Inquiry into microeconomic reform in Western Australia
Submission by Martin Sheridan,
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Executive Summary
Martin Sheridan is an infrastructure specialist with significant public and private sector experience in Australian and overseas markets. His overseas experience includes both developing and developed markets and his areas of expertise are road financing, construction and operation; and water and wastewater services financing, construction and operation.

This submission relates to the following areas:

1. Government ownership
2. Public utilities
3. Funding and utilisation of infrastructure

Introduction
As detailed in your discussion paper of 8 November 2013, government ownership of assets is both direct and through Government Trading Enterprises. You identify reasons for public ownership of assets but you also identify the "infrastructure gap" created by the sometime limited capacity of the State to fund asset creation. You also note that a reason for private sector involvement in ownership of an asset is where the private sector can manage that asset better than the public sector. Additionally you state a preference that an asset should only be sold where the buyer will pay more than the net present value to the State.

This submission argues that many of the benefits of private sector ownership, of user-pays charging and increased funding can be achieved without ownership changing. Instead this submission argues for long-term leases to private sector entities to enable the State to achieve its aims in a politically and socially acceptable manner.

Government Ownership
There are numerous examples where the State retains ownership but has outsourced operation of an asset to a third party. Examples include the lease of Western Australia's major freight rail network to Brookfield Rail and the current organisation of the mining sector (the State retains ownership of the mineral resource – and receives a royalty for its extraction – but the mining activity is done by a third party).

Public Utilities
Many public utilities exist because of historical market failure. This failure can be because of monopoly positions (granted or competitively won: the "Rum Corps" of New South Wales was one of Australia's first monopolies), lack of private finance (you give an apt example: the provision of roads – without a monetisation mechanism there is no incentive for a private party to develop a road) or strategic and risk considerations (the nuclear power industry is a public monopoly in many countries; armies are – normally - controlled by their governments. Private armies successfully existed in historical times but the "market failure" was the constant political, social and economic instability created by such arrangements).

However many of these public utilities (Water Corporation, the power companies) could be replicated by private sector players in today's efficient and regulated economy (and private armies are once again on the rise). These utilities currently crowd out private sector competitors (for example, see the frequent debate in the press regarding the State utility providers and the small private energy companies). They often also suffer from competing – and inefficient – priorities (an

example is Water Corporation. Water Corporation charges for its services on both a capacity basis – the "water service charge", a charge based on recovering the cost of built assets - and a "water use charge" - pay per quantum of use. Recent correspondence between the author and the Minister of Water indicates that the government prefers not to charge purely on a usage basis since this would disadvantage lower income users. This means that higher income, low volume users subsidise those living in lower rateable value properties. A far more efficient means of supporting lower income users is direct subsidy rather than indirect subsidy).

One much cited reason for the slew of privatisations in the United Kingdom in the late 20th century was that the then Prime Minister – Margaret Thatcher – saw privatisation as a means to remove the public sector from people's lives, to boost economy-wide productivity and to remove the crowding out of the private sector.

Funding and Utilisation of Infrastructure

Not only does an asset not need to be owned by those who operate or use it (think of a leased house or commercial premise) but it also does not need to be funded by those who wish to own or operate it. Sophisticated capital markets allow debt, equity and hybrid finance to comfortably co-exist. Parties can choose to keep those financial and contractual risks that suit them best and can sell down those that don't. This deepens capital markets and leads to sophisticated but efficient financial products such as structured and project/cashflow finance. Too often the State funds its assets directly via expected tax revenues (a volatile cashflow) or by taking on debt unnecessarily.

Specific Proposals for Microeconomic Reform

This submission argues for 2 specific reforms. The first relates to the financing and construction of new roads to bridge the infrastructure gap. The second relates to the charging of water and wastewater services.

1. *Financing and construction of new roads.*
   Traffic congestion is a growing problem throughout the State. Additionally the recent downgrade of the State's credit rating has added to the pressure on the State's finances. An obvious solution to this problem is to initiate a "user-pays" mechanism; some form of "toll". However directly charging is not politically acceptable (voters will punish the political party that makes them pay for a good or service that is currently "free"; it also impacts lower income users and small businesses to a greater extent than others). Tolls have unintended consequences (some drivers will seek to use untolled routes - increasing congestion and reducing safety in residential areas) and tolls are not equitable when applied to previously untolled, existing assets (persons made choices about where to live and where to establish businesses based upon criteria that seemed reasonable to them at the time of the decision. This did not include an expectation that they might pay road tolls in future. Whilst it might be fair to charge a heavy road user more than a light user, stamp duty and other inefficient taxes prevent that heavy user from easily relocating their home or business. They are therefore disadvantaged by a newly incurred toll whereas another person or business – by pure chance and luck of location – might not be so disadvantaged. With a rigid fiscal system, the disadvantaged person cannot make optimal choices as circumstances change).

   There is a mechanism that deals with the political, unintended and equitable outcomes. This is the use of a "shadow toll" where a party receives a payment based upon an "agent" (in this case, a car driver or similar) using the asset (the road). In particular, the State could sell the rights to operate and maintain a road to a third party (note: the road is still owned by the State; this is not a privatisation of ownership). That party would receive a payment from the State for every vehicle that used the road. The funds raised by the State from the sale of

the operating rights could then be used to fund other roads, closing the infrastructure gap. Since an agent is not charged directly the political consequences are reduced and also there is no incentive to choose an alternate, less optimal, route. Finally the mechanism is equitable: it accepts the current *status quo*. The mechanism is also a natural "hedge": as the State's economy grows so – typically - does traffic and the State would pay more in total (but could afford to do so). However, as the economy declined, so would road traffic, reducing the amount to be paid. To ensure that the commitment is not open ended, the State's counterparty (ie the party that bought the rights to the traffic flow) would have either a capped return (or capped quantum of income over the life of its contract with the State) or a maximum period to which it was entitled to receive payments. The counterparty's obligations (as to recurrent maintenance, its rights to any additional revenue sources and any final maintenance obligations prior to handing back the asset) would be defined in the lease agreement (or similar contractual vehicle).

Such a mechanism requires auditable, automatic vehicle counters to be effective. As described, it has a potential flaw: automatic vehicle counters cannot easily differentiate between vehicles. Therefore it is possible that a single vehicle could be counted (and therefore a charge raised) many times across a given network in a single day. For this reason the mechanism is best used on roads where journeys are effectively "point to point" as opposed to "multi-point". This favours its application to major highways/freeways (since a user will likely travel one direction and then back in the other) rather than in a metro area where journeys may be short and cross the same point many times per day.

To give an example, there is currently a proposal to extend the Mitchell Freeway (https://www.mainroads.wa.gov.au/BuildingRoads/Projects/planning/Pages/mitchell.aspx) and a Strategic Business Plan has been published (https://www.mainroads.wa.gov.au/Documents/Mitchell%20Freeway%20CWG%20Business%20Case.u_4148973r_1n_D12%5E23393368.PDF). Attached at appendix A is a simple funding model. By selling the rights to the existing traffic flow on the Mitchell, funds are raised to build the extension. Assuming that there are positive economic outcomes from the extension, the use of the proposed mechanism accelerates those outcomes – to the benefit of all.

The mechanism proposed here is powerful: much as a property developer raises capital for a project and then sells that project down before using the profit to develop the next project, so this mechanism can achieve the same result. In this case, the traffic rights along a section of the Mitchell (ie the right to a shadow toll) would be sold for a defined period or to raise a defined sum. This might be from, say, the Perth CBD to Burns Beach Road. The sum raised is then used to fund, in whole or in part, the proposed extension of the Mitchell Freeway north of Burns Beach Road (as per the Minister's aim reported on the weblink above). Once that is complete, the rights are sold again and the funds raised rolled into the next extension or a new project.

2. *Charging for water and wastewater services.*
Mention has been made above of the importance of equity when dealing with public goods and monopolies. Water Corporation is a monopoly provider of water and wastewater services. Water Corporation charges for its services via water service charges - effectively a capacity or availability charge – and a water use charge. Typically the first pays for fixed costs (primarily infrastructure capital expenditure) and the latter pays for the variable costs of actually producing, treating and carrying water. As shown in a letter from the Minister for Water to the author (private correspondence, 21 November 2013), the State recognises a

number of potential ways of charging for water and wastewater services and currently believes that the mixed basis – service charges and use charges - is the "fairest" ("fairest" is the description used in the Minister's letter). The Minister goes on to explain that "Sewerage and drainage service charges are calculated based on Gross Rental Value (GRV) … This is because the Government accepts the view that GRV pricing plays an important role in ensuring that low income households can afford to be supplied … there is a positive relationship between the mean taxable incomes of Perth suburbs and the median house price of each suburb."

Whilst I accept the Minister's assertion on the general relationship between income and asset prices, this – of course – cannot be applied universally. For instance, the single person in a large house but with only a small income would pay – before any use charge – as much as a family with 2 incomes in an equally large house. Yet the family would no doubt use a lot more. Also the single person has limited incentive to save water since the fixed charges are large enough to make the use charge a small component of the total (in the author's experience, one bill seen by him was over $150 but the use charge was less than $10 ! The house was occupied throughout the period by a single male). Additionally, a large part of water usage is fixed: there is a minimum requirement for cooking, cleaning, washing etc. So – at the margin – it is conceivable that a person's choice of location and type of residential property could be determined by its GRV treatment ! Hardly an efficient basis to make a major economic decision.

It is therefore clear that water service and water use charges, as currently constructed, are not efficient. In a State where water is in short supply, conservation is a key priority. Charging users on the basis of GRV is a social tool that penalises many inadvertently. Focused charges that guide consumer behaviours in desirable ways are better. User pays is appropriate and that means that higher volume users should pay more. At the margin, they can reduce their usage and – if it is desirable to engage in "social engineering" - subsidies can be paid to both low income users and high volume users who lack discretionary use (families with young children for instance). Currently the water service charges is a "stealth tax" on home owners and an appropriation of private wealth. If the State wishes to tax home owners, it should do that directly – to charge them for the provision of multiple services, to charge them for the loss of amenity to others of their ownership of the land on which their house is situated etc. Using indirect mechanisms is harmful to the economy and broader environment and inequitable.

<u>Conclusion</u>

This submission has highlighted 2 areas of microeconomic reform. The first has immediate benefits – developmental, environmental, and fiscal. The second deals with an inequitable and contradictory policy beneficial to a monopoly service provider and with a purely social outcome that can be achieved in a better way. Both reforms are urgently needed.

Thank you for the opportunity to provide this submission.

Perth, December 2013

Appendix A – a simple funding model for a shadow toll mechanism (in this case, the Mitchell Freeway extension)

Mitchell Freeway Extension			
Funding model example			
Martin Sheridan, 6 December 2013			
Sources of funds	$m, approx	Uses of funds	$m, approx
Sell rights to existing Mitchell Freeway traffic flow, say	400	Build extension (estimated cost in Strategic Business Case)	392
Economic benefits (use Strategic Business Case BCR of 7.6)	2979	Capitalised value of shadow toll obligation	400
Development rights revenue, extension (capitalised value of new economic activity where not included in current BCR)	tbc		
Net return to WA State (minimum)	2587		
Note:			
1. Right to sell Mitchell Freeway traffic flow may need a change of law (the "Ultra Vires" principle) or agreement with Commonwealth (ownership rights due to funding ?).			
2. Analysis excludes O&M costs; obligations on handover.			
3. Shadow toll obligation NPV varies with financial market movements but can be hedged and also is capped by the use of a maximum return or period call option against acquirer.			