassified as operating expenditure in the 2014-15 budget and, as such, are no longer included in the AIP. The ERA does not consider that this has any impact on the scale of, or the commercial risk posed by, these activities.

The Housing Authority has provided information, both in its submission to the Draft Report and in meetings with the ERA, that approximately 80 per cent of the development was pre-sold prior to the Housing Authority's land being released. The Housing Authority also advised that prior to the bank approving finance it required that all debt was entirely covered by pre-sales and equity from Diploma and the Housing Authority. Further, the ERA notes that the One on Aberdeen project delivered more affordable housing outcomes than implied in the Draft Report.

Based on information from the Housing Authority it is evident that the risks posed by the One on Aberdeen project were explicitly accounted for and that the commercial return gained from the project has been used to support affordable housing outcomes.

Further, it appears that, to date, the Housing Authority has achieved returns on its developments that are consistent with those that would be expected by the private sector.

7.5.4.5 ERA conclusions

After viewing information from the Housing Authority, the ERA is less concerned with the risks to state finances posed by the Housing Authority's development activities. It notes that housing development is a high risk, high return, industry and, as such, strategies must be put in place to account for occasional project failures. However, to date, project returns to the Housing Authority appear to be sufficient to offset such failures and should continue to do so provided that the Housing Authority continues to be diligent about the projects that it undertakes. If Government wishes to obtain objectives that cannot be achieved commercially, then an explicit operating subsidy should be provided to the Housing Authority. Previously, subsidies have been provided for specific projects that are not able to be met commercially.

The ERA considers that, ideally, the Housing Authority's development activities should not go beyond demonstrating new and innovative designs to the private sector that encourage the increased private provision of affordable housing. In saying this, the ERA appreciates

that the Housing Authority's current activities are heavily influenced by the fact that it receives limited capital appropriation from Government consolidated revenue.

Part of the reason the Housing Authority engages in housing developments is to increase the stock of public housing available for households currently on the waiting list. The Housing Authority constructs low-cost dwellings, but then has to sell a large proportion of the dwellings in order to cover the costs of its activities. The ERA considers that a relatively modest cash contribution from the State Government to the Housing Authority could allow them to retain a greater number of these dwellings to substantially increase the public housing stock, without requiring the Housing Authority to engage in more housing developments.

Finally, while noting that some information regarding these activities may be commercial in confidence, the ERA considers that the Housing Authority should be as transparent as possible with activities that are commercial in nature.

7.5.5 Alternative policies

7.5.5.1 Introduction

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 Housing Authority's range of development activities are designed to respond to the fact that affordable dwellings are not typically built by the private sector. 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 risks to the Government that is associated with development activities.

7.5.5.2 Findings of the Draft Report

Identifying a market failure to which the Housing Authority is responding to through these activities, 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 Housing Authority provided a case study that illustrated the additional costs of complying with regulations imposed by the State Government as well as various State and local building conditions. In particular, the Housing Authority states that the cost of one of its unit developments was increased by approximately \$20,000 per unit 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.⁸⁶⁶

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 Housing Authority 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 Housing Authority input.

Draft 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 Housing Authority 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.

7.5.5.3 Response to Draft Report submissions

The ERA received two public submissions on this issue, both relating specifically to the housing industry. Both submissions were broadly supportive of reform of Government policy that restricts the provision of affordable housing.

The Community Housing Coalition WA (**CHCWA**) agreed that the first logical step in improving the supply of affordable housing is to reform government policies that restrict the ability of the private sector to supply affordable housing. CHCWA considers that further investigation should be undertaken into the effect that reducing regulations would have on the cost of developments, believing that the removal of regulations (if they are found to increase prices) would be more beneficial than the current development activities of the Housing Authority.

The Housing Authority welcomed a renewed focus on the removal of unnecessary regulations that affect the housing industry. However, the Housing Authority considered that:

⁸⁶⁶ The case study in question was for an affordable housing development.

- such changes would not provide the required level of public and affordable housing solutions required by the community; and
- that the private sector is unlikely to provide sufficient affordable housing given the existence of other distorting factors (such as State and Commonwealth taxation and land availability issues).

In response to these submissions, the ERA considers that the reform of Government regulations relating to housing developments has the potential to significantly improve the affordability of housing in the State.

7.5.5.4 ERA conclusions

In the event that there are other methods for delivering the same, or a part of 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.

The ERA recommends that the Government conduct an inquiry into State and local government regulation of dwelling construction and residential land development. The purpose of this inquiry would be to assess the costs and benefits of constraints and conditions imposed on land development and housing construction, allowing government to make better informed decisions on the trade-offs between various planning objectives and housing affordability.

7.5.6 Conclusion

Broadly, the ERA has concerns regarding the effectiveness of the suite of policy measures designed to improve housing affordability in Western Australia. A number of these activities involve participation by the Housing Authority in commercial industries, posing significant risk to government finances. It appears that the Housing Authority has, to date, received returns that have adequately compensated for the risk posed by its development activities. However, the ERA still has concerns regarding the risks posed by Keystart's activities and whether the Government is adequately compensated for these risks.

Additionally, the accountability of these activities is limited, with a lack of available information due to a number of factors. The ERA considers that the operation and decision making surrounding such activities should be transparent and that any risks that are posed to government finances should be accounted for and reflected on the State's balance sheet. In noting this, the ERA understands that a number of the Housing Authority's developments are undertaken as joint ventures with the private sector and, as such, are subject to commercial confidentiality. Where this is the case, the Housing Authority should be as transparent as possible in its reporting.

The ERA has concerns about the effectiveness of the policy instruments that the Housing Authority applies to improve housing affordability and the risk that some of its activities pose to Government finances. The ERA considers that these issues warrant further investigation by the Government, reflecting the complexity of housing affordability issues and the policy response of the Housing Authority.

7.5.7 Recommendations

44. Explore options for the potential divestment of Keystart.
45. Conduct a review of State and local government regulation of dwelling construction and residential land development.
46. Conduct a review of housing affordability and the effectiveness of the current policy response.

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

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ABN	Alcock Brown and Neaves
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
AIG	Australian Industry Group
AIIA	Australian Information Industry Association
AIP	Asset Investment Program
AMEC	Association of Mining and Exploration Companies
APPEA	Australian Petroleum Production and Exploration Association
ASIC	Australian Security and Investment Commission
ASX	Australian Stock Exchange
ATF	Australian Taxi Federation
ATO	Australian Taxation Office
AUD	Australian Dollar
BCC	Business Cost Calculator
BCRs	Benefit Cost Ratio
BITRE	Bureau of Infrastructure, Transport and Regional Economics
Blueprint	<i>Regional Investment Blueprints</i>
BMW	Building Management and Works
BWEA	Bunbury Wellington Economic Alliance
Capella	Capella Parking Pty
CBA	Cost-Benefit Analysis
CBD	Central Business District
CCFWA	Civil Contractors Federation of Western Australia
CCIWA	Chamber of Commerce and Industry of Western Australia
CEDA	Committee for Economic Development of Australia
CHCWA	Community Housing Coalition of Western Australia
CHP	Community Housing Providers
CIRA	COAG Competition and Infrastructure Reform Agreement
CMEWA	Chamber of Minerals and Energy of Western Australia
COAG	Council of Australian Governments
COSBOA	Council of Small Business Organisations of Australia
CPI	Consumer Price Index
CPP	Critical Peak Pricing
CRIS	Consultation Regulatory Impact Statement
Customer Code	<i>Code of Conduct for the Supply of Electricity to Small Use Customers</i>
DAA	Dairy Adjustment Authority
DAE	Deloitte Access Economics
DAFWA	Department of Agriculture and Food Western Australia
DAPs	Development Assessment Panels
DBNGP	Dampier to Bunbury Natural Gas Pipeline
DGR Policy	Domestic Gas Reservation Policy

Diploma	Diploma Properties Pty Ltd
DMP	Department of Mines and Petroleum
DoP	Department of Planning
DPC	Department of Premier and Cabinet
DRIS	Decision Regulatory Impact Statement
EERC	Economic Expenditure Review Committee
EIA	<i>Electricity Industry Act 2004</i>
ENAC	<i>Electricity Networks Access Code 2004</i>
ERA	Economic Regulation Authority
ERWIN	'Everything Regulation Wherever It's Needed'
ESAA	Energy Supply Association of Australia
FMG	Fortescue Metals Group
GDP	Gross Domestic Product
GJ	Gigajoule
GPS	Global Positioning System
GSP	Gross State Product
GST	Goods and Services Tax
GTEs	Government Trading Enterprises
GVA	Gross Value Added
HIA	Housing Industry Association
ICT	Information and Communications Technology
IGA	Independent Grocers of Australia
IMO	Independent Market Operator
IPE	Independent Procurement Entity
IPART	Independent Pricing and Regulatory Tribunal
JV	Joint Venture
Keystart	Keystart Loans Ltd.
KPIs	Key Performance Indicators
kWh	Kilowatt hour
LMI	Lenders Mortgage Insurance
LNG	Liquefied Natural Gas
LRT	Light Rail Transit
MAX	Metro Area Express
MBAWA	Master Builders Association of Western Australia
Metering Code	<i>Electricity Industry Metering Code 2005</i>
MFP	Multi Factor Productivity
MMA	McLennan Magasanik Associates
MRIT	Metropolitan Region Improvement Tax
NCP	National Competition Policy
NEM	National Energy Market
NIEIR	National Institute of Economic and Industry Research
NQ&R Code	<i>Electricity Industry (Network Quality and Reliability of Supply) Code 2005</i>
NRA	National Retailers Association
NRAS	National Rental Affordability Scheme
NSW	New South Wales

NWS	North West Shelf
OAG	Office of the Auditor General
OECD	Organisation for Economic Co-operation and Development
OSP	Office of Strategic Projects
OTCR	<i>Electricity Industry (Obligation to Connect) Regulations 2005</i>
PCA	Property Council of Australia
PCIA	Plastics and Chemicals Industries Association
PGERA	<i>Petroleum and Geothermal Energy Resources Act 1987</i>
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
PPL	Perth Parking Levy
PPPs	Public Private partnership
PSLA	<i>Petroleum (Submerged Lands) Act 1982</i>
PTG	Perth Taxi Group
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
SAP	Strategic Asset Plan
SBDC	Small Business Development Corporation
SCVs	Small Charter Vehicle
SECWA	State Energy Commission of Western Australia
SPG	Satterley Property Group
SSSSR	<i>Electricity (Supply Standards and System Safety) Regulations 2001</i>
SWIN	South West Interconnected Network
SWIS	South West Interconnected System
Synergies	Synergies Economic Consulting
Taxi Plates	Taxi Licence plates
TCWA	Taxi Council of Western Australia
TEC	Tariff Equalisation Contribution
TNPS	Total Non-Financial Public Sector
TODs	Transit Orientated Developments
TOT	Terms of Trade
TOU	Time of Use
UDIA	Urban Development Institute of Australia
USD	United States Dollar

WACOSS	Western Australian Council of Social Services
WACTOA	WA Country Taxi Operators Association
WAIGA	WA Independent Grocers Association
WALGA	Western Australian Local Government Association
WAPC	Western Australian Planning Commission
WASPP	Western Australian Seed Potato Producers Committee
WATC	Western Australian Treasury Corporation
WEM	Wholesale Electricity Market
White Paper	<i>Energy White Paper 2012 – Australia’s energy transformation</i>
WPI	Wage Price Index

Appendix 3 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](#)

Submissions received in response to the Draft Report

[Anton Porzig](#)

[Alcock Brown-Neaves](#)

[Association of Mining and Exploration Companies Inc](#)

[Australian Information Industry Association \(AIIA\)](#)

[Australian National Retailers Association \(ANRA\)](#)

[Australian Petroleum Production & Exploration Association \(APPEA\)](#)

[Australian Taxi Federation](#)

[BGC Residential](#)

[Bunbury Wellington Economic Alliance](#)

[Burella Pty Ltd](#)
[Central Country Zone of Western Australian Local Government Association](#)
[Chamber of Commerce and Industry WA \(CCIWA\)](#)
[Chamber of Minerals and Energy of Western Australia \(CMEWA\)](#)
[City of Bunbury](#)
[City of Busselton](#)
[City of Greater Geraldton](#)
[Civil Contractors Federation of Western Australia](#)
[Committee for Perth](#)
[Community Housing Coalition of Western Australia](#)
[Cr Murray Cook JP](#)
[Cr Rumble JB](#)
[Department of Housing](#)
[Department of Regional Development](#)
[DomGas Alliance](#)
[Housing Industry Association Ltd](#)
[IGA State Board of Retailers](#)
[John McCleary](#)
[Katanning Furnishings](#)
[Martin Sheridan](#)
[Master Builders](#)
[Mostyn Consulting \(Indirect Tax Consultants\)](#)
[Murdoch University –Professor Jones](#)
[Murdoch University –Professor Milroy](#)
[National Retail Association](#)
[Parliamentary National Party of Australia \(WA\)](#)
[Patrick Smith](#)
[Perth Taxi Group](#)
[Potato Growers Association of Western Australia](#)
[Potato Marketing Corporation of Western Australia](#)
[Property Council of Australia](#)
[Real Estate Institute of Western Australia](#)
[Riverpark Consulting](#)
[Satterley Property Group](#)
[Shelter Western Australia](#)
[Shire of Ashburton](#)
[Shire of Bridgetown-Greenbushes](#)
[Shire of Capel](#)
[Shire of Collie](#)
[Shire of Cranbrook](#)

[Shire of Dalwallinu](#)
[Shire of Dardanup](#)
[Shire of Denmark](#)
[Shire of Gnowangerup](#)
[Shire of Kondinin](#)
[Shire of Mingenew](#)
[Shire of Morawa](#)
[Shire of Plantagenet](#)
[Shire of Upper Gascoyne](#)
[Shire of Wandering](#)
[Shire of Wiluna](#)
[Shopping Centre Council of Australia](#)
[Supercheap Auto](#)
[Taxi Council of Western Australia](#)
[Tenancy Western Australia](#)
[UnionsWA](#)
[Urban Development Institute of Australia \(WA\)](#)
[WA Country Taxi Operators Association](#)
[WA Independent Grocers Association](#)
[Western Australian Council of Social Services \(WACOSS\)](#)
[Western Australian Taxi Association \(Inc\)](#)
[Woolworths](#)

Appendix 4 Government Service Efficiency Indicators

Productivity Commission Report on Government Services – Efficiency Indicators

Volume, topic, (year of data)	Cost category and description	WA	Aust.	Diff.	Rank*
Volume B: Child care, education and training (2012, 2013)		(\$)	(\$)	(%)	
School education	Recurrent expenditure per student	18,731	15,768	19%	1
School education	User cost of capital per student	3,643	2,439	49%	1
School education	Total expenditure per student – Govt. Schools	22,374	18,207	23%	1
Family day care	Median weekly service cost of child care services	367	339	8%	1
Vocation Educational Training	Recurrent expenditure per annual hour	15	13	19%	2
Vocation Educational Training	Recurrent expenditure per load pass	19	15	25%	1
Volume C: Justice (2013)					
Police Services	Recurrent expenditure police services per person	479	416	15%	1
Courts	Cost per finalisation - District Court	18,141	9,713	87%	1
Courts	Cost per finalisation - Magistrate's Court	894	561	59%	1
Courts	Cost per finalisation - Children's Court	839	524	60%	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 service 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%	1
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 5 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 the 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.⁸⁶⁷

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's Economic Reform division. 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.

⁸⁶⁷ 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 the 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:

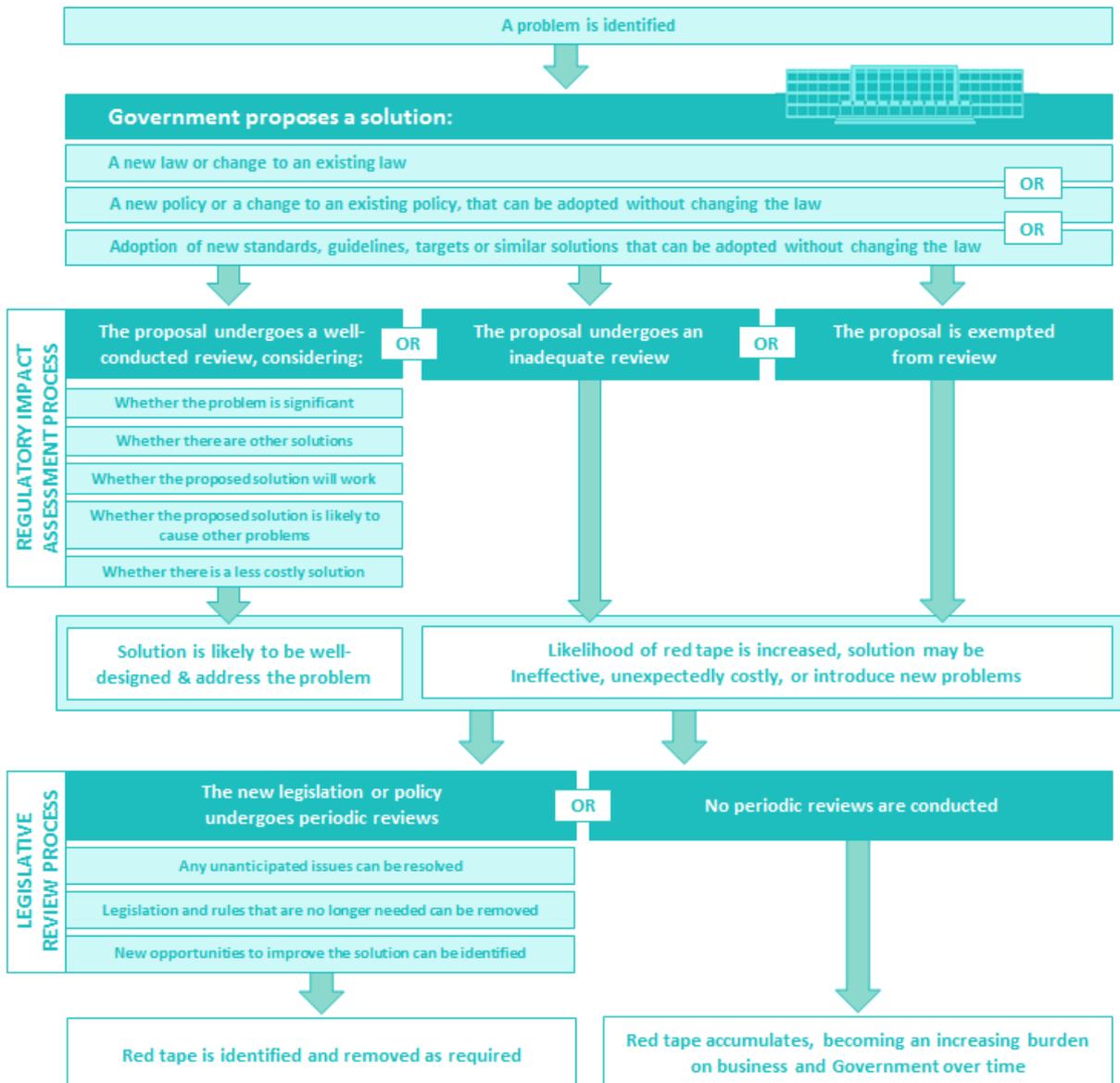
1. establishing a case for action before addressing a problem;
2. a range of feasible policy options must be considered, including self-regulatory, co-regulatory and non-regulatory approaches, and their benefits and costs assessed;
3. adopting the option that generates the greatest net benefit for the 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 49 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.

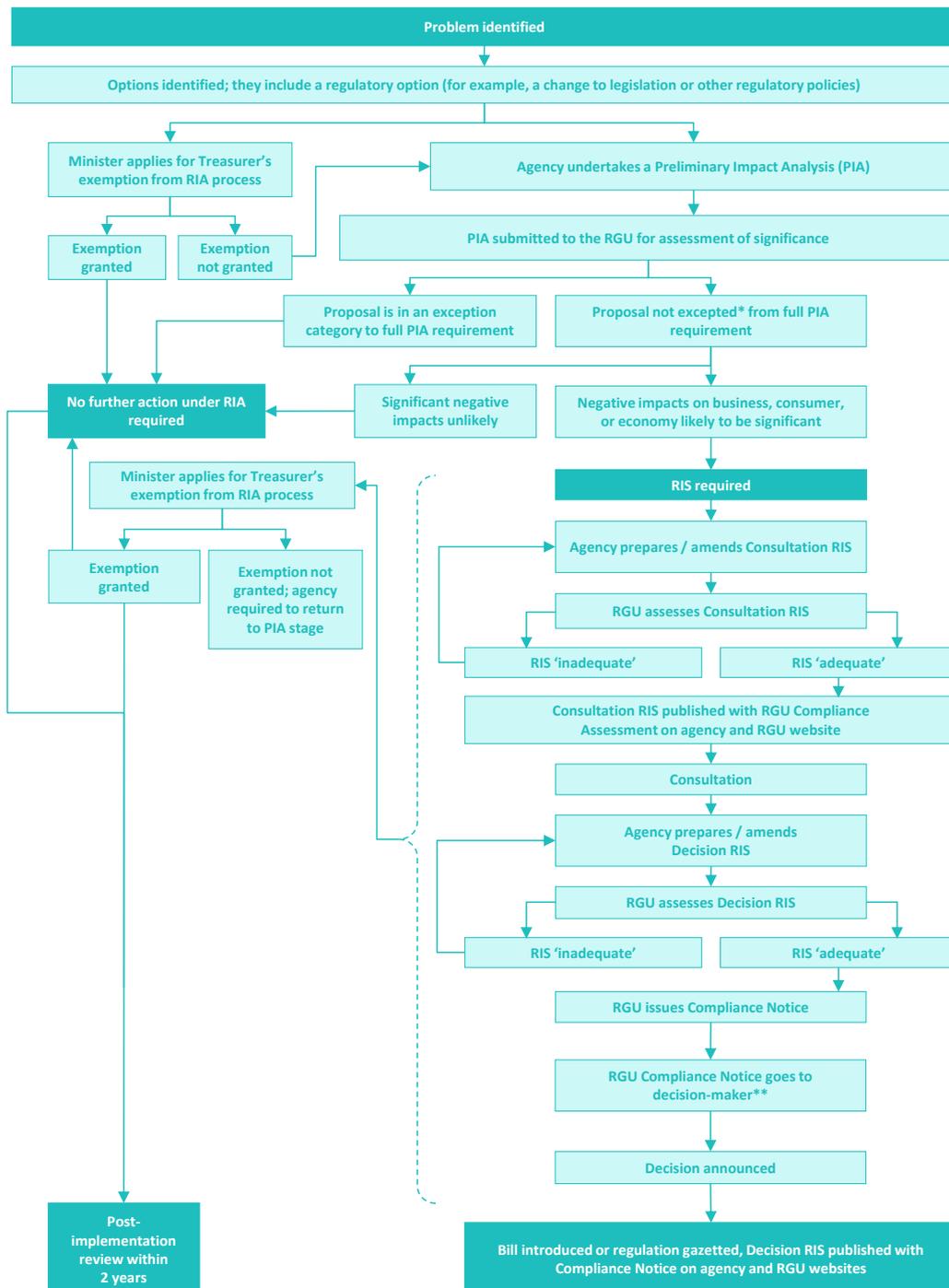
Figure 49 Safeguards at each stage of the regulatory process



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 50.

Figure 50 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.

** For example the agency or office of the Minister responsible for introducing the proposed regulation.

Source: Productivity Commission; Department of Finance, Western Australia

Benchmarking Western Australia's RIA processes against other jurisdictions

Key RIA Practices across Australia

Table 39 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 39 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 39 Examples of RIA practices by jurisdiction as at January 2012

 Fully implemented
  Partially implemented
  Not implemented

	WA	Cwth	COAG	NSW	Vic	Qld	SA	Tas	ACT	NT
RIA requirements apply to election commitments			n/a							
Exemptions granted only by head of government										
Agencies determine need for RIS with oversight body monitoring										
Two-stage RIA process										
Guidance requires recommended option results in the greatest net benefit										
Publish RISs - primary legislation										
- subordinate legislation										
Central listing of published RISs										
Public annual compliance monitoring and reporting										

	WA	Cwth	COAG	NSW	Vic	Qld	SA	Tas	ACT	NT
Adequacy assessments published	!	✓	✓	✗	!	✗	✗	✗	✗	✗
Adequacy assessments include reasons or qualifications	✗	✗	✗	✗	!	✗	✗	✗	✗	✗
Oversight body has operational independence	✗	✗	✗	✗	✓	✗ ^a	✗	✗	✗	✗
Ministerial explanation for exempt/non-compliant proposals proceeding	✗	✗	✗	✗	!	✗	✗	✗	✗	✗
PIR required for all exempt and non-compliant proposals	!	✓	✗	✗	✗	!	✗	✗	✗	✗

^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 40. 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 sunset 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 sunset provisions to RIA to ensure that the required reviews are necessary and appropriate.

Table 40 Regulatory proposals subject to RIA

Type of regulation	WA	Cwth	COAG	NSW	Vic	Qld ^a	SA	Tas	ACT	NT
New bills	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Amending bills	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
New regulations (gazetted)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Amending regulations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remaking of sunset regulations	✗	✓	n/a	✓	✓	✓	✓	✓ ^a	✓	✓
Quasi regulation	✗	✓	✓	✗ ^b	✗ ^c	✓	✓	✗	✓ ^d	✓

- 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 40 as being covered by the RIA requirements, are not effectively reviewed in practice. A notable example of this is quasi regulation,⁸⁶⁸ which can be challenging to capture effectively within the RIA process.⁸⁶⁹ 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.⁸⁷⁰ 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."⁸⁷¹

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

⁸⁶⁸ 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.

⁸⁶⁹ Productivity Commission, *Ibid*, 2012.

⁸⁷⁰ The Department of Finances has noted that it does occasionally receive Preliminary Impact Assessments for quasi-regulation going to Cabinet.

⁸⁷¹ Productivity Commission, *op. cit*, 2012.

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.

Table 41 Guidance provided on methods of assessing costs and benefits

Type of regulation	WA ^a	Cwth	COAG	NSW	Vic ^a	Qld ^b	SA	Tas	ACT	NT
Cost-benefit analysis	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cost-effectiveness analysis	✗	✓ ^d	✓	✓	✓	✓	✗	✓	✓	✗
Multi-criteria analysis	✗	✗	✗	✓	✓	✓	✗	✗	✗	✓

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.

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 42), and in providing guidance on implementing and enforcing the proposed regulation (Table 43).

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 42 Recommended option requirements in a RIS

<i>Recommended option demonstrates:</i>	<i>WA</i>	<i>Cwth</i>	<i>COAG</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Greatest net benefit to the community	✓	✗	✓	✓	✓	✓ ^a	✓ ^b	✓ ^a	✓	✓ ^c
Reasons for rejecting other options	✗	✓	✓	✗	✓	✓	✓	✓	✓	✗

^a Or least net cost.

^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.

Source: *Productivity Commission 2012*

Table 43 Guidance on implementing and enforcing the preferred option

<i>The RIS should discuss:</i>	<i>WA</i>	<i>Cwth</i>	<i>COAG</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Implementation and enforcement strategies	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗
Compliance strategies	✗	✓	✓	✓	✓	✓	✓	✗	✓	✗

Source: Productivity Commission 2012

Note: The Regulatory Gatekeeping Unit in Western Australia does seek information from departments on proposed evaluation strategies.

Appendix 6 Goods That May Be Sold By Each Category of Special Retail Shop

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)

These are shops that are engaged in the sale of art and craft works.

They may sell original art and craft works; prints and reproductions of original works; art and craft supplies; art and craft related reading materials and calico or similar re-useable shopping bags.

Souvenirs (Shops offering items of tourism significance)

These are shops that are engaged in the sale of items of tourism significance.

They may sell 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 and calico or similar re-useable shopping bags.

Pharmacy

Pharmacies may sell goods and services that are in accordance with the *Pharmacy Act 2010* and calico or similar re-usable shopping bags.

Domestic development shops

These are shops offering items for domestic improvements, construction and maintenance, floral arrangements and products for the establishment and maintenance of gardens.

They may sell 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 and calico or similar re-useable shopping bags.

Marine Craft (shops engaged in the sale of marine craft)

These are shops that are engaged in the sale of marine craft.

They may sell, marine craft and vessels associated spare parts and accessories, boating related books and video cassettes and calico or similar re-useable shopping bags.

Video shops

Video shops may sell digital video disks, video cassette tapes and video head cleaning products; promotional items relating to any video; confectionery and savouries and calico or similar re-useable shopping bags.

Duty free shops

Duty free shops may only trade 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).

They may sell goods offered for sale duty free under the terms of the permission granted and calico or similar re-useable shopping bags.

Motor vehicle spare parts shops

Motor vehicle spare parts shops are shops other than shops located on premises on which motor vehicles are sold.

They may sell 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 and calico or similar re-useable shopping bags.

Sports venue shops

Sports venue shops are shops located at special sports participation venues.

They may sell, sporting goods and associated equipment relevant to the sports activities at each applicant venue and calico or similar re-useable shopping bags.

Newsagencies and book shops

Newsagencies and book shops may sell 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.) and calico or similar re-useable shopping bags.

Hotel Tourist shops

Hotel tourist shops are 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.

They may sell 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 and calico or similar re-useable shopping bags.

Appendix 7 Goods That May 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)).

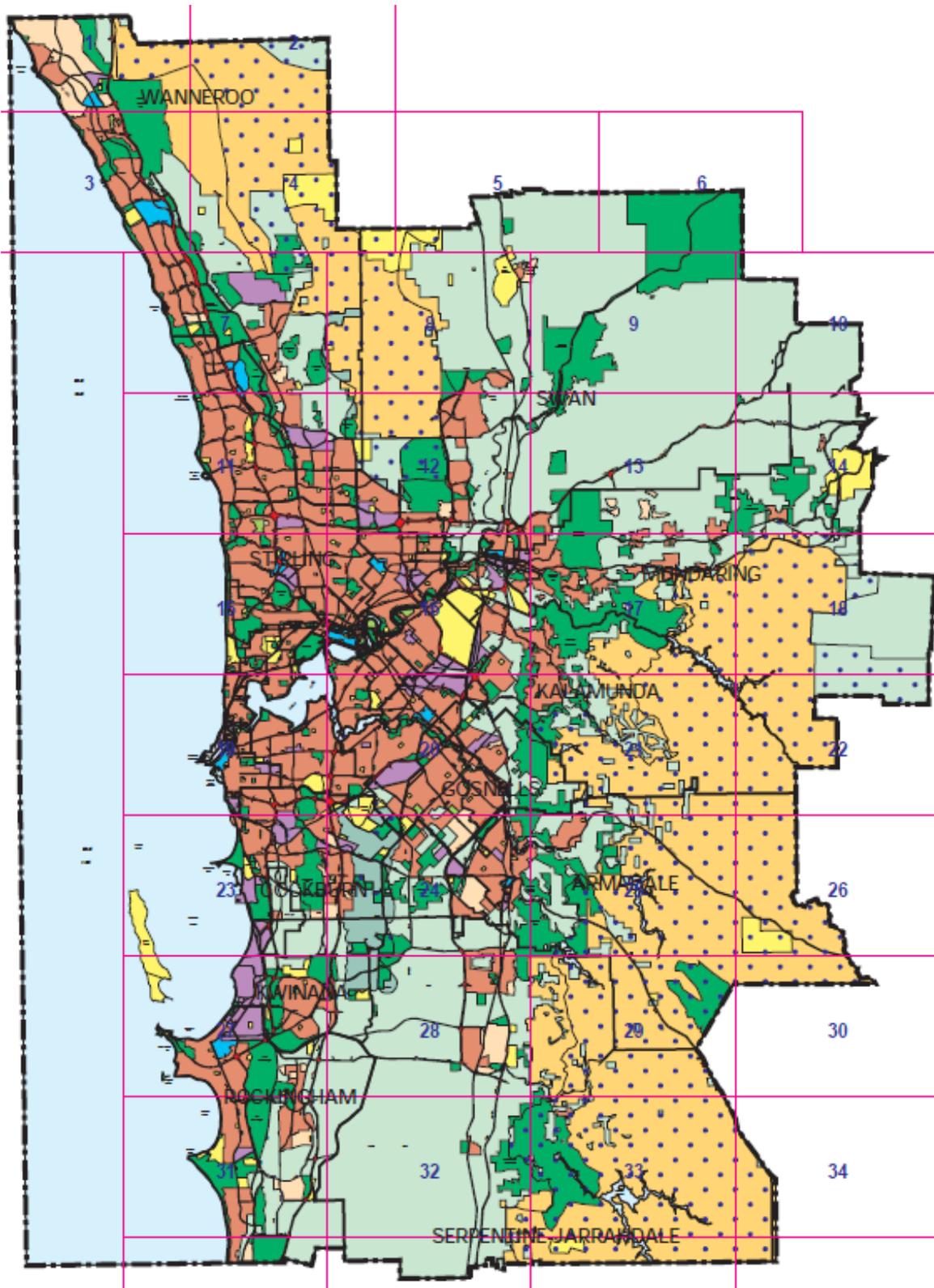
Under section 14A(1)(b) of the Act the following goods are prescribed for the purposes of sale at all filling stations —

- 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);
- i) replacement sporting equipment (including fishing hooks, lines, sinkers, bait, balls and tees);
- j) film;
- k) flash bulbs;
- l) 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; and
- i) canned food.

Appendix 8 Perth Metropolitan Area as Referenced by the *Retail Trading Act 1987*



Source: Government of Western Australia, Western Australian Planning Commission

Appendix 9 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.⁸⁷²

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.

⁸⁷² Gascoyne; Goldfields – Esperance; Great Southern; Kimberley; Mid West; Peel; Pilbara; South West; and Wheatbelt.

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 sedans 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 10 Calculation of Costs and Benefits of Supply Restrictions in Perth

Benefit to plate holders

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.⁸⁷³

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 \$35.75 respectively (both figures are GST inclusive). This amounts to a combined weekly lease fee of \$107.25 (\$97.5 exclusive of GST).

For area restricted plates, the maximum is \$355 per week, although the ERA considers given the differential between the 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.⁸⁷⁴

Assuming that each plate is leased out at its regulated maximum rate,⁸⁷⁵ the total annual benefit to taxi plate holders is \$27.7 million.⁸⁷⁶

Table 44 Expected aggregate plate owner revenue

Plate owner benefit	Government			Private		
	Conventional	Peak Period	Area Restricted	Conventional	Peak Period	Area Restricted
Plate Numbers	618	390	58	984	22	15
Weekly Lease Fee	\$250	\$50	\$100	\$355	\$97.5	\$142
Annual Revenue	\$8,034,000	\$1,014,000	\$301,600	\$18,164,640	\$111,540	\$110,760

Source: Department of Transport (as at December 2013)

⁸⁷³ PricewaterhouseCoopers, *Re: Update of the 2011 taxi fare increase*, Document posted on DoT website, 2011.

⁸⁷⁴ The Government lease rate for area restricted taxi plate is 40 per cent of the lease rate for a conventional taxi.

⁸⁷⁵ With the exception of area restricted plates.

⁸⁷⁶ Peak period plates have been assumed to be leased for Friday/Saturday night and one other shift.

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.

Benefit to drivers

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 which allows drivers leasing Government plates to capture the differential between the lease rates for themselves and earn a greater income than drivers leasing plates privately.⁸⁷⁷

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.⁸⁷⁸ 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 nights is \$64.35, for any other shift the regulated maximum is \$32.18.⁸⁷⁹ Based on the assumption that peak period plates operate during the two compulsory Friday/Saturday nights and one other shift,⁸⁸⁰ 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.

For the purposes of this calculation, the differential between the cost of leasing conventional and area restricted plates from the Government 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).⁸⁸¹ Accordingly, it is assumed that the market rate for area restricted plates is

⁸⁷⁷ Provided the regulated taxi fares are cost reflective, the income earned by drivers leasing privately owned plates would be expected to be comparable to driver income levels in a fully competitive market.

⁸⁷⁸ For simplicity and conservatism, it has been assumed that all plates are assigned to sedans.

⁸⁷⁹ The regulated fees for these two shifts include GST, these figures are GST exclusive.

⁸⁸⁰ 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.

⁸⁸¹ \$100 a week for area restricted and \$250 for conventional (sedan).

\$142 per week. This provides drivers leasing Government plates with a cost advantage of \$42 per week.

Table 45 Benefit to taxi drivers of leasing Government tax plates

Driver Benefit	Conventional	Peak Period	Area Restricted
Government owned	618	390	58
Weekly cost differential with privately leased plates	\$105	\$47.5	\$42
Annual benefit to drivers	\$3,374,280	\$963,300	\$126,672
Total	\$4,464,252		

Source: Department of Transport

In total, supply restrictions generate benefits of approximately \$4.4 million per year to taxi drivers who lease government plates.

Cost to passengers – prices

As noted in the body of this chapter, 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. The cost of leasing the taxi plate is incurred by taxi drivers and is passed on to passengers via taxi prices.

The extent to which supply restrictions increases prices to taxi passengers can be calculated in two ways:

- by estimating the total benefits that taxi plate owners and taxi drivers enjoy as a result of supply restrictions; 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 benefit earned by taxi plate owners from leasing taxi plates in Perth has already been estimated to be \$27.7 million per year and the benefit to taxi drivers who lease taxi plates from the Government has been estimated to be \$4.4 million per year. Combined, this amounts to a cost to passengers of \$32.1 million per year.

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. Table 46 illustrates the results of the survey, along with the proportion of taxi rides that are undertaken during each period of the week.

Table 46 Average fares in the Perth Metropolitan Area (2013)

	Weekday day	Weekend day	Monday – Thursday, & Sunday evening	Friday evening	Saturday evening ⁸⁸²
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, 2013.

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 estimated 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.⁸⁸³ This would see the average fare fall by \$3.62 from \$22.92 to \$19.30.

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.

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.⁸⁸⁴ 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:

⁸⁸² 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.

⁸⁸³ 15.8 per cent.

⁸⁸⁴ 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.

- **\$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 the 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 \$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 estimated price benefits that would accrue to existing passengers from the removal of supply restrictions⁸⁸⁵ calls into question the accuracy of assuming that taxi fares would decrease by 16 per cent. As such, a conservative estimate of 10 per cent has been used instead.⁸⁸⁶

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 (**IPART**) in New South Wales. 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.⁸⁸⁷
- Price elasticities of demand for taxis in Melbourne were estimated as part of the Victorian Taxi Inquiry in 2012.⁸⁸⁸ 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

⁸⁸⁵ That is the estimates of \$32.1 million per year and \$47 million per year.

⁸⁸⁶ 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.

⁸⁸⁷ Booz Allen Hamilton, *Appraisal of Taxi Fare Structure Issues*, Prepared for IPART, 2003.

⁸⁸⁸ Victoria Taxi Industry Inquiry, *Final Report: Customers First – Service, Safety, Choice*, 2012 p.260.

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.⁸⁸⁹

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 increases 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.⁸⁹⁰

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 that 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.

Cost to passengers – waiting times

Quantity restriction on the number of taxis results in longer passenger waiting times. This is because the number of available taxis cannot meet the 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.⁸⁹¹

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 five minutes had fallen to nine per cent.⁸⁹² A similar result was observed in Cambridge,⁸⁹³ 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 2003.⁸⁹⁴

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

⁸⁸⁹ The ERA has placed more weight on the Victorian elasticity than the Booz Allen Hamilton elasticities because the recent nature of the Victorian report.

⁸⁹⁰ 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).

⁸⁹¹ OECD, *Taxi Services: Competition and Regulation*, Policy Roundtable, 2007, p. 8.

⁸⁹² Office of Fair Trading, *The regulation of licensed taxi and PHV services in the UK*, 2003, p.31

⁸⁹³ 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.

⁸⁹⁴ Office of Fair Trading, *The regulation of licensed taxi and PHV services in the UK*, 2003, p.31

1997 to 49.7 per cent in 2008.⁸⁹⁵ Overall, average waiting times fell by 46 per cent between 1997 and 2008.⁸⁹⁶

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 8 year period between deregulation in 2000 and 2008.⁸⁹⁷

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:

“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.”⁸⁹⁸

The most recent update of the ABS average weekly income data set used by Abelson shows that average income has risen to \$1,437.⁸⁹⁹ This breaks down to an hourly wage of \$38.30 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 IPART in its review of taxi pricing in Sydney.⁹⁰⁰

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 hours⁹⁰¹

⁸⁹⁵ Goodbody Economic Consultants, *Economic Review of the Small Public Service Vehicle Industry*, 2009, p.49.

⁸⁹⁶ Goodbody Economic Consultants, *Economic Review of the Small Public Service Vehicle Industry*, 2009, p.93.

⁸⁹⁷ Goodbody Economic Consultants, *Economic Review of the Small Public Service Vehicle Industry*, 2009, p.94.

⁸⁹⁸ Abelson, *The High Cost of Taxi Regulation, with Special Reference to Sydney*, Agenda: A Journal of Policy Analysis and Reform, Volume 17, Number 2, 2010

⁸⁹⁹ ABS 6302.0 - Average Weekly Earnings, Australia, 2013.

⁹⁰⁰ IPART, Review of maximum taxi fares and review of annual Sydney taxis licences from July 2014, p.40.

⁹⁰¹ One minute per trip would save 13,007,268 minutes.

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 per taxi trip will be higher.⁹⁰²

⁹⁰² Abelson estimates an average of 1.8 passengers in each taxi ride, although the basis for this is not clear.

Appendix 11 Analysis of Competition in the Farm-gate Purchase of Ware Potatoes in Western Australia

Introduction

In this attachment, the ERA examines the market structure of the Western Australian potato market to determine whether the major supermarkets have market power in the purchase of ware potatoes in the Western Australia. Specifically, market power is defined as the supermarkets having significant pricing power in the wholesale market, facing an upward sloping demand curve with a steeper marginal expense curve. This is formalised below.

Economic theory

In the short run, the supply of ware potatoes equals the Domestic Market Entitlements for the period in question, which in this analysis is taken to be one year. In 2012/13, 54,000 tonnes of Domestic Market Entitlements were allocated by the Potato Marketing Corporation.⁹⁰³

However, in the long run the Potato Marketing Corporation is targeting a price for growers as required under Section 32 of the *Marketing of Potatoes Act 1946*. Consequently, for this analysis, the Potato Marketing Corporation is assumed to set price first and then establish a quantity of Domestic Market Entitlements consistent with this price.

This is obviously a simplification of the actual process. However, it makes the analysis easier to perform and understand and actually minimises (maximises) the welfare loss (gain) from regulation. This is because it changes the price that buyers face, from one that increases as they demand more, to a one where price is constant no matter how much they demand.

Removing the regulations on the ware potato industry will cause a fall in the price of potatoes at the point of sale from the Potato Marketing Corporation to washpackers. The scale of the reduction, and the amount passed through to consumers, will differ depending on whether buyers (supermarkets) have monopsony buying power.

In undertaking this analysis, the ERA assumes:

- constant washpacker and wholesale margins⁹⁰⁴; and
- that supermarkets are largely 'foreign-owned' (that is, not owned by Western Australians), and so any surplus created will flow out of Western Australia. Foreign shareholders do not have 'standing' in the analysis (that is, the ERA does not value benefits and costs accrued by foreign owners).

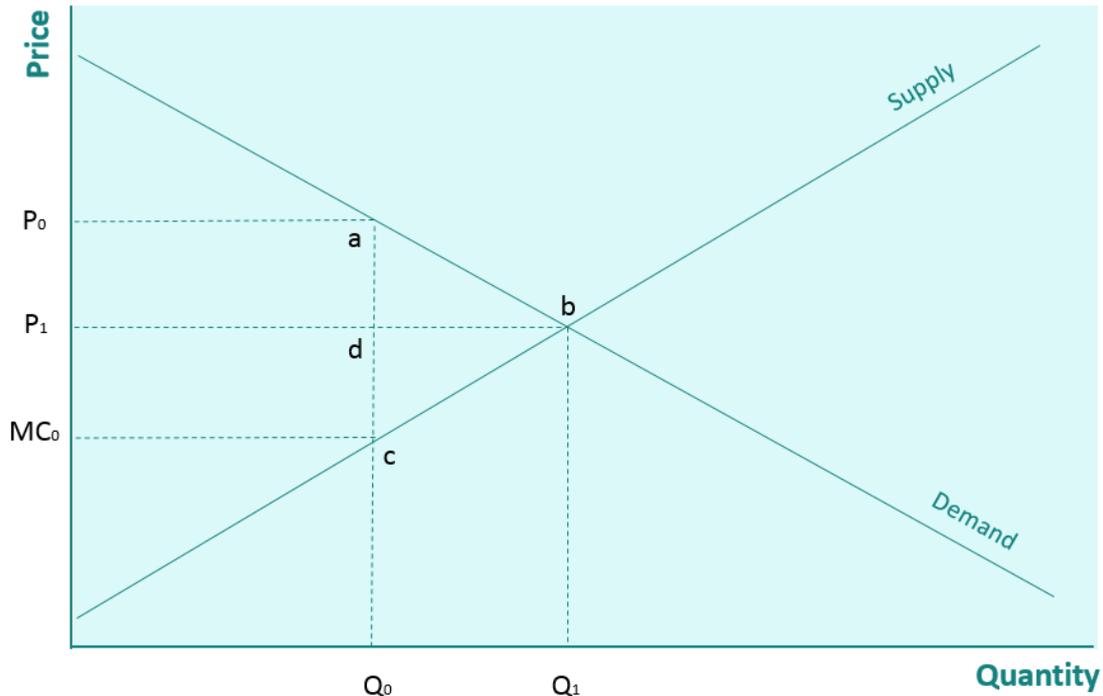
If there is perfect competition, removing the regulations will result in a small reduction in farm-gate prices and all of this will be passed through to consumers. This is shown in the stylised supply-demand relationship below. By targeting a price (P_0) that is higher than the free-market price (P_1), the Potato Marketing Corporation would have to restrict Domestic Market Entitlements to a point (Q_0) below the free market quantity (Q_1). In this case,

⁹⁰³ Potato Marketing Corporation, *Annual Report 2012/13*, p. 21.

⁹⁰⁴ In reality washpackers act as wholesalers in the market.

removal of the Potato Marketing Corporation would result in a transfer to consumers from growers equal to area $a-d-P_1-P_0$, with net economic welfare increased by the value equal to $a-b-c$.

Figure 51 Economics of the Ware Potato market without pricing power by supermarkets



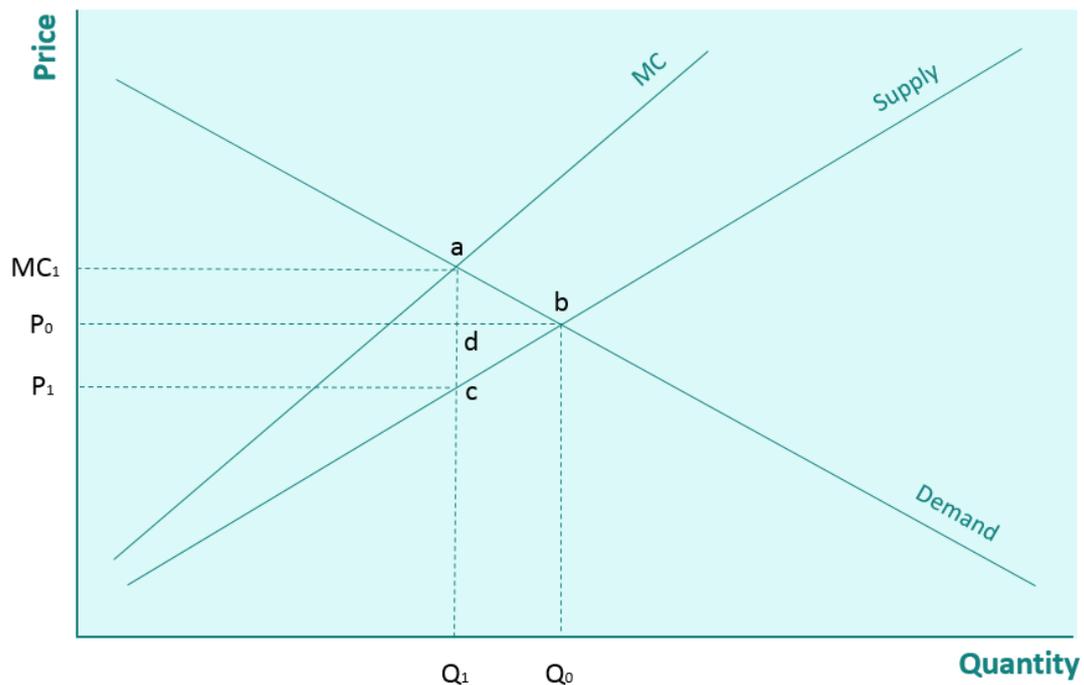
Source: ERA Analysis

If there is substantial buying power by the supermarkets (monopsony), the fall in farm-gate prices will be large, as the supermarkets drive a wedge between the value of potatoes to them and the price they pay for the product. Little of the fall in farm-gate prices will be transferred to consumers.

This is shown in the stylised chart below for the case of a single buyer and, in the absence of the Potato Marketing Corporation, many sellers. In this case, the monopsony buyer is not a price taker and therefore increases the price it must pay for potatoes when it demands more product. However, it must pay this increase on all of its other purchases, meaning its marginal expense of consuming one extra unit is much higher than the price paid for that unit.

Hence, a monopsonist will restrict output to below the welfare maximising level (Q_1 rather than Q_0) and depressing the price it pays to producers. The buyer will make a monopsony profit because of the difference between what it pays farmers at Q_1 and the value it can gain from selling the potatoes at retail.

Figure 52 Economics of the Ware Potato market with pricing power by supermarkets



Source: ERA Analysis

The presence of the Potato Marketing Corporation could, under these conditions and assuming skilled setting of its minimum price, increase the quantity sold from the free-market level, increase the price to growers and increase society-wide welfare (area a-b-c in the chart above by setting price P_0).⁹⁰⁵

Consequently, under such conditions, deregulation of the market would lead to a welfare loss equal to area a-b-c, with a transfer from growers to supermarkets of d-c- P_1 - P_0 and from consumers to supermarkets a-d- P_0 - MC_1 .

It is also possible that, even if the supermarkets do have market power and the Potato Marketing Corporation is not acting in the ideal manner described above, regulation is still increasing welfare in Western Australia. If the Potato Marketing Corporation were to increase its price above MC_1 , consumers would be worse off than under a free market, but the large transfer from the supermarkets to farmers would lead to a net benefit to Western Australia.

Productivity gains in the farming sector flowing from greater competitive pressure under deregulation would lower the supply curve and could lead to substantial net benefits to Western Australia even if retailers are able to gain some monopoly and/or monopsony profits.

The key question asked in this appendix is whether there is enough competition at the wholesale level so that, if the regulations were to be removed, the supermarkets would not have substantial pricing power. That is, the supermarkets cannot affect the farm-gate price of potatoes to the point where their total expense from purchasing their last unit of production exceeds the price they pay for that last unit.

⁹⁰⁵ This situation is frequently cited in the case of a minimum wage. For example, see Nicholson, W. and C. Snyder, *Microeconomic Theory: Basic Principles and Extensions*, 10th Edition, 2008, p. 587.

There will be a transfer from producers to consumers and a net welfare benefit if the Potato Marketing Corporation is removed if there is substantial competition in the purchase of potatoes at the farm gate. There will be a transfer from producers to supermarkets and a net loss to Western Australia if there is not substantial competition in the purchase of potatoes at the farm gate. There are shades of grey between complete competition and complete pricing power. The economic benefit will be proportional to the share of the reduction in farm-gate prices that is passed through to consumers.⁹⁰⁶

Preliminaries

The ERA has estimated the annual value of Domestic Market Entitlements at \$50 per tonne per annum in 2013/14 prices. All else equal, the farm-gate price of ware potatoes will fall by this amount at current production should the Act be repealed. However, the slope of the potato supply curve will change from horizontal under the Potato Marketing Corporation to an upward sloping curve where production increases in response to a rise in prices.

The analysis below requires some reference to the retail elasticity of demand for ware potatoes, so knowledge of the approximate value is required. In its Draft Report, the ERA used a retail elasticity of demand for potatoes of -0.2 on the basis that it is generally accepted that potatoes are an essential good. The only study that the ERA could find showed an elasticity of -0.12.⁹⁰⁷ ACIL Allen⁹⁰⁸ criticised the ERA's use of -0.2 for the elasticity of demand for potatoes on the grounds that the ERA had ignored the published estimate.

However, more recent research estimates a higher long-run elasticity of -0.8⁹⁰⁹. In this regard competition between potatoes and other sources of starch such as rice and pasta is quite vigorous.

Additionally, simple movements in annual quantities and retail prices in Western Australia indicate that the elasticity of demand may be much higher than this. The table below shows the change in domestic sales in each financial year, the implied price change given a linear demand curve and a demand elasticity of -0.12, and the actual price change in each year. In most years an elasticity of demand of -0.12 implies a far larger price rise than actually occurred.

⁹⁰⁶ This is before any dynamic gains from deregulation, such as an increase in grower productivity driven by a more competitive market.

⁹⁰⁷ V. Lechene, *Section 6: Income and Price Elasticities of Demand for Foods Consumed in the Home*, Department of Economics: Trinity College Dublin, p.101.

⁹⁰⁸ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.6.

⁹⁰⁹ R. Tiffin, K. Balcombe, M. Salois and A. Kehlbacher, *Estimating Food and Drink Elasticities*, University of Reading, 2011.

Table 47 Potato Market Corporation ware potato sales versus retail prices

Year	Domestic Sales Change	Implied Retail Price Change (e=-0.12)	Actual Real Retail Price Change
2006	-8%	69%	7%
2007	-1%	9%	3%
2008	-4%	37%	5%
2009	4%	-29%	1%
2010	3%	-27%	-7%
2011	2%	-17%	-1%

Source: Potato Marketing Corporation data, ERA calculations.

Instead, while detailed data were not available for a formal computation, and interstate imports are not included, the available data indicate a retail demand elasticity in the range -0.7 to -0.8. A slightly lower farm-gate elasticity of -0.6 is used to account for the fact that the potatoes at the farm-gate accounts for only a share of the retail cost of potatoes.⁹¹⁰

Finally, in its Draft Report the ERA used analysis of pass-through of farm-gate prices to the retail level as evidence of competition for the purchase of potatoes by retailers. ACIL Allen⁹¹¹ noted that the ERA's conclusion relied on particular assumptions regarding the shape of the retail demand curve for ware potatoes. The ERA agrees with ACIL Allen and so conducts a thorough analysis of price pass through with a wider array of demand curve shapes.

However, before this can be done, an estimate of the actual price pass through is required. The ERA has analysed the pass-through of farm-gate prices to the retail level and concludes that a \$1 rise (fall) in the farm-gate cost of potatoes translates to a \$1.20 rise (fall) in the average retail price of potatoes. This estimate differs from the Draft Report and reflects use of different data and a more thorough analysis of the pass through. This analysis is detailed below.

Analysis

Introduction

The most direct method for determining the level of monopsony power in a market is to attempt to model a firm's supply curve to see whether it is upward sloping. A firm is thought to have monopsony power if it can affect price directly.

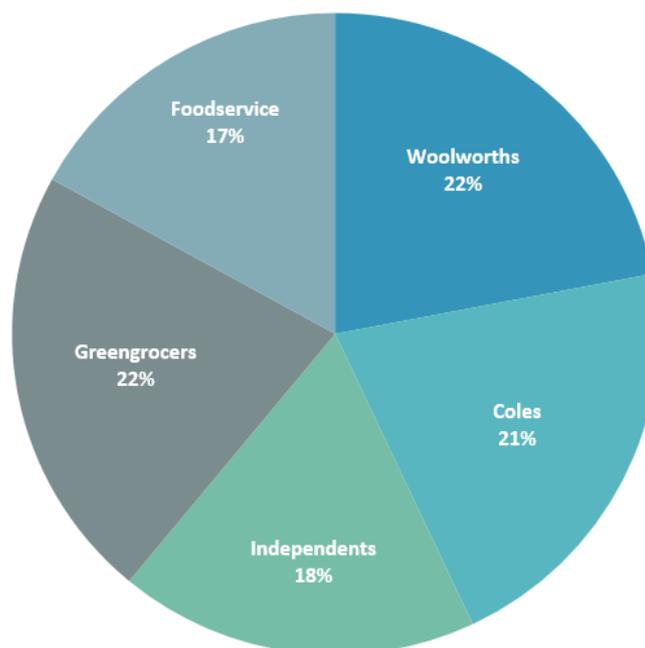
However, the Potato Marketing Corporation exists to offset any such market power, so the typical signal of monopsony power will, assuming the Potato Marketing Corporation is operating effectively, be muted in this case. Therefore, the ERA has used indicators of market power at the retail level (monopoly) as an indicator that there is market power in the purchase of wholesale potatoes at the farm-gate.

⁹¹⁰ J.R. Hicks (1963). *The Theory of Wages*, Second Edition, London: Macmillan.

⁹¹¹ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *A review of the Draft ERA Report on Microeconomic Reform*, 2014, p.6.

Known market shares

Figure 53 Market shares of retail Ware Potato market



Source: Potato Market Corporation

In its submission to the ERA's discussion paper the Potato Marketing Corporation provided information showing that the two major supermarkets, Coles and Woolworths, accounted for 43 per cent of its sales. From this, the ERA concluded that it was unlikely that the supermarkets had any major market power in the wholesale purchase of ware potatoes.

However, in its submission to the ERA's Draft Report the Potato Marketing Corporation claimed that 84 per cent of its Class 1 ware potato sales were to Coles and Woolworths. The ERA has confirmed this estimate through other sources. There could be substantial market power in this segment of the market, which is a much higher value market than other varieties.

Class 1 potatoes account for approximately 40 per cent of production⁹¹². Therefore the Potato Marketing Corporation data indicate that the remaining 60 per cent of sales is quite competitive. However, Class 1 potatoes attract a significant premium over other classes,⁹¹³ so the value share of sales of Class 1 potatoes is much greater than 40 per cent.

The key question is whether Class 1 and Class 2 potatoes are readily substitutable in the minds of consumers. The ERA understands that potatoes are graded mainly on the basis of size and appearance, with absence of internal defects common across all grades sold. This would indicate that Class 1 and Class 2 potatoes can be used for identical purposes.

Additionally, data from the Potato Marketing Corporation indicates that smaller greengrocers, farmers markets and the food service sector consuming mainly non-Class 1 potatoes, but are the sectors of the market where consumers could be expected to be the most discerning.

⁹¹² Potato Marketing Corporation (2013) Annual Report 2012/13, p.7.

⁹¹³ Potato Marketing Corporation (2013) Annual Report 2012/13, various.

Finally, any market power will be mitigated by vigorous competition between the two major supermarkets. The ERA also notes that ALDI will open its first store in Western Australia in 2014 with plans for substantial expansion, although it is not clear in which sector of the market it will operate.

Nevertheless, the supermarkets do account for a major share of a high-value sector of the market and this is probably the only way a large proportion of the shopping public purchases potatoes. The ERA concludes that this evidence suggests that the supermarkets enjoy some, though not total, market power in the wholesale ware potato market

In its Inquiry into the Competitiveness of Retail Prices for Standard Groceries⁹¹⁴, the ACCC examined whether a lack of competition in the Australian grocery sector had contributed to increased grocery prices. In this Inquiry, the ACCC paid particular attention to the potential market power of the major supermarkets – Coles, Woolworths and Metcash (the major wholesaler to the independent sector, including the IGA chain in Western Australia).

The ACCC found that:

- grocery retailing is ‘workably competitive’, although it identified a number of factors limiting price competition;
- price competition is strongest for ‘key value items’, which consumers use to assess value;
- ALDI has provided vigorous competition since its entry into Australia, with the biggest impact on dry goods, but some impact on fresh produce;
- while margins of all supermarkets had increased in the years before the Inquiry, any potential weakening of competition had not been a major contributor to increases in retail prices;
- the Australian retail supply chain had worked well; and
- the major supermarkets had some pricing power in relation to packaged grocery products, but vigorous competition at the retail level meant that the supermarkets had to pass some of the gains of this market power through to consumers.

The ACCC also examined the relationship between farm-gate and retail prices and found that farm-gate prices were set by demand and supply of the product in question rather than by retailer market power. Additionally, changes in wholesale prices tended to be translated directly to changes in retail prices.

Finally, the ACCC reported favourably on the Horticulture Code of Conduct for retailers, but did not provide recommendations on how to improve its coverage and effectiveness.

Recent developments in retailing

Australian Venture Consultants notes the recent action by the ACCC against Coles for unconscionable conduct against its suppliers as the type of retailer behaviour that necessitates the regulation of the ware potato industry.⁹¹⁵ In this action, the ACCC alleges

⁹¹⁴ ACCC, *Report of the ACCC inquiry into the competitiveness of retail prices for standard groceries*, 2008.

⁹¹⁵ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Costs and Benefits Analysis of the Current Statutory Requirements for Growing and Marketing Potatoes in Western Australia*, 2014.

that Coles ‘developed a strategy to improve its earnings by obtaining better trading terms from its suppliers’.⁹¹⁶ The specific allegations against Coles include that it was:

- providing misleading information to suppliers about the savings and value to them from the changes Coles had made;
- using undue influence and unfair tactics against suppliers to obtain payments of a rebate;
- taking advantage of its superior bargaining position by, amongst other things, seeking payments when it had no legitimate basis for seeking them; and
- requiring those suppliers to agree to the ongoing Active Retail Collaboration rebate without providing them with sufficient time to assess the value, if any, of the purported benefits of the Active Retail Collaboration program to their small business.

More recently, there has been some controversy in the media regarding Woolworth’s request to growers for a 40 cent per crate levy to help pay for an advertising campaign featuring celebrity chef Jamie Oliver.⁹¹⁷ Woolworths has argued that this is a voluntary levy, but critics argue that Woolworths may be coercing growers into paying the levy.

The ERA makes no comment on the veracity of the ACCC’s claims, but takes the allegations raised in both cases above very seriously. However, it questions whether these allegations necessitate the regulation of the ware potato industry in Western Australia. Firstly, if its allegations are proven, the ACCC’s action against Coles demonstrates that suppliers have protection under Australia’s existing competition and consumer laws. While the ACCC has noted the reluctance of suppliers to come forward during this case, suppliers should be bolder in future cases if the current prosecution is successful.

Additionally, the ERA notes that while the Woolworth’s marketing fee is at least notionally voluntary, the Potato Marketing Corporation and statutory industry bodies such as the Agricultural Produce Commission levy compulsory market fees on growers. While industry agreement is needed for such levies, there may be a substantial numbers of growers who are compelled to pay the levy against their wishes.

Industry trends

Deregulation of the ware potato industry would undoubtedly lead to some consolidation of growers. The ERA consider that the expected consolidation of industry post-deregulation will mitigate the market power of the supermarkets to some extent.

The ERA notes the example of Beta Spuds wash packers in the ACIL Allen submission to the ERA’s Discussion paper.⁹¹⁸ Beta Spuds has expanded to own farms and has formed relationships with growers to ensure supply at various times of year. The ERA also understands that Beta Spuds is undertaking research and development of new varieties and even some of its own marketing work.

⁹¹⁶ Australian Competition and Consumer Commission, *ACCC takes action against Coles for alleged unconscionable conduct towards its suppliers*, 2014, <http://www.accc.gov.au/media-release/accc-takes-action-against-coles-for-alleged-unconscionable-conduct-towards-its-suppliers> (accessed 23 June 2014).

⁹¹⁷ Australian Broadcasting Corporation, *Farmers slugged for Woolworths Jamie Oliver campaign*, 2014, <http://www.abc.net.au/news/2014-06-06/nrm-ausveg-vs-woolworths/5505808> (accessed 23 June 2014).

⁹¹⁸ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014.

Such alliances, which may also include the formation of grower co-operatives similar to the Sweeter Bananas co-operative, are likely to become more common if the current regulations are removed. The ERA considers that this will reduce any market power that the major retailers may have relative to the current industry.

Price pass through

Introduction

The pass-through of prices can be used to test for the competitiveness of the market for the retail market for ware potatoes in Western Australia when compared with various plausible assumptions regarding the nature of retail demand for ware potatoes.

In this section, the ERA considers the relationship between farm-gate and retail prices for input into the examination of competition the retail market for potatoes.

In the Draft Report, the ERA used analysis of changes in potato input costs faced by retailers when the Potato Marketing Corporation's price for Grade 1 Nadine potatoes sold to merchants rose from approximately \$850 per tonne in August 2006 to approximately \$1,175 per tonne in June 2008, a rise of 38 per cent.⁹¹⁹ The ERA found that this price rise was more than passed on in full. This was indicative of competition in the retail market, as monopolists would only pass on a proportion of any price rise in the value chain.

However, ACIL Allen⁹²⁰ noted that the ERA's conclusion depended critically on the shape of the demand curve chosen and that alternative shapes would lead to different conclusions. Consequently the ERA has undertaken a more thorough analysis of the pass-through of farm-gate prices to retail prices using a variety of demand structures.

Australian Venture Consultants⁹²¹ criticised the ERA's use of ABS data as the ABS itself had noted that these data were inappropriate for time-series comparisons. In response to this criticism, the ERA has chosen to use only the retail data presented by Australian Venture Consultants in its initial submission and provided in detail by the Potato Marketing Corporation.

Consequently the ERA has used the Potato Marketing Corporation's 'old' series for the average retail price of Western Australia, despite there being faults with these data, because the new series has not existed for long enough to undertake statistical analysis. The period considered is monthly data from July 2005 to January 2012, a total of 79 observations. These prices are compared to the price paid by wash packers for Class 1 Nadine potatoes⁹²² over the same period.

Model

The ERA considers that little is known about the nature of potato demand in Western Australia. Therefore any inferences drawn from the pass through of farm-gate prices need to be as robust as possible across a range of demand assumptions.

⁹¹⁹ McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.21.

⁹²⁰ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014

⁹²¹ Australian Venture Consultants (on behalf of the Potato Growers Association of WA), *Response to ERA Draft Report: Inquiry into Microeconomic Reform in Western Australia*, 2014.

⁹²² Provided by the Potato Marketing Corporation.

The pass through of any industry-wide cost increase under perfect competition will be 100% (or 1.0 times any cost change) under any shaped or sloped demand curve. That is a \$1 increase in farm-gate prices will lead to a \$1 rise in retail prices.

However, under a pure monopoly situation, the pass through will depend on the shape of the demand curve in question. If the demand curve is concave (that is demand becomes more responsive to prices as prices increase), there will be little pass through of any cost change.

If the demand curve is linear, as assumed by the ERA in the Draft Report, the pass through will be 50%. If the demand curve is convex, the pass through can range from less than one to greater than one.

Burlow and Pfliegerer⁹²³ give a summary of the impact of the various functional forms of the demand curve facing a monopolist: constant elasticity of demand, polynomial demand (of which a linear curve is a special case) and semi-log demand. These are examined below.

A constant elasticity of demand curve was suggested by ACIL Allen⁹²⁴ as a possibility to explain a greater than one for one pass through of costs to retail prices by a monopolist as estimated by the ERA in the Draft Report. The constant elasticity inverse demand curve is given by the formula:

$$p = \beta q^{\frac{1}{\epsilon}}, \epsilon < -1$$

Where: p is the retail price of the good;

β is a constant;

q is the quantity demanded at a given price; and

ϵ is the (constant) own price elasticity of demand

Under such as case, the pass-through of a cost increase will be

$$\frac{dp}{dc} = \frac{\epsilon}{1 + \epsilon} > 1$$

Where: dp/dc is the change in retail price in response to a change in costs.

Burlow and Pfliegerer⁹²⁵ also consider the inverse demand curve:

$$p = \alpha - \beta q^{\delta}, \delta > 0$$

Where α is a constant.

In this case the pass-through is given by:

⁹²³ Burlow, J. and Pfliegerer, P, 'A Note on the Effect of Cost Changes on Prices, *Journal of Political Economy*, Vol.91, Issue 1, 1983.

⁹²⁴ ACIL Allen Consulting (A report to the Potato Marketing Corporation), *Regulation and the potato industry in WA*, 2014, p. C-7.

⁹²⁵ Burlow, J. and Pfliegerer, P, 'A Note on the Effect of Cost Changes on Prices, *Journal of Political Economy*, Vol.91, Issue 1, 1983.

$$\frac{dp}{dc} = \frac{1}{(1 + \delta)} < 1$$

A linear demand curve is a special case where $\delta = 1$ and implies a pass-through rate of 0.5 as discussed in the Draft Report.

Finally, Burlow and Pflleiderer⁹²⁶ also consider the semi-log inverse demand curve:

$$p = \alpha - \beta \ln(q)$$

In this case:

$$\frac{dp}{dc} = 1$$

That is, an estimated pass through of slightly greater than one is consistent with such a demand curve regardless of the elasticity of demand.

Quantitative Analysis of Farm-gate Price Pass through to Retail

To analyse competition in the Western Australian retail market for ware potatoes we first require an estimate of the plausible range of pass-through of farm prices to retail prices.

The ERA has modelled the linear relationship between the two price series because the price pass through of any price changes will be 100 per cent of the cost change if it is a competitive market.⁹²⁷ Therefore the estimation below informs whether the competitive situation is realistic.

The ERA recognises that it is impossible to estimate the true parameter in this circumstance. Given the lack of information regarding the nature of demand, the focus of the forthcoming analysis is to inform whether this parameter implies competition or monopoly power, which can be inferred from the estimated parameter.

In undertaking this analysis, the ERA has assumed that changes in Farm-gate (F)⁹²⁸ prices cause changes in Retail (R) prices. This is plausible, because the Potato Marketing Corporation targets prices to fulfil Section 32 of the *Marketing of Potatoes Act 1946*.

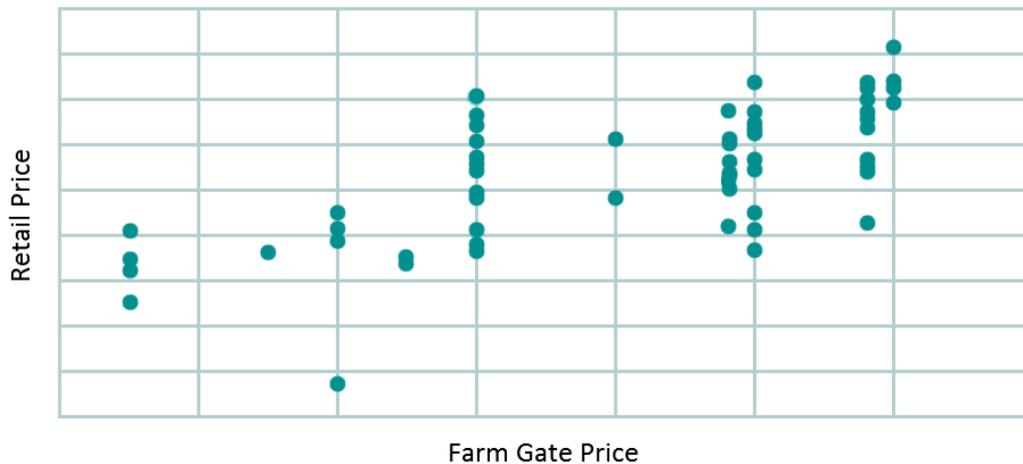
Figure 54 below shows the scatterplot between F and R. The chart indicates there could a linear relationship, but it is apparent that retail prices are far more volatile than farm-gate prices. This volatility is likely due to variability in intermediate costs or the quality blend of the retail index changing over time. Although not shown in the scattergram, farm-gate prices are often stable for substantial periods of time.

⁹²⁶ Burlow, J. and Pflleiderer, P, 'A Note on the Effect of Cost Changes on Prices, *Journal of Political Economy*, Vol.91, Issue 1, 1983.

⁹²⁷ Levels are estimated rather than changed as this is more likely to be the true relationship. If the data were measured without error and the model specified correctly, linear estimation in levels would be identical to estimation of changes, but this is never the case in practice.

⁹²⁸ Here the farm-gate price is taken to be the price paid by washpackers for Class 1 Nadine potatoes (McKinna et al, *Strategic Analysis of the WA Ware Potato Supply Chain: Final Report*, 2011, p.21.). While this is the price paid by wholesalers rather than retailers, the ERA assumes that the wholesale sector is competitive and operates based on a constant linear cost.

Figure 54 Scattergram of farm-gate versus retail prices



Source: Potato Marketing Corporation data, scales are removed and do not start from zero as the data are commercial in confidence.

Augmented Dickey Fuller tests⁹²⁹ are conducted for R and F to determine whether the data are stationary.⁹³⁰ This is required in the analysis of data⁹³¹ that may be non-stationary, as conventional methods such as ordinary least squares can produce spurious results.⁹³²

The Augmented Dickey Fuller test requires an input for the amount of lags to include in the test regression, in addition to the parametric form of the Dickey Fuller test.⁹³³ There are three parametric forms of the Augmented Dickey Fuller test that are used to test for non-stationarity, conditional on whether the differences in the time series of interest are:

1. Assumed to contain both a drift/intercept component and linear time trend as follows:

$$\Delta y_t = a_0 + \gamma y_{t-1} + a_2 t + \sum_{i=2}^p \beta_i \Delta y_{t-i+1} + \varepsilon_t$$

2. Assumed to contain an additional drift or intercept component:

$$\Delta y_t = a_0 + \gamma y_{t-1} + \sum_{i=2}^p \beta_i \Delta y_{t-i+1} + \varepsilon_t$$

3. Assumed to only be a function of its lagged value as follows:

$$\Delta y_t = \gamma y_{t-1} + \sum_{i=2}^p \beta_i \Delta y_{t-i+1} + \varepsilon_t$$

⁹²⁹ S. Said, D Dickey. "Testing for Unit Roots in Autoregressive-Moving Average Models of Unknown Order". *Biometrika*, 1984.

⁹³⁰ That is, they have constant mean and variance.

⁹³¹ Also called a unit root.

⁹³² C. Granger, P. Newbold. "Spurious Regressions in Econometrics". *Journal of Econometrics* 1974.

⁹³³ *Ibid.*

In order to ensure robustness in the conclusions from the Augmented Dickey Fuller test, the ERA must first determine which of the above parametric specifications is applicable to the time series of interest. This can be done by testing joint-hypothesis that the coefficients a_0 , γ and a_2 are equal to zero. The appropriate specification of the Augmented Dickey Fuller test can then be ascertained by determining which of the coefficients are statistically different from zero, and selecting the appropriate parametric form accordingly. A detailed discussion of this procedure can be found in Enders.⁹³⁴

In order to determine the appropriate amount of lags, the Bayesian Information Criterion (**BIC**) is employed.⁹³⁵ The BIC is a selection criteria that selects among a set of competing models by assigning a value to each by use of the following:

$$BIC = n \log\left(\sum_{i=1}^n e_i^2\right) + k \log(n)$$

where:

- n is the number of observations ;
- k is the number of parameters estimated;
- $\sum_{i=1}^n e_i^2$ is the sum of squared residuals from the model.

In this analysis, the set of competing models is the differing amount of lags, p , that are possible in the Augmented Dickey Fuller test. The chosen model is the one that minimises the BIC statistic out of the set of competing models. The BIC criterion is known to select more parsimonious models relative to other selection criteria such as the Akaike Information Criterion (AIC) or Hannan-Quinn Information Criterion (HQC).⁹³⁶ This makes the BIC the most appropriate criterion for model selection in this analysis, given the small sample of farm-gate and retail prices, and power concerns of the Augmented Dickey Fuller test.⁹³⁷

Once the correct form of the Augmented Dickey Fuller test is specified, a hypothesis test can be conducted testing the premise that the time series in question is non-stationary. Formally, the ERA tests the null hypothesis of a unit root $H_0 : \gamma = 0$ against the alternative hypothesis of stationarity $H_1 : \gamma < 0$. As explained in Enders⁹³⁸, this is done via the use of the τ statistic and corresponding critical values of the corresponding Dickey Fuller distribution.⁹³⁹

⁹³⁴ W. Enders, *Applied Econometric Time Series*, 3rd edn, Hoboken, NJ, John Wiley & Sons, 2010, p.207.

⁹³⁵ G. Schwarz. "Estimating the dimension of a model". *Annals of Statistics* 6 (2): 461-464 1978.

⁹³⁶ H. Bieren. "Information Criteria and Model Selection". Pennsylvania State University, 2006.

⁹³⁷ As noted by Enders, increasing the amount of lags in the Augmented Dickey Fuller test unnecessarily can reduce the power of the test, see: W. Enders, *Applied Econometric Time Series*, 3rd edn, Hoboken, NJ, John Wiley & Sons, 2010, p.237.

⁹³⁸ W. Enders, *Applied Econometric Time Series*, 3rd edn, Hoboken, NJ, John Wiley & Sons, 2010, p.207.

⁹³⁹ W. Enders, *Applied Econometric Time Series*, 3rd edn, Hoboken, NJ, John Wiley & Sons, 2010, p.207.

The R prices are first analysed by fitting the most general form of the Augmented Dickey Fuller test, containing both a drift and a time trend. The results indicate that this is the appropriate form of the Augmented Dickey Fuller test, as the Null Hypothesis of $a_0 = \gamma = a_2 = 0$ is rejected at the 1 per cent level of statistical significance. In addition, the BIC criterion selects one lag, or $p=1$. Given this, we are able to reject the Null Hypothesis of a unit root at the 1 per cent level of statistical significance and conclude that the R series is stationary. The results are as follows:

Table 48 Augmented Dicky-Fuller Tests for R with lag length equal to one.

Test Statistic	Estimated Value of Test Statistic	Null Hypothesis	1 per cent Critical Value	5 per cent Critical Value	10 per cent Critical Value	Result
τ	-4.35	$\gamma = 0$	-4.04	-3.45	-3.15	Reject Null Hypothesis
ϕ_2	6.51	$a_0 = \gamma = 0$	6.50	4.88	4.16	Reject Null Hypothesis
ϕ_3	9.64	$a_0 = \gamma = a_2 = 0$	8.73	6.49	5.47	Reject Null Hypothesis ⁹⁴⁰

Using the above specification, the ERA is thus able to conclude that the R series is stationary. In order to ensure robustness in this conclusion, the ERA tests for serial correlation and normality of the resulting residuals from the Augmented Dickey Fuller test. This ensures that the assumptions underlying the Augmented Dickey Fuller test are satisfied, namely that the error terms are uncorrelated in time,⁹⁴¹ and the resulting residuals are normally distributed.

In order to test for serial correlation, the ERA used the Ljung-Box Q statistics tests at 4, 8 and 12 lags.⁹⁴² This tests the Null Hypothesis that all serial correlations in the residuals, up to 4, 8 and 12 lags are zero. Rejecting the Null Hypothesis would present statistical evidence of serial correlation present in the residuals of the Augmented Dickey Fuller test.

Normality is tested via the Jarque-Bera test.⁹⁴³ The Jarque-Bera test statistic is a goodness-of-fit test analysing the skewness and kurtosis present within residual data. Rejecting the Null Hypothesis in this test is equivalent to rejecting the normality assumption within the errors.

The results indicate that no serial correlation exists in the residuals arising from the Augmented Dickey Fuller test, and they are normally distributed.⁹⁴⁴ Therefore, no statistical

⁹⁴⁰ The result of this test indicates that the correct specification of the Augmented Dickey Fuller test is the specification with the drift/intercept and linear time trend component.

⁹⁴¹ Finding evidence of serial correlation would indicate that more lags would be required in the Augmented Dickey Fuller test to control for correlation in time within the residuals.

⁹⁴² G. Ljung, and G. Box. "On a Measure of Lack of Fit in Time Series Models." *Biometrika* 65 (1978), 297-303.

⁹⁴³ Jarque C.M and Bera A.K "A Test for Normality of Observations and Regression Residuals" *International Statistical Review* Vol. 55, No.2 (Aug 1987), pp. 163-172.

⁹⁴⁴ The p-values from the Box-Ljung tests at lags 4, 8 and 12 are 0.44, 0.60 and 0.57 respectively. Therefore, we accept the Null Hypothesis of no serial correlation in the residuals. The p-value for the Jarque-Bera test is 0.30, indicating normality in the residuals.

evidence exists to call into question the robustness of the above analysis, and therefore the conclusion of stationarity in the R price series is valid. Therefore, we reject the null hypothesis of a unit root existing in the R series, and accept the alternative hypothesis of the retail prices being stationary.

While the test for R clearly shows that it is stationary under conventional analysis, the results for F are less clear. Traditional Augmented Dickey-Fuller tests indicate that the appropriate specification is the form without a drift and trend.⁹⁴⁵ The BIC criterion selects the form with one lag, and with this specification the Null Hypothesis is accepted at the 5% and 10% significance level.⁹⁴⁶ The results are as follows:

Table 49 Augmented Dickey-Fuller Tests for F with lag length equal to one.

Test Statistic	Estimated Value of Test Statistic	Null Hypothesis	1 per cent Critical Value	5 per cent Critical Value	10 per cent Critical Value	Result
τ	-0.162	$\gamma = 0$	-4.04	-3.45	-3.15	Accept Null Hypothesis

The ERA notes that the series may be too short for the Augmented Dickey Fuller test to reject the null hypothesis of a unit root.⁹⁴⁷ In addition, the ERA notes that the F data series is highly discrete and persistent,⁹⁴⁸ which may be the reason for the failure to reject the Null Hypothesis at any level of statistical significance, that is, structural breaks are misinterpreted as a unit root. A detailed discussion of this issue can be found in Romero and Usabiaga (2009).⁹⁴⁹

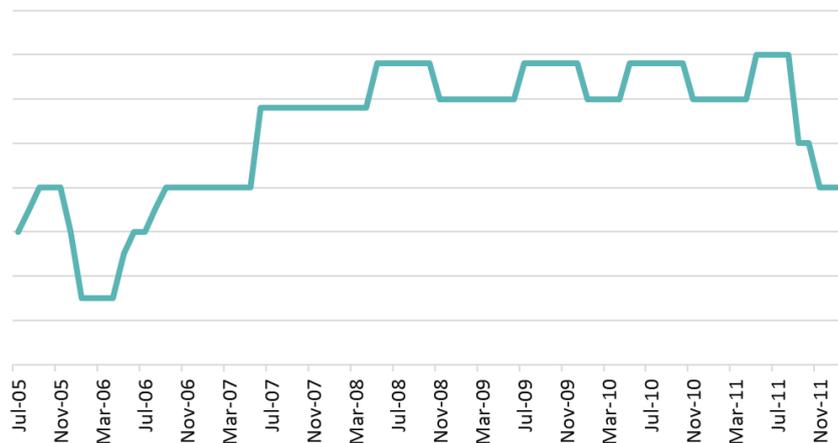
Analysing the F series for evidence of structural breaks indicates that farm-gate prices rose dramatically in 2007/08 as supply declined with the introduction of Domestic Market Entitlements. This is shown in Figure 55.

⁹⁴⁵ All specifications of the relevant hypothesis tests using the test statistics ϕ_1, ϕ_2, ϕ_3 are accepted at both 5% and 10% significance levels. This implies the correct form of the Augmented Dickey Fuller test is the one without an intercept and trend. For a detailed discussion see W. Enders, *Applied Econometric Time Series*, 3rd edn, Hoboken, NJ, John Wiley & Sons, 2010, p.208.

⁹⁴⁷ Note that Augmented Dickey Fuller test is biased to acceptance of the null over short samples. See: W. Enders, *Applied Econometric Time Series*, 3rd edn, Hoboken, NJ, John Wiley & Sons, 2010, p.237.

⁹⁴⁸ A visual inspection of the Farm gate price series indicates that prices stay the same over various periods.

⁹⁴⁹ D. Romero-Avila and C. Usabiaga "The Unemployment Paradigms Revisited: A Comparative Analysis of U.S State and European Unemployment" *Contemporary Economic Policy* July 2009.

Figure 55 Farm gate price series

Source: Potato Marketing Corporation data, scales are removed and do not start from zero as the data are commercial in confidence.

The ERA notes that the statistical evidence of stationarity for the R the series is extremely robust, whilst the F series has limited evidence regarding its status. Therefore, the standard case of spurious regression as outlined in Granger Newbold is not applicable when analysing the R and F price series.⁹⁵⁰ Therefore, the ERA has no statistical evidence to suggest that regressing the retail price against the farm gate price will produce spurious results. As a consequence the ERA has proceeded to estimate the relationship between F and R using ordinary least squares.⁹⁵¹ This will demonstrate how farm gate prices flow onto retail prices. The results are as follows:

⁹⁵⁰ The traditional case of spurious regression involves a regression performed using two time series each containing unit roots, see: C. Granger, P. Newbold. "Spurious Regressions in Econometrics". Journal of Econometrics 1974.

⁹⁵¹ Pesaran, B. and M.H. Pesaran, Time Series Analysis using Microfit 5.0, Oxford University Press, 2009, p.8.

Table 50 Ordinary Least Squares estimation results

Ordinary Least Squares Estimation: Dependent Variable = R			
	Coefficient	Standard Error	T Ratio
Intercept	1.4133	0.1558	9.068 **
F	1.1627	0.1495	7.777 **
R ² : 0.46734	R-bar-squared:0.433		
F-Stat: 60.48 **	Durbin-Watson Statistic: 1.419 ⁹⁵²		
Diagnostic Tests			
	LM Version	F Version	
Serial Correlation ⁹⁵³	9.1987	0.70285	
Functional Form ⁹⁵⁴	0.042983	0.040828	
Normality ⁹⁵⁵	7.3289*	n/a	
Heteroscedasticity ⁹⁵⁶	0.86795	0.85537	

Source: ERA Analysis

* Denotes significant at 5% level

** Denotes significant at 1% level

Given the high value of the Durbin- Watson statistic relative to the r-squared, there is no reason to consider that this regression is spurious.⁹⁵⁷ Therefore, no statistical evidence exists to conclude that the regression is spurious. The estimation of the coefficient of F is 1.2 - that is, the retail price will be 1.2 times the farm-gate price plus a constant. Tests for serial correlation, functional form and heteroscedasticity are not statistically significant, however the normality of residuals assumption is violated.⁹⁵⁸

To overcome the violation of the normality assumption in the residuals, robust regression procedures can be employed. The ERA has utilised the MM robust regression as it is the most efficient form of robust regression currently available, with a high breakdown point. A detailed discussion of the MM estimator can be found in the ERA's rate of return guidelines.⁹⁵⁹ The results for the MM regression are as follows:

⁹⁵² This test is based on the Durbin-Watson statistic, which tests for autocorrelation in the residuals of the regression analysis. For more information see: J. Durbin, S. Watson, 'Testing for serial correlation in least squares regression. III'. *Biometrika*, 1971.

⁹⁵³ Godfrey, L.G, 'Testing Against General Autoregressive and Moving Average Error Models when the Regressors Include Lagged Dependent Variables', *Econometrica*, vol. 46, 1978, p. 1293.

⁹⁵⁴ Ramsey, J.B, 'Tests for Specification Errors in Classical Linear Least Squares Regression Analysis', *Journal of the Royal Statistical Society*, series B, 1969, p. 350.

⁹⁵⁵ Jarque, C.M., and A.K. Bera, 'Efficient Test for Normality, Homoscedasticity and Serial Independence of Regression Residuals', *Economic Letters*, 1980, vol.6, 255.

⁹⁵⁶ Koenker, R., 'A Note on Studentizing a Test for Heteroscedasticity, *Journal of Econometrics*, vol. 17, 1981, p. 107.

⁹⁵⁷ A general rule of thumb to identify spurious regressions was first given by Granger and Newbold, suggesting that a regression could be spurious if the R^2 is greater than the Durbin-Watson statistic, see: C. Granger, P. Newbold. "Spurious Regressions in Econometrics". *Journal of Econometrics* 1974. Furthermore a theoretical foundation was provided by Phillips, see: P. Phillips, "Understanding spurious regressions in econometrics". Cowles Foundation Paper 667 1986.

⁹⁵⁸ The Jarque Bera test for the residuals has a p-value of 0.03, indicating at the 5% significance level we reject the null assumption of normality in the residuals.

⁹⁵⁹ Economic Regulation Authority, Appendices to Explanatory Statement for the Rate of Return Guidelines: Meeting the Requirements of the National Gas Rules, 16 December 2013, Appendix 17.

Table 51 Robust Regression Estimation Results

Robust Regression Estimation: Dependent Variable = R			
	Coefficient	Standard Error	T Ratio
Intercept	1.4548	0.1528	9.52**
F	1.1337	0.1466	7.73**

Source: ERA Analysis

The ERA notes that the estimated coefficient for the F has not changed significantly from Table 50, and in particular that both estimates fall between 1 and 2, implying that the qualitative conclusion arising from each estimate does not change. This is examined below. Therefore, the ERA does not consider the lack of normality in the residuals to be a significant issue.

Overall, the ERA considers that the estimate of 1.15 to be sufficient to proceed to the next stage of the analysis. Qualitatively, this estimate implies that any change in farm-gate prices will be more than passed on to retail prices. The implications of this result are discussed in the following Section.

Analysis

The estimated coefficient of 1.15 above implies a slightly larger pass through than perfect competition, but could be consistent with substantial competition and low pricing power by the retailers, or simply complete competition but that there is measurement error in the data or the equation is not specified correctly.

However, the estimated parameter is inconsistent with any plausible assumption regarding demand in a monopolistic market. With regard to a constant elasticity of demand curve, a pass through of 1.15⁹⁶⁰ would imply implausibly large values for ϵ^{961} , so the ERA considers that the demand curve is highly unlikely to be of this form. Large values of ϵ would mean that pricing power by one individual would be extremely limited in any case.

A pass through of greater than 1.0 is inconsistent with formulation:

$$\frac{dp}{dc} = \frac{1}{(1 + \delta)} < 1$$

Even if the pass-through of 1.15 is not accurate, it is unlikely to be much below 1.0. In this case the value of δ must be very small (0.1), implying that quantity demanded is very sensitive to price, which is inconsistent with any known response of this market and limits the pricing power of the supermarkets even if they were colluding perfectly. Any competition between the supermarkets would mean none would have any substantial pricing power.

The semi-log formulation is broadly consistent with the estimated 1.15 pass through. However, the intuitive reasoning behind a semi-log demand is that a change in price responds to a relative change in the quantity demanded. That is the price of potatoes would fall by a dollar amount if the quantity of potatoes on the market rose by a fraction (say 20%).

⁹⁶⁰ This would indicate a margin of 15% placed on top of any cost increase.

⁹⁶¹ For example, a pass through of 1.15 would imply a own price demand elasticity for each firm of -7.66. A pass through of 2.0 would imply a firm level demand elasticity of -2.0 which, given the market elasticity is approximately -0.75, would still require a level of competition between the major supermarkets that would largely offset any pricing power.

Such a formulation is popular in empirical economics where one of the variables is known to be a share, such as the ratio of money demand to income.⁹⁶² However, the ERA considers that this will be relatively unlikely in the market for potatoes.

Summary

Overall, while not 100 per cent conclusive, the ERA considers that the historical pass-through of farm-gate prices to retail prices indicates substantial competition for the retail sale of ware potatoes in Western Australia. While little is known about the properties of consumer demand, the ERA considers that a competitive market is most consistent with the estimated pass through across a broad range of demand formulations. However, substantial pricing power by the major retailers requires a demand structure implausible with respect to the estimated price pass through estimates.

Conclusion

In conclusion, the ERA considers that substantial, but not complete, competition exists in the total retail potato market. This is evidenced by the analysis in this section indicates that the retail market ware potatoes in Western Australia is largely competitive, from which competition in the farm-gate market can be inferred. Any pricing power by the retailers is likely to exist in the market for Class 1 Potatoes by the major supermarkets.

The choice of any pass-through of prices for the input into the ERA's cost-benefit analysis must be arbitrary to some extent. The analysis above can inform the ERA about the level of competition in the market, but cannot provide exact parameters on which to base the analysis.

Overall, the ERA considers that, across the entire ware potato market, retailers will be able to drive a 10 per cent wedge between the price that they pay and the price that is passed through to retail prices.⁹⁶³ The wedge is likely to be higher for Class 1 potatoes due to the concentration in the share of major customers, but lower in the remainder of the market which is very competitive. This is consistent with a market where substantial, but not complete, competition exists.

⁹⁶² For example, see Calza, A. and A Zaghini, Sectoral Money Demand and the Great Disinflation in the US, European Central Bank Working Paper Series, No 218, June 2010, p.11.
<http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1218.pdf>

⁹⁶³ Standard economic formulae for the pass-through of prices by a monopolist are not appropriate because; the situation must be generalised to a monopoly and monopsony situation; the exact form of the demand curve is unknown; and the market own price elasticity of demand for ware potatoes is greater than -1.0, which would be impossible for an individual monopolist.

Appendix 12 Seed Potato Export Industry Development

Background

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 conditions that are well-suited to growing seed potatoes, a skilled grower base, and the ability to produce seed potatoes through 12 months of the year. Consequently, Western Australia is well-positioned to develop a substantial seed potato export industry.

“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.”⁹⁶⁴

Seed potatoes are initially grown from disease-free mini tubers, micro tubers, or plantlets. These tubers or plantlets are grown over a 3 to 4 month period, with the resulting crop then being stored for planting in the following year. The seed potatoes are multiplied in the field over a number of years (generations) before being sold, generally when the tubers reach the third to fifth generation.

Expansion of export Seed Potato industry

Potential for expansion

The seed potato industry is the world's largest seed industry, both in terms of the value and volume of seed produced annually. The major seed potato producing countries are located in Central and Eastern Europe, India, and China. Most of these countries use seed for domestic production, with trade being dominated by northern European countries and Canada.

The bulk of seed potato exports are sent to European and Middle Eastern countries. Middle Eastern countries grow early-season ware potatoes for the European market, and for local consumption. The Netherlands and United Kingdom are currently facing pressure from disease, and there is a move to shift production of potatoes to Eastern Europe, which has cheaper land and labour as well as better access to the European market.

⁹⁶⁴ Dr Peter Schmiediche, Regional Representative International Potato Centre (CIP) Bogor, Indonesia (1992-97).

Table 52 Major seed potato exporting countries: value and quantity of seed potato exports in 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: ERA Analysis and UN Comtrade Database <http://comtrade.un.org>

There are major opportunities 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 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 then bulk them up over a number of generations to have sufficient quantities to meet demand.

In addition the quantities of seed demanded are often beyond the scope of an individual grower. This opportunity requires significant investment in market research and production, and will likely require one or more new entrants to the industry. The inability to sell oversize/reject seed tubers has deterred potential new investors.

Table 53 Fresh potato consumption of Australia and neighbouring countries

Country	Consumption					Change 1990 - 2000	
	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%

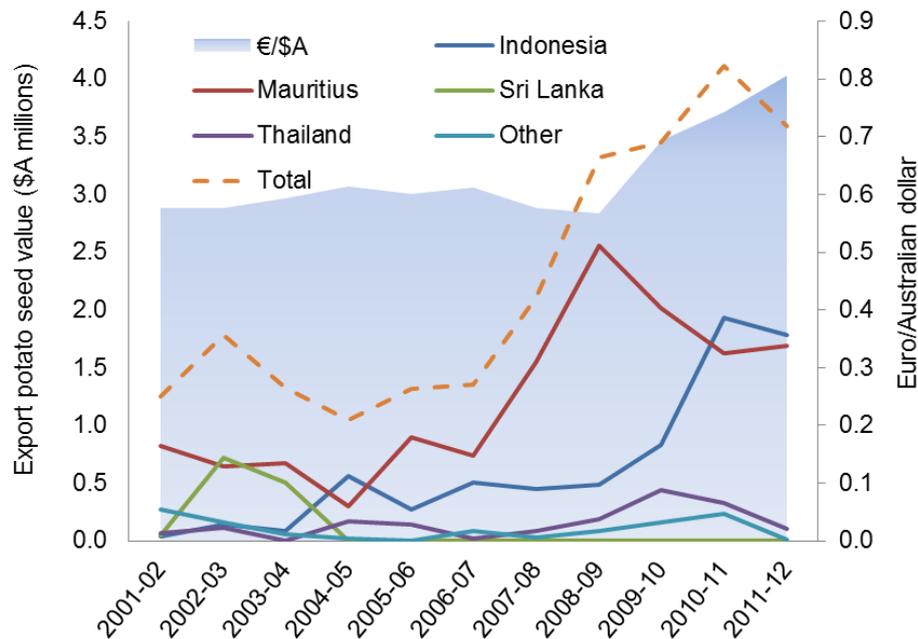
Sources: Consumption FAO; population World Bank.

Asia is a relatively small but growing market for seed potato exporters. Over the last two decades, the consumption and production of potatoes in Asia has increased rapidly, driven by increases in disposable income, a westernisation of diets increasing demand for potatoes and potato products (such as French fries and crisps), and the need to feed an increasing population.

Pest and disease pressures hamper potato production in Asia, particularly in tropical and subtropical regions. These issues have also limited the production of high quality seed, with domestic seed production systems in the tropics having limited success.

DAFWA research found that the major constraints on potato production in developing countries are the availability of high quality and affordable seed, and a lack of efficient crop management.

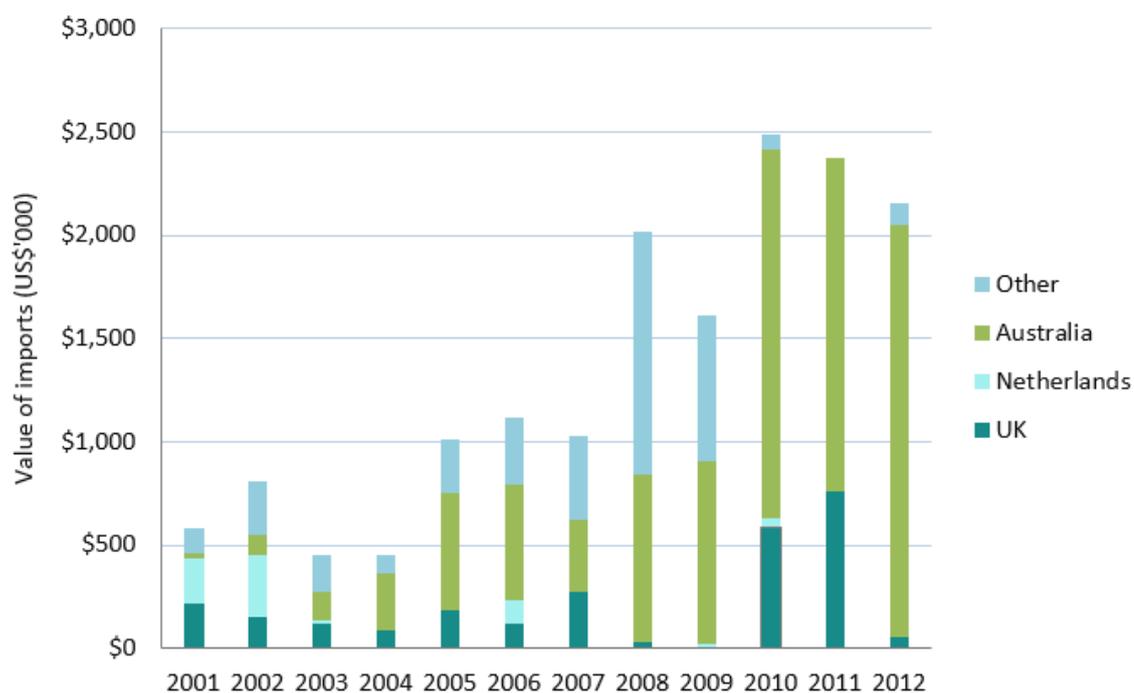
The Western Australian seed potato industry has been expanding in response to the growing demand from South-East Asian processing factories that require seed of the Atlantic variety for their growers. This growth has led to the increases in export seed sales shown in Figure 56.

Figure 56 Value of Western Australian seed potato exports by market (A\$ millions)

Source: Agrifood Infonet; www.oanda.com/currency/historical-rates/

The value of Western Australian exports of seed potatoes has increased, despite the appreciation of the Australian dollar against the Euro, as shown in Figure 56. (Seed from the Netherlands is denominated in Euros.) This increase in sales reflects the price premium that Western Australian seed attracts.

Figure 57 demonstrates how, over the past decade, Australia has become the preferred supplier of seed potatoes to Indonesia. The variety supplied is primarily Atlantic, which is a processing variety.

Figure 57 Value (US\$ '000's) of seed potato imports into Indonesia

Source: GTIS

Western Australia's proximity to South East Asia and South Asia affords it a competitive advantage over other horticultural regions in Australia and over other seed potato export nations, in terms of both the cost of transport and timeliness. Timeliness is an important factor, as physiological age has a major impact on seed performance. Western Australia also has an advantage over Europe since the climate allows growers to produce seed potatoes all year round at the correct physiological age, which is not possible for European growers.

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 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 in Western Australia. Seed potatoes are viewed by most ware growers as a lower value, higher risk crop, which has deterred investment. The ERA estimates that, if the ware seed potato industry were to grow by 10,000 tonnes, it would generate approximately 1,700 tonnes of oversize tubers for sale on the Western Australian market, based on 15 per cent of the crop being oversize tubers. The actual exportable percentage of oversize tubers can vary from 10 per cent to 30 per cent of the crop, depending on conditions and whether there is a domestic market for medium-sized seed tubers.

A quota system for sales of oversize/reject seed tubers is not a long term solution, as it will limit expansion opportunities, deter investment by new entrants, and will not be able to accept failed seed crops at short notice.

The production of another 10,000 tonnes of seed potatoes would require an additional 270 hectares of suitable land and water in the South West. The Department of Water's *Draft 2012 State of Water Resources*⁹⁶⁵ indicates that the Warren and Donnelly catchments each have 11 gigalitres available for allocation, although some of this resource will have subsequently been allocated. The Potato Marketing Corporation's plans for expansion of ware production indicate that it believes there is sufficient land and water for further production. Expansion of seed potato production will see a reallocation of water and land resources from lower value activities to higher value of seed potato production.

Western Australia is a high-priced producer of many horticultural crops, and has seen exports of labour-intensive horticultural crops such as cauliflowers and apples decline in recent years. Mechanically harvested crops that receive a price premium for quality (such as carrots and wine) have seen growth over the past decade. Western Australia exported \$50.5 million of carrots in 2012, up from \$34.6 million in 2000. Seed potatoes are also a high value mechanised crop, indicating that this industry has the potential for similar growth.

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 also lead to new varieties being made available to Western Australian consumers if the ware market were deregulated. DAFWA is currently working on an ACIAR-funded project in Indonesia focusing on incorporating Western Australian seed potatoes into the Indonesian seed certification system. One of the primary aims for DAFWA is to develop exports of the granola variety to Indonesia. A domestic market for oversize/reject seed tubers would encourage investment in this major opportunity.

Department of Agriculture and Food Western Australia Activities

DAFWA has invested considerable resources in research and the development of an export seed potato industry in recent years.⁹⁶⁶ DAFWA continues to promote the development of seed potato exports through a number of projects in partner countries.

The ERA considers the considerable effort undertaken by DAFWA indicates that this industry has considerable potential. Some DAFWA projects in this sector are shown in Table 54.

⁹⁶⁵ Western Australian Department of Water, *Draft 2012 State of Water Resources*, 2012.

⁹⁶⁶ Western Australian Department of Agriculture and Food, *South West AgMemo*, February 2014, <https://www.agric.wa.gov.au/newsletters/south-west-agmemo-february-2014-issue-1?page=0%2C7> (accessed on 25 June 2014).

Table 54 DAFWA-supported seed potato export development projects

Country	Project
Indonesia	Indonesian Seed Potato Value Chains – analysis of development opportunities towards a sustainable potato industry, positioned for growth 2014 – 2015 funded primarily by ACIAR
Indonesia	Optimising the productivity of the potato/brassica cropping system in Central and West Java and potato/brassica/allium systems in South Sulawesi and Nusa Tenggara Barat 2006 – 2010, primarily funded by ACIAR
Mauritius	Project PT09038 Improving Australia’s competitiveness in the Mauritius export seed market (2010-2012)
Various (AusAID)	DAFWA staff have been seconded as AusAID funded Australian Youth Ambassadors to work on seed potato development projects in Vietnam, Sri Lanka and Indonesia.

Source: DAFWA

Conclusion

Overall, the ERA considers that, while any developments are not certain, the seed potato industry offers substantial opportunities for Western Australian growers. Factors which might hinder its development, such as regulation of the domestic market, should be reviewed.

Appendix 13 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 separate investigation;
- areas that were examined by the ERA as part of this Inquiry but which would warrant further examination; 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. While this has been addressed to a limited degree in the ERA's chapter on regulatory burden, there are also broader opportunities that warrant investigation.

- **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.

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.
- **Housing affordability:** In this Inquiry, the ERA examined some policy instruments applied by the Housing Authority to address housing affordability issues. Currently, housing affordability policy is guided by the Affordable Housing Strategy 2010-2020. The ERA considers that housing affordability and the Government's current policy response are complex and require further investigation to ensure that policy is effective and does not expose Government to undue financial risk.
- **Flexible Electricity Pricing:** A full cost benefit analysis of introducing smart metering and flexible pricing should be undertaken.
- **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 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. While this is covered to some degree in the ERA's chapter on regulatory burden, it may warrant more specific attention.
- **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,⁹⁶⁷ 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 the deregulation of intrastate air services, to encourage the competition that is needed to support the State's economic growth.

⁹⁶⁷ Economic Regulation Authority, *Revised Final Report Inquiry on Harvey Water Bulk Water Pricing*, 2007.