

Productivity Commission Public Infrastructure Inquiry

Victorian Government submission
January 2014

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Executive Summary

The Victorian Government welcomes the opportunity to provide a submission to the Productivity Commission Public Infrastructure Inquiry. A detailed analysis of the issues covered in the terms of reference and potential options will advance the national debate and will support reforms to improve outcomes for the community.

The Commonwealth is a key partner in the delivery of infrastructure. The scale of public infrastructure investment to meet demand and address key productivity challenges is beyond the scope of any state alone and requires appropriate support from the Commonwealth. The Victorian Government is responsibly managing its budget to support a sustained program of infrastructure investment and is committed to infrastructure growth within the current context of budgetary and borrowing constraints. With the Commonwealth's greater funding capacity, it is a key partner in this investment and will continue to be fundamental in assisting states to address infrastructure challenges.

States remain best placed to plan, prioritise and deliver the most suitable infrastructure projects for their jurisdictions.

Victoria reiterates the important distinction between funding and financing when alternative options are being investigated.

Victoria considers the Productivity Commission could examine opportunities to improve current funding structures, including:

- greater certainty in the quantum and timing of Commonwealth funding for infrastructure projects to ensure states are able to strategically plan for future infrastructure needs;
- funding of National Network Roads and rail projects should be treated consistently in the GST distribution system to recognise the national significance of mass transit systems in our cities;
- options for the Commonwealth to use its balance sheet to increase capacity for infrastructure funding; and
- mechanisms to reinvest, through infrastructure, the productivity benefits arising from investment that currently flow to the Commonwealth.

Victoria has implemented reforms to the *Partnerships Victoria* public private partnership policy to respond to market conditions. A range of alternative financing structures have delivered positive outcomes on recent projects. In considering alternative financing it is critical to maintain the performance incentives for service delivery and continue the disciplines of private finance in managing risk. Evidence from current transactions confirms there is private debt and equity available for investment in projects. The opportunities for further investment are driven by the availability of funding.

As part of this inquiry, the Productivity Commission could examine:

- an appropriate assessment framework for the implementation of alternative financing structures;
- ways to encourage acceptance of a beneficiary pays model for infrastructure investment;
- international best practice, including the use of sovereign infrastructure funds; and
- a methodology for the inclusion of wider economic benefits and productivity metrics more broadly, in investment decision making in Australia.

The Victorian Government has **acted to address concerns around the rising costs of construction in Victoria by implementing a range of measures** including the *Implementation Guidelines to the Victorian Code of Practice for the Building and Construction Industry*. These measures are designed to increase productivity so Victoria is not priced out of delivering the critical infrastructure that it needs.

As part of this inquiry, the Productivity Commission could examine:

- whether industrial disputation on Australian construction projects is discouraging international participation in the market; and
- whether the widespread use of pattern agreements is impacting construction costs.

Victoria continues to look for **opportunities for efficient and effective decision making and timely project delivery**. As an investor, it is critical that governments clearly scope and define projects, put in place effective governance structures and ensure that project teams have the necessary skills and capabilities. These steps are fundamental to ensuring cost efficient infrastructure delivery.

Victoria's submission is structured in two parts, consistent with the Productivity Commission's approach set out in its November 2013 *Issues Paper*. Victoria has not commented on the financial risks to the Commonwealth posed by alternative funding and financing mechanisms (Terms of Reference 3). The Victorian Government will continue to engage constructively with the Productivity Commission during the inquiry.

The references in this submission relate primarily to major economic infrastructure investments. Victoria has a very large program of infrastructure investment and the processes outlined in this submission apply across various service delivery sectors.

Part A

The provision, funding and financing of major public infrastructure

1. TOR: How infrastructure is currently funded and financed in Australia, including by the Commonwealth, the states and the private sector.

1.1 Government infrastructure investment in Victoria

All levels of government need to respond to Australia's strong population growth and declining productivity growth by facilitating sustainable levels of investment in beneficial economic infrastructure. High quality economic infrastructure reduces business costs, attracts new private investment, and improves workforce participation and productivity. In 2013-14, Victorian general government sector investment in roads, public transport, health, schools and other infrastructure is estimated to total \$5.8 billion, increasing to \$7.2 billion in 2014-15. This builds on the \$5.4 billion infrastructure spend in 2012-13.

The Victorian Government's commitment to responsibly managing its budget directly supports a sustained program of infrastructure development and continued high quality public services for Victorians while avoiding excessive levels of debt.

The Victorian Government's approach to public infrastructure investment is developed in the context of the overarching economic and fiscal strategy most recently outlined in the 2013-14 Budget Update released on 13 December 2013. The Government's focus is to address the challenges facing Victoria and drive future economic growth and prosperity by:

- rebuilding budget capacity;
- improving productivity, including through the provision of major infrastructure, more responsive and productive service delivery and continuing to build the skills and capabilities of the Victorian workforce; and
- ensuring Victoria is a competitive and low-cost place to do business.

The Victorian Government has set out a medium term fiscal strategy that builds a stronger budget position for Victoria. Delivery of the Victorian Government's medium term fiscal strategy is measured against the following parameters:

- infrastructure investment of 1.3 per cent of gross state product (GSP) (calculated as a five-year rolling average);
- reduced general government net debt as a percentage of GSP over the period to 2022;
- fully-funded superannuation liability by 2035; and
- net operating surplus of at least \$100 million, consistent with the infrastructure and debt parameters.

The focus of this strategy is to generate the financial capacity to fund infrastructure sustainably without excessive borrowing, and rebuild budget capacity to deal with future fiscal shocks.

The capacity of state governments to sustain budget capacity is exacerbated by the vertical fiscal imbalance in Australia's federal funding arrangements. States have significant service delivery responsibilities, with associated infrastructure requirements, but the Commonwealth has disproportionate revenue raising capacity.

Borrowing has been used by state governments to fund the acquisition of new assets and maintains existing assets to support service delivery. This borrowing is often justified by a claim that the benefits generated will be enjoyed over a number of years. This argument is

valid in corporate settings where assets are often acquired in discrete bundles and produce income. Similarly, households can accumulate relatively larger amounts of debt in the short term, knowing they have the rest of their working lives to save and repay. However, for governments, capital expenditure to support service delivery and public good provision is required every year and does not normally produce income. Once a government starts to live beyond its means, it is very difficult to return to stability.

Capacity to fund infrastructure is the threshold question. The Victorian Government operates within budgetary and borrowing constraints.

Compared with the Commonwealth, states have limited capacity to borrow. The Victorian Government is committed to reducing its debt burden as a percentage of GSP to sustain the State's capacity to provide services. One indicator of financial sustainability is maintaining the State's triple-A rating which allows us to:

- have lower borrowing costs and save around \$170 million a year; and
- maintain the financial reputation of the State of Victoria as the triple-A rating status is recognised internationally as of the highest credit quality and attracts investment in Victorian bonds.

If Victoria lost its triple-A rating it may take some time before the State could return to its triple-A status. Victoria was last downgraded in July 1990 and it took eight years to be upgraded.

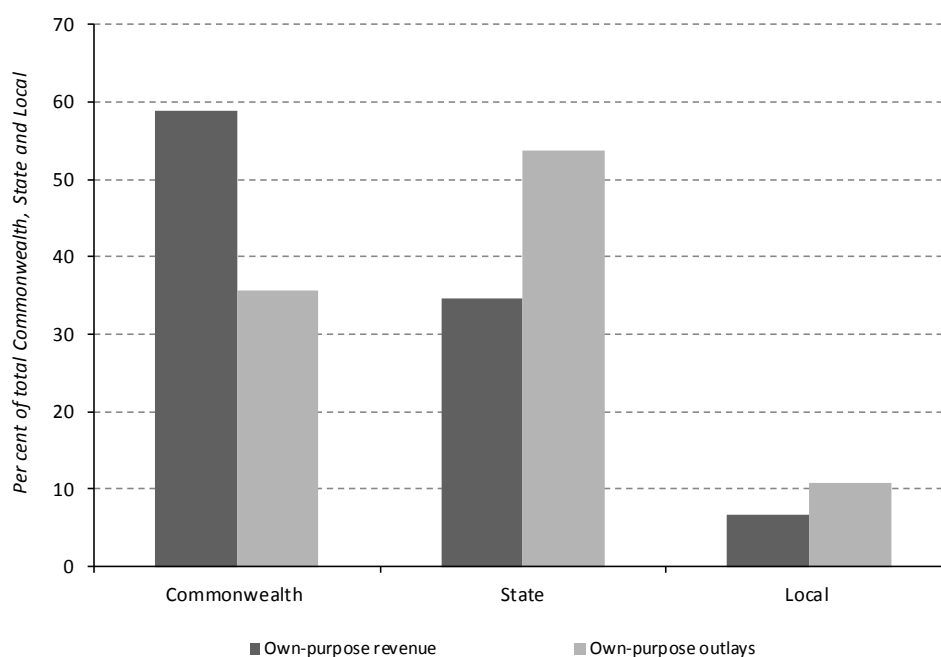
Recommendation: In examining opportunities around infrastructure funding the Productivity Commission could investigate options for the Commonwealth to use its balance sheet to increase capacity for infrastructure funding.

1.2 Partnering with the Commonwealth to deliver infrastructure

Commonwealth funding is critical to the delivery of major public infrastructure projects. Major infrastructure investment is beyond the capacity of state governments to fund alone. The ability of individual states to pay for major infrastructure projects is constrained by their limited revenue raising capacity and wide ranging service delivery responsibilities.

The chart below illustrates the difference in Australian governments' shares of revenue raising and service delivery responsibilities. This disparity leads to states becoming increasingly dependent on Commonwealth transfers to fund major infrastructure.

Figure 1. Shares of national revenue raised and service delivery responsibilities 2011-12



Source: ABS Cat. No. 5501.0.55.001 Government Financial Estimates, Australia, 2011-12

Traditionally governments have funded most infrastructure through general taxation revenue. The progressive concentration of revenue raising power with the Commonwealth Government has increasingly left states reliant on revenue transfers from the Commonwealth to discharge their infrastructure and service delivery responsibilities.

In the Australian federal system of government, the Commonwealth Government retains the majority of revenue raising powers while the states bear the majority of expenditure responsibilities. This vertical fiscal imbalance is addressed through the transfer of revenue from the Commonwealth to the states in the form of grants. In 2013-14, Commonwealth grants will constitute 46 per cent of Victoria's total general government revenue. More than 20 per cent of Victoria's revenue is GST revenue.

Victoria is expecting to receive a lower share of the GST in 2013-14. This is based on the Commonwealth Grants Commission Report on GST Revenue Sharing Relativities 2013 Update, which recommends a decrease in Victoria's GST share from 22.9 per cent in 2012-13 to 22.6 per cent in 2013-14. Combining both the weaker outlook for the national GST pool and Victoria's lower relative share, GST revenue is expected to be \$1.5 billion lower than previously expected in 2012-13 and over the forward estimates. Revisions to historical data may be significant in the Commonwealth Grants Commission's 2014 Update as the Australian Bureau of Statistics continues to update its social and demographic statistics as a

result of the 2011 census. Given GST funds are a major component of Victoria's discretionary revenue pool, a reduction may prove to be a significant constraint to adequately funding infrastructure projects.

Funding pressure is compounded because growth in Victoria's taxation revenue has slowed in part as a result of moderated GSP growth. Between 2008-09 and 2011-12 average annual revenue growth was 4.1 per cent, down from 6.6 per cent between 2002-03 and 2007-08. Trend GSP growth and taxation revenue growth are also forecast to be lower but still positive over the forward estimates. Notwithstanding positive GSP growth, expectations of moderated economic growth compared with pre-global financial crisis levels will impact all of Victoria's taxation revenue streams.

At the state level there is a limited general taxation revenue base available for infrastructure investment. The efficiency of taxes varies according to their structure. There is a range of possible efficiency losses such as the costs involved in administering and collecting new taxes and the extent to which the tax distorts economic behaviour.

Taxes seeking to capture value from relevant infrastructure developments are more equitable as there is a clearer link between the source of revenue and the benefit received by taxpayers.

Other examples of raising revenue for specific purposes include developer charges such as the Growth Areas Infrastructure Contribution and Developer Contributions. This is discussed further in section 2.8.

The volatility and uncertainty of Commonwealth funding constrains Victoria's capacity to adequately plan for and deliver long term infrastructure projects. This reduces the confidence of private sector investors and infrastructure providers, including their ability to plan for and manage national workforce and capability requirements. This uncertainty ultimately drives higher costs for all Australian governments and the private sector undertaking infrastructure projects. Without baseline funding certainty, it is difficult for Victoria to strategically plan for and accommodate future infrastructure needs.

The Victorian Government considers that all Commonwealth funding for National Network Roads (NNR) and rail projects be treated consistently in the GST distribution system.

Applying a consistent treatment to both NNR and rail projects removes a significant and specific bias in the assessment. Consistent treatment would improve the prioritisation and delivery of many nationally significant, transformational transport projects and remove wasteful negotiations undertaken in determining the differential treatment.

Victoria has consistently argued that the differential treatment of Commonwealth funding for NNR compared to rail projects in calculating the GST distribution favours investment in roads over rail. Victoria's view was supported by the independent 2012 *GST Distribution Review* which recommended removing the differential treatment. The 2013-14 Victorian budget estimates that Victoria will lose \$2.1 billion in GST payments due to the differential treatment of road and rail infrastructure funding.

Recommendation: The Productivity Commission could reinforce the importance of treating NNR and rail projects in the same way for the purpose of calculating the GST distribution as a simple step toward streamlining Commonwealth/State interactions and improving funding certainty.

Consideration should also be given to how large one-off infrastructure projects that are outside usual state service and infrastructure delivery can be treated appropriately and consistently in the GST calculations.

The Commonwealth Government needs to take a long term view when funding nationally significant infrastructure. The scale of some infrastructure projects across jurisdictions is such that Commonwealth investment needs to be over a longer period than the five year infrastructure program that is traditionally the focus of federal infrastructure funding. For example, the AusLink program ran over 2004-09 and the Nation Building Program over 2009-14. This approach does not efficiently deploy Commonwealth investment in projects with ten year development and construction timeframes, particularly as this period spans multiple federal and state electoral cycles.

When considering infrastructure funding, the Commonwealth must complete the transition from grants provider to investor. The pathway for this transition is through reforming intergovernmental payments to invest in infrastructure that supports productivity based economic growth. Strategic investments in productivity enhancing infrastructure boost economic activity resulting in ongoing increases in taxation revenues to the Commonwealth through company and income tax. Good investment decisions by states should become a platform for funding the next round of investments that will grow national productivity.

Long term consistent Commonwealth funding is critical to the delivery of future major public infrastructure and would be welcomed by Victoria, but should not extend to increased Commonwealth involvement in decision making and project management. States are best placed to determine and manage the most suitable infrastructure projects for their jurisdictions without potentially duplicative Commonwealth involvement.

1.3 Financing infrastructure through tax benefits

A Tax Increment Financing mechanism would enable a portion of increased Commonwealth taxation revenue generated by the productivity benefits of state infrastructure investment to be provided to the states as infrastructure funding.

Payment by results mechanisms have been put in place in the United Kingdom and examples such as National Competition Policy reward payments also exist in Australia, and governments have discussed the use of growth incentive payments as potential mechanisms for this purpose.

Recommendation: In examining opportunities around infrastructure funding the Productivity Commission could investigate incentive arrangements such as tax increment financing.

1.4 Other funding sources – beneficiary pays and recycling capital

A range of Victorian infrastructure has been funded directly by users as the primary beneficiaries of improved access or associated travel time savings. The most conventional mechanism in an infrastructure context is toll roads. Examples in Victoria include the toll to fund the West Gate bridge opened in 1978, the CityLink project opened in 2000 and the EastLink project opened in 2008. Victoria's water businesses operate on a full cost recovery basis as do other regulated utilities.

User charging ensures the beneficiaries of the infrastructure investment contribute to its provision, maintenance and operation. User charging can facilitate private sector participation in infrastructure provision if it generates an adequate return on investment.

The Victorian Government will continue to examine opportunities for user pays mechanisms to be applied where appropriate. The disbursed nature of the benefits for users and the scale of construction costs means that some major infrastructure investments are unlikely to be solely self-funded through a user charge, and therefore may require some level of budget funded supplementation.

East West Link procurement strategy

Following extensive analysis and consultation with industry in 2013, the Victorian Government decided to procure Stage One of the East West Link as an availability public private partnership (PPP). This involves the private sector designing, constructing, financing, operating and maintaining the road for the PPP contract term (in exchange for regular availability payments over the life of the concession), with the State retaining toll revenue and demand risk, at least initially.

Given recent well publicised toll road failures in Australia and overseas where the private sector took on traffic demand risk resulting in heavy losses for investors and/or insolvency of the project vehicles in those toll road concessions, there is little appetite or capacity from participants in the market for a traditional traffic demand risk transfer toll road model. The State therefore does not believe the transfer of traffic demand risk before traffic volumes are proven represents value for money for the taxpayer at this point in time.

The innovative availability PPP model is similar as that used to deliver the Peninsula Link project. However, as the East West Link will be tolled, the State will separately procure toll collection and customer services.

The State will seek to align the performance requirements and incentives under the availability PPP (predominantly through the payment mechanism and abatement regime) with those of the owner of the toll revenue, the State in the first instance. This will also provide a commercially viable framework for realising the best value of the toll revenue by the State in the future once traffic volumes reach steady state. Lessons learnt from Peninsula Link and other toll road projects have also been taken into consideration in structuring the East West Link availability PPP.

Regulated assets that build in access charges are also well established in Victoria. The regulated asset market provides the right incentives and a stable and predictable environment for private sector investment. Within the regulated asset sector it is critical to establish an access pricing regime that provides equitable access. The Essential Services Commission is Victoria's independent regulator with statutory responsibility for the electricity, gas, water and sewerage, ports and rail freight industries (<http://www.esc.vic.gov.au/Home>). Note that in some sectors, a national regulatory regime has supplanted the Victorian regulatory role.

The Essential Services Commission is tasked with ensuring equitable pricing of key economic infrastructure vital to the State's economy. Equitable pricing would invariably establish an appropriate price for essential infrastructure to allow recovery of both capital and ongoing operational costs. When the Essential Services Commission regulates pricing under the *Essential Services Commission Act 2001* it takes an equitable approach that balances industry circumstances, costs of production and compliance, and returns on assets with the ultimate affordability to consumers.

In the rail sector, the Victorian Rail Access Regime outlines the access regime for rail providers. The access charges under this regime are paid by the rail providers and are intended to cover part of the State's asset infrastructure investment and the ongoing operational and maintenance costs. The user charges in this sector do not fully offset the level of infrastructure investment in freight rail.

The Essential Services Commission is also the economic regulator of Victoria's commercial ports. The Commission monitors the prices (it does not set prices charged at the ports) through the *Price Monitoring Determination 2010*. The Port of Melbourne Corporation is the only port operator currently subject to the regime. As a government business enterprise the Port of Melbourne Corporation determines the access pricing charged to users to fund infrastructure investment and ongoing renewal and maintenance.

Also relevant to port infrastructure pricing is the Victorian Regional Channels Authority. Prescribed tariffs for the use of channels and port facilities are different for each port (or port service provider). Charges for prescribed shipping and port services are regulated under the *Port Management Act 1995*.

In January 2013 a new National Heavy Vehicle Regulator commenced operation to administer a single set of consistent national laws and services for heavy vehicles. Improving the consistency between jurisdictions of the access and charging arrangements for heavy vehicles is a priority for improving freight network efficiency and productivity.

In July 2012 the Council of Australian Governments approved commencement of work on reform options to improve funding and heavy vehicle charging arrangements to support road transport productivity growth. The Victorian Government is committed in its freight and logistics plan *Victoria - The Freight State* to working constructively with the National Regulator and actively contribute to the reform process, including through the Heavy Vehicle Charging and Investment reform.

In November 2013 the Commonwealth raised with state jurisdictions a potential incentive payment linked to recycling capital through asset sales into new infrastructure investment. This is a reform that Victoria would support in principle, however there is less scope in Victoria due to market reform already completed.

Victoria has a strong record in market reform in the energy infrastructure sector and other utilities. There is less scope in Victoria than other jurisdictions for sale of government owned assets, given the extensive program of reform undertaken by Victoria in the 1990s. Victoria should not be disadvantaged through this proposal because it has already undertaken significant reform, such that the design of any incentive payment linked to asset sales should take into account Victoria's track record and current asset portfolio.

Further potential opportunities for asset divestments will be carefully considered for medium term reform. The strongest opportunities will be in sectors where the infrastructure is supported by a direct user revenue stream.

1.5 Financing is not funding

In examining options for infrastructure investment, it is important to make the distinction between the funding and financing of infrastructure. The difference is reinforced in the Productivity Commission *Issues Paper* released on 28 November 2013. In Victoria, the majority of public infrastructure is budget funded from operating revenue.

Funding is how infrastructure is paid for, either from government investment or user charges. Financing refers to the way in which debt and equity are raised for the delivery and operation of an infrastructure project.

The public private partnership (PPP) procurement model facilitates the use of private finance in a consistent structure. Within a PPP, private finance comprises debt financing and equity investment. The due diligence role of debt and equity in a PPP structure can add value in mitigating risk and incentivising performance.

The objective in using private finance is to drive efficiencies in infrastructure investment through optimal allocation of risk. Victoria utilises sustainable and sensible financing structures that are responsive to market conditions, flexible over time and provide value for money.

PPPs may be government funded through an availability model, directly funded through a user pays mechanism, or a combination of the two.

- An availability PPP structure most commonly applies to social infrastructure and is budget funded.
- Economic infrastructure may or may not involve availability payments:
 - Peninsula Link road is an availability payment model, with private debt and equity repayments met through a government budget allocation over the life of the contract;
 - EastLink road is a demand risk transfer model, with private debt and equity repayments met entirely through direct user charges collected by the private operator; and
 - East West Link will be an availability payment model, with private debt and equity repaid through a government budget allocation over the life of the contract. The repayment will be offset through the user charges collected by government.

In the right circumstances PPPs represent an appropriate financing mechanism, however they do not provide a funding source for infrastructure projects. Except in circumstances where PPP projects are fully funded by user charges, for example toll roads, funding responsibility remains with government.

In accordance with international accounting standards, where an availability payment arrangement is in place, the liability and asset ownership is recognised on the State's balance sheet, meaning that both the asset and the liability are fully reflected in the public sector accounts and impact net debt. In Victoria, the majority of PPP projects are contracted using an availability payment stream and are disclosed in this way.

1.6 Priority investment in productivity enhancing infrastructure

Victoria has led Australia in the reform of economic infrastructure sectors, such as energy and water, resulting in more efficient market operation by creating market signals for infrastructure investment.

It is critical that governments optimise their infrastructure investment to produce the best outcome for their communities while contributing to the growth of the economy. In Victoria, the major opportunity to drive productivity growth will come from continued investment in the State's transport network, given its critical role in linking people, products and markets. In 2007 the Bureau of Infrastructure, Transport and Regional Economics estimated the avoidable cost of congestion for Melbourne will be around \$6.1 billion by 2020 at http://www.bitre.gov.au/publications/2007/wp_071.aspx.

While the nature of the transport system may not necessarily allow for the same degree of privatisation as other sectors, Victoria recognises the private sector needs to play a greater role in the financing, delivery and operation of transport assets.

The national reform currently underway through the Heavy Vehicle Charging and Investment initiative has the potential to deliver a model allowing greater collaboration between governments and industry in the targeted delivery of transport infrastructure. Victoria believes investments through this reform need not just focus on large scale infrastructure but could also contribute to productivity growth by investments addressing pinch points on nationally significant supply chains.

The Victorian Government believes the focus should be on investing in productivity enhancing infrastructure, regardless of scale or sector, to support the growth of nationally significant economic activity. For example, investment can occur anywhere along a nationally significant transport supply chain spanning the production source in regional areas through to export gateways in major cities. Investment decisions should be informed by the productivity benefits rather than being driven by the type of infrastructure.

In the Australian context, consideration must be given to the significant role cities play in generating economic activity. Victoria believes the focus should be on investing in productivity enhancing infrastructure, regardless of scale or sector, to support the growth of nationally significant economic activity.

For example, investment can occur anywhere along a nationally significant transport supply chain spanning the production source in regional areas through to export gateways in major cities. Investment decisions should be informed by the productivity benefits rather than being driven by the type of infrastructure.

Australia is one of the most urbanised countries in the world and in Victoria this is particularly true. Melbourne and Victoria's regional cities play significant roles in supporting national productivity growth. The Victorian economy has evolved over the past decade, including the redistribution of traditional industries such as manufacturing and the consolidation of knowledge intensive industries in Melbourne's central city. This trend is also prominent in Victoria's regional cities which are experiencing strong growth underpinned by diverse economies which enable them to adapt to economic change. Strong population growth in Victoria's regional cities is reflected in increasing employment in construction, and the key service role of Ballarat, Geelong and Bendigo is reflected in increasing employment in health, education and knowledge intensive services. The Victorian Government is committed to investments such as the \$630 million Bendigo Hospital and the \$4.8 billion Regional Rail Link that make these cities more attractive places in which to live and invest.

This was emphasised in Victoria's submission to Infrastructure Australia in 2012 which can be found at <http://www.dpc.vic.gov.au/index.php/featured/infrastructure-australia-update>.

Earlier investment in high capacity public transport servicing cities (for example the Melbourne Underground Rail Loop) contributed to higher productivity through the concentration of high value knowledge based industries such as professional, financial and insurance services. These industries now comprise 19.7 per cent of the economy and are attracted to urban environments, skilled workforces, a large pool of potential clients, good amenity and transport links that support face to face interaction. Victoria's ability to further improve productivity and competitiveness will in part depend on further investment in high quality public transport and roads to support the requirements of the knowledge based service industries.

1.7 Victoria has the right frameworks in place to guide investment

The Victorian Government has a broad suite of strategies to deliver on the State's vision for infrastructure by building on its competitive advantages, distinctiveness and strengths as a range of demographic, economic and social changes occur over the next 30 to 40 years.

These strategies include the Victorian Government's economic and fiscal strategy, a freight and logistics plan (*Victoria - The Freight State*) and eight Regional Growth Plans. Developed in conjunction with the local community and businesses, these strategies and plans provide the foundation for Victoria's long-term development.

In relation to specific public economic infrastructure initiatives, the Victorian Government is responding to the challenges of strong population growth and the need to improve productivity with the construction of a series of game changing projects, which will lay the foundations for future generations. These include the expansion of the Port of Melbourne at Webb Dock, the development of the Port of Hastings as a second container port, Regional Rail Link and East West Link – Stage 1.

The Victorian Government recently released *Plan Melbourne*, the new metropolitan planning strategy which outlines a series of policy, planning and infrastructure measures to support Melbourne's continued contribution to national economic growth.

Plan Melbourne defines the kind of city Melbourne will be and identifies the infrastructure, services and major projects that need to be put in place to underpin the city's growth. It is a blueprint for Melbourne's future prosperity, liveability and sustainability. From an infrastructure perspective, these measures include investments in the arterial road network, freight and port networks and the public transport network. Further opportunities for urban renewal to expand the central city's productive footprint into locations such as Fisherman's Bend are also identified. *Plan Melbourne* is open for public consultation and can be accessed at <http://www.planmelbourne.vic.gov.au/>.

The Victorian Government has developed eight Regional Growth Plans to provide broad direction for land use and development across regional Victoria and detailed planning frameworks for key regional centres.

The Regional Growth Plans have been developed in a partnership with local government and state agencies and authorities. Together, the Plans will help councils by streamlining planning policy and identifying important economic, environmental, social and cultural resources to be preserved, maintained or developed. The plans will also provide direction for accommodating growth and change in regional Victoria, including consideration of the infrastructure needs to support population and employment growth and regional industries. Regional Growth Plans can be accessed at <http://www.dpcd.vic.gov.au/planning/projects-and-programs/regionalgrowthplans>.

Victoria - The Freight State outlines the Victorian Government’s long term strategy to improve freight efficiency, grow productivity and better connect Victorian businesses with their markets, whether local, national or international.

The freight plan is supported by a series of key directions, strategies and actions intended to provide greater certainty to the private sector and to help inform business planning and investment decisions. These have been developed through extensive data and evidence gathering and by listening to the views of stakeholders, including those businesses operating in the freight and logistics sector, those which depend on efficient freight movements and the local government community. To meet future challenges, including a tripling of the freight task by 2050, the freight plan contains strategies and actions proposed for implementation over the next one to five years involving a combination of project delivery, project planning, network efficiency and regulatory reform initiatives. The Freight State strategy can be accessed at <http://www.transport.vic.gov.au/freight/freight-projects-and-initiatives/victorian-freight-and-logistics-plan>.

1.8 Asset management and accountability framework

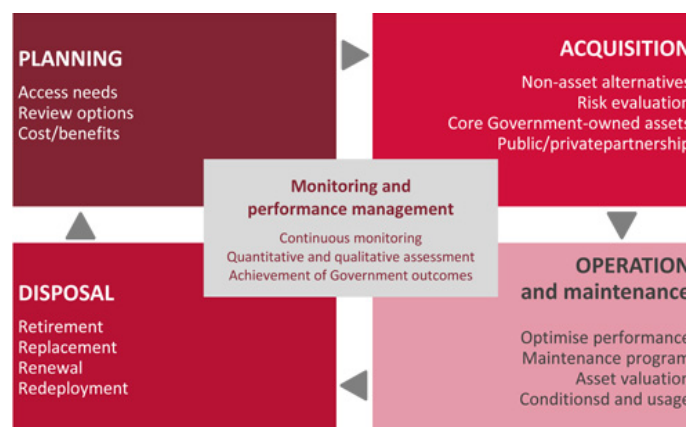
The Victorian Government is keen to drive improvement in public sector asset management and the delivery of infrastructure.

Victoria has an asset management framework based on the four key stages of the asset life cycle as shown in Figure 2 below:

1. *Planning* - determination of asset requirements, based on an assessment of both service delivery needs and the capability of the existing asset base to meet these needs.
2. *Acquisition* - procurement of assets to meet an identified service need, including the assessment of procurement options.
3. *Operation and maintenance* - management and use of an asset to deliver services, including maintenance.
4. *Disposal* - treatment of an asset that has either reached the end of its useful life, is considered surplus, or is under-performing.

Monitoring and performance management of assets are identified as occurring throughout all phases of the life cycle.

Figure 2. Four key asset life cycle stages



Victoria is working towards a strengthened Asset Management Accountability Framework in 2013-14 to help facilitate improved asset management in Victoria. This includes establishing a more effective mechanism to incentivise departments and agencies to optimise asset utilisation.

1.9 Infrastructure planning information

The Government discloses information about infrastructure planning in Budget Paper No. 4, State Capital Program, which lists projects along with their funding and expected completion dates. Public transport and road projects comprise the bulk of the capital program and additional detail about these projects is published on the Moving Victoria website at <http://movingvictoria.vic.gov.au/>.

The Victorian Government is investing in a significant program of infrastructure planning. For the effective and timely delivery of infrastructure to meet community needs, infrastructure planning must work hand in hand with urban and regional planning. The Government has integrated planning, urban design and local infrastructure with service delivery in the Department of Transport, Planning and Local Infrastructure.

Victoria continues to support the role of Infrastructure Australia in policy development and consistent investment evaluation. Victoria also continues to support the existing National Infrastructure Construction Schedule and provides quarterly updates on projects that are currently funded.

1.10 Robust investment analysis

The implementation and timing of infrastructure delivery will be consistent with the Victorian Government's economic and fiscal strategy, including the medium-term fiscal parameters. The Victorian Government is committed to rigorous decision making on initiatives that require funding, statutory amendments or new regulations.

In particular, the business cases for all projects and initiatives requiring budget funding will be carefully assessed in relation to budget capacity. Implementation and timing are subject to consideration of the evidence base and likely net benefits as part of the annual budget cycle.

The Victorian Government has established Investment Lifecycle and High Value High Risk guidelines to ensure consistently robust business cases are developed to inform investment decisions.

The High Value High Risk framework increases the likelihood that major projects will be delivered successfully on time and on budget. New infrastructure projects costing over \$100 million or classified as high risk are subject to additional Government approvals before they can progress to the next stage. This is to provide increased assurance that the projects, if funded, can be delivered on time and on budget and will realise the intended benefits.

Further detail on the High Value High Risk framework is provided in section 5.1 and the extensive suite of policy and guidance material is available at <http://www.dtf.vic.gov.au/Investment-Planning-and-Evaluation>.

The Investment Lifecycle and High Value High Risk guidelines promote the use of the real options concept in order to manage investment risk. While risk and uncertainty can be associated with particular costs and benefits or other important variables in an economic evaluation, they can also be associated with the underlying investment concept or the circumstances surrounding it. This may require the evaluation approach to incorporate real options which allow the investor to exercise flexibility before and during project delivery (discussed further in section 5.4 below).

Government normally enters into contracts for full project delivery. However, in the use of real options the investor retains flexibility to respond to systemic impacts outside the client's/supplier's control. Real options could be exercised by Government (as the investor) as they will generally deliver a different outcome to that anticipated in the business case, but which in the circumstances provide for a greater value for money outcome.

Real options analysis incorporates flexibility in the investment planning process to allow investments to adapt to uncertainty. It is a useful technique for evaluating project options and planning solutions that are characterised by uncertainty. Real options enable investments to be structured to encompass flexibility at milestone stages. Further information on real options is contained in section 5.4.

It is important to distinguish between the investment decision and the procurement decision. PPPs are one of a range of procurement models Government uses to contract with the private sector to provide infrastructure and associated services. The procurement model is determined separately from the investment decision.

The decision as to which procurement model to use is independent of whether the project should proceed. Procurement options analysis is guided by the Investment Lifecycle Procure guideline available at <http://www.dtf.vic.gov.au/Publications/Investment-planning-and-evaluation-publications/Lifecycle-guidance/Investment-lifecycle-and-High-Value-High-Risk-guidelines-Procure>.

Private finance does not represent an additional funding source for governments. The decision to proceed with a PPP is based on the potential value that can be achieved. With the exception of fully privately funded and operated toll roads, all PPPs in Victoria are recognised on the State's balance sheet. Therefore, the financial and commercial robustness of PPP projects is important for rating agency considerations. In Victoria, the Government fully accounts for the finance lease liability (and associated financing payments) arising from PPPs on the State's balance sheet, and budgeting for associated lifecycle, maintenance and operational costs is also consistent with normal budgeting practice.

1.11 Rigorous economic analysis

The Victorian Government has restructured and simplified its practices for shaping investments with the aim of providing decision makers with an increased level of certainty that investments are likely to succeed. The initial decisions on whether to invest in particular projects are underpinned by rigorous economic evaluations using cost benefit analysis. Important additional information not provided in the traditional cost benefit analysis framework can also facilitate this crucial decision making.

As part of this process, the Investment Lifecycle and High Value High Risk guidelines have been updated to include revised *Economic Evaluation* guidelines to supplement evaluation of investment proposals. The robust use of economic evaluations will help the Victorian Government maximise the benefits of its investments and is therefore a vital component of the business case development that supports informed investment decision making. The *Economic Evaluation* guidelines can be found at <http://www.dtf.vic.gov.au/Publications/Investment-planning-and-evaluation-publications/Lifecycle-guidance/Technical-guides-Stage-2-Prove>.

The *Economic Evaluation* guidelines advocate cost benefit analysis as the preferred method for evaluating the costs and benefits, including market and non-market impacts, of a project to society as a whole. The guidelines nevertheless acknowledge there are other important considerations, beyond what is captured in the traditional cost benefit analysis framework, that are likely to be highly relevant for decision makers. These factors include government budgetary impacts, non-monetisable costs and benefits, and distributional impacts. These can also be supplemented by additional relevant information, such as the likely economy wide impacts of a project as estimated by computable general equilibrium modelling.

A suite of tools have been developed for the analysis of costs and benefits of investments. But more can be done to inform decision makers on the economic impacts of different investments choices by focussing on the wider economic benefits, particularly for transport investments. Approaches include articulating the benefits of improved transport access on productivity, supporting deeper labour markets, improved business to business connections and knowledge growth that improves innovation.

There has been an increasing focus on ways to estimate and incorporate wider economic benefits that were previously not captured by traditional cost benefit economic evaluations but that may be significant particularly for large transport projects in urbanised areas.

Infrastructure Australia currently has some existing guidelines on the use and presentation of wider economic benefits and benefit cost ratio results.

The issue of estimating and incorporating wider economic benefits in project evaluations is currently being reviewed through various Council of Australian Governments processes. This includes proposals from New South Wales to use productivity metrics to help estimate the productivity benefits of infrastructure investments, as well as the potential for Growth Incentive Payments from the Commonwealth Government to the states based on the benefits that flow to the Commonwealth from the states making these investments. The methodological and data collection issues associated with estimating wider economic benefits has been referred to the Steering Committee for the National Guidelines for Transport System Management with the expectation it will be dealt with as part of the overall update of the national guidelines.

Further work will be required to improve the data basis of wider economic benefits analysis and to develop integrated productivity metrics that can inform decision makers of the wider economic impacts and other key productivity impacts such as reduced travel costs to businesses.

Specific actions would improve information used to assess the value of current infrastructure, changing travel demands, and the value of travel delays and avoidance of road safety risks. Two initiatives would contribute at the national level:

- implementation of the Australian Bureau of Statistics proposal to extend the National Accounts to include a Transport Satellite Account to show the impact of transport activity on the whole economy; and
- national support to value avoidance of freight delay, travel delay and transport safety risk.

Recommendation: The Victorian Government recommends the Productivity Commission comment on the issue of how best to collect data for, estimate and include wider economic benefits, and productivity metrics more broadly, in investment decision making in Australia. The potential for productivity based payments for infrastructure investment from the Commonwealth to the states is also an issue that is worthy of the Commission's further consideration.

2. TOR: The rationale, role and objectives of alternative funding and financing mechanisms, including:

- a) the full range of costs and benefits of different models;
- b) the issues and costs associated with the allocation of project risks, availability of finance, contracting arrangements and delivery models for construction projects;
- c) the disincentives to private sector investment;
- d) the broad principles for the use of these funding and financing mechanisms;
- e) the roles of the Australian Government, the States and Territories, Local Government and the Private Sector;
- f) creation of revenue streams to attract private sector finance; for example, through user charging, availability payments etc.

2.1 *Partnerships Victoria* model of infrastructure delivery

Public private partnerships (PPPs) are one of a range of procurement models government uses to contract with the private sector to provide infrastructure and associated services.

Projects delivered as PPPs aim to use the innovative skills and abilities of the private sector in a way that is most likely to deliver value for money and improved services to the community. PPPs are most useful for major and complex capital projects with opportunities for innovation and optimal risk transfer, bringing together the ideas, experience and skills of the public and private sectors to develop innovative solutions.

PPPs make a valuable contribution to the delivery of infrastructure and services and will continue to be implemented in Victoria for suitable projects. The challenge for the public and private sectors is to determine the most effective and efficient means of service delivery in an arrangement that is beneficial to both sectors as well as to users and taxpayers.

Under the *Partnerships Victoria* model 23 infrastructure projects worth around \$11.7 billion in capital investment have been contracted since 2000. During the 1990s a range of PPPs were also delivered including CityLink, private prisons and hospitals. Victoria has a consistent track record of a PPP project pipeline with projects in the market across a range of sectors including roads, hospitals, schools, prisons, emergency services telecommunications and specialised facilities such as the Melbourne Convention Centre and the Biosciences Research Centre.

The PPP model delivers a number of benefits to government including greater innovation, asset utilisation and whole of life management, which is underpinned by the discipline of private financing.

PPPs offer significant benefits when used appropriately:

- PPPs provide enhanced incentives for on time and on budget delivery;
- the financial consequences of risks allocated to the contractor are borne by the private sector; and
- there is greater certainty of service standards and cost transparency over the longer term.

Victoria has been at the forefront of PPP delivery and in May 2013 released new *Partnerships Victoria* Requirements which will see the next phase of PPP projects in Victoria deliver high quality infrastructure and services.

The new requirements are designed to ensure the PPP model evolves to respond to a more dynamic economic environment. The model is an important part of the Victorian Government's strategy to deliver critical infrastructure in partnership with the private sector.

The PPP model promotes Government objectives including maximising the efficiency, social and economic returns from government expenditure, promoting growth and sustainability in Victoria, and ensuring value for money over the longer term.

The new *Partnerships Victoria* Requirements operate within the National PPP Policy and Guidelines that have applied to all Victorian PPP projects released to the market from January 2009. Victorian PPP projects also comply with Victorian Government's Investment Lifecycle and High Value High Risk guidelines. The Requirements can be found at <http://www.dtf.vic.gov.au/Publications/Infrastructure-Delivery-publications/Partnerships-Victoria/Partnerships-Victoria-Requirements>.

The current Victorian policy has been informed by independent reviews and consultation with industry on the costs and benefits of the PPP model.

In response to recent Victorian project experiences and changing financial market conditions, the Victorian Government released an industry consultation paper in November 2012. The *Future direction for Victorian public private partnerships* paper established the context for change, outlined the rationale and some precedent examples for reform and requested feedback on identified options. This feedback was then incorporated in the PPP policy reforms. The consultation paper can be found at <http://www.dtf.vic.gov.au/About/Projects/Future-directions-for-public-private-partnerships>.

The Victorian Auditor General has conducted a range of performance audits on Victorian PPP projects in the procurement phase including Peninsula Link in 2011, Royal Children's Hospital in 2009, Royal Women's Hospital in 2008 and Melbourne Convention Centre in 2007. The most recent audit in 2013 focussed on the operational phase, investigating smaller scale operating water infrastructure projects. Recommendations have been incorporated into tender processes. Reports can be found at <http://www.audit.vic.gov.au/>.

A number of local and international studies have demonstrated the benefits of PPPs, including greater time and cost certainty in project delivery¹. PPPs are likely to offer value for money when projects have the following characteristics:

- a project of appropriate size (over \$100 million) with the ability to bundle operation and maintenance services, ensuring integrated whole-of-life asset management;
- the opportunity for appropriate risk transfer;
- the ability to specify outputs;
- the opportunity to encourage innovation, asset utilisation and third party revenues;
- a competitive market to bid for the project; and
- the ability for the project to be privately financed.

¹ Allen Consulting Group, Duffield, C. and Raisbeck, P., 2007, *Performance of PPPs and Traditional Procurement in Australia*, Final Report to Infrastructure Partnerships Australia, 30 November 2007, <http://www.ippp.org/TheAllenGroup.pdf>

Duffield, C., Raisbeck, P. and Xu, M., 2008, *Report on the performance of PPP projects in Australia when compared with a representative sample of traditionally procured infrastructure projects*, 17 December 2008, <http://www.partnerships.vic.gov.au/>

Mott MacDonald, 2002, *Review of Large Public Procurement in the UK, Final Report to HM Treasury*, July 2002, [http://www.hm-treasury.gov.uk/d/7\(3\).pdf](http://www.hm-treasury.gov.uk/d/7(3).pdf)

The current financial environment in which PPPs operate is different to that faced over the past decade with new challenges emerging. The PPP model should continue to evolve to maintain and improve the value delivered to taxpayers.

The global financial crisis has necessitated modifications to PPP projects to ensure value for money outcomes continue to be achieved, due to:

- smaller pool of lenders offering terms considerably less favourable than in the past;
- limited competition to bank debt; and
- changes in the capital markets and the downgrades of monoline insurers that have previously provided credit enhancement.

Modified or alternative financing structures could maximise value for money by addressing increased private sector funding costs and changing market conditions. It is important to maintain the incentive for long term service outcomes, and continue the disciplines of private finance in managing risk.

Victoria has reviewed, considered and consulted on a range of alternative financing options.

In 2011, Victoria commissioned research to identify a range of alternative financing options based on examples from around Australia and international jurisdictions. Alternative financing options were also tested with industry when the Victorian Government released its consultation paper, the *Future direction for Victorian public private partnerships* paper, in November 2012 as part of reform of the *Partnerships Victoria* Requirements (refer to link above).

A range of alternative financing options were identified and assessed against criteria based on the objective of capturing the benefits of PPP procurement, while taking into account current market conditions which impact on the ability to leverage private finance for projects. Figure 3 below summarises the range of options considered at the time.

Industry response to Victoria's consultation paper indicated there is strong support for the government making capital contributions, typically between 20 and 40 per cent of capital cost. This was seen as delivering the best value to government. A government contribution over 50 per cent of capital cost was questioned for maintaining market interest in PPPs as it reduced the amount of private capital required, and therefore the profitability and sustainability for participants. As at early 2013, there were mixed views on alternatives to bank debt, with no likely re-emergence of domestic bonds in the near future, but greater growth in foreign debt markets that could improve bank debt pricing.

Following consultation, the Victorian Government announced reforms to the *Partnerships Victoria* model in May 2013, including using modified financing structures where project outcomes can be improved.

Figure 3. Summary of modified financing options

<p>Models to address liquidity</p> <p>Deferred funding confirmation:</p> <ul style="list-style-type: none"> • first stage provides indicative terms and then a second bid stage (with one or more bidders) provides full underwritten bid(s). <p>Preferred bidder funding competition:</p> <ul style="list-style-type: none"> • two stage bid process, with only the preferred bidder confirming price based on a funding competition. First stage would require assurance that the bid is financeable, with the State having the right to reject if it is considered too aggressive. <p>Government guarantee syndication:</p> <ul style="list-style-type: none"> • bidders submit a privately financed bid, but in the event of an unsuccessful syndication, the State would become a lender of last resort for the shortfall.
<p>Models to address liquidity and value – to expand the market</p> <p>Government guarantee revenue:</p> <ul style="list-style-type: none"> • a tool applicable to demand risk transfer projects such as toll roads whereby the State guarantees a minimum level of revenue to be received by the private sector for a defined period and if it is not achieved, the State will provide financial support. Conversely if above a certain threshold the State would receive payment.
<p>Models to address liquidity and value – to restructure traditional PPP financing to improve value for money</p> <p>Government contribution:</p> <ul style="list-style-type: none"> • the State provides a proportion of the funds earlier via a capital contribution either in the form of a payment at commercial acceptance or progress payments. <p>Interest rate risk sharing:</p> <ul style="list-style-type: none"> • a risk sharing tool whereby the private sector takes the initial risk of interest rate change and the State takes the longer-term interest rate risk either through a payment adjustment or hedging arrangements. <p>Differential payment profile:</p> <ul style="list-style-type: none"> • standard debt and equity profile, but instead of a flat (in real terms) repayment profile over the 20 plus years of the contract, the service payments could either be front ended, or stepped down over time to pay off more earlier. <p>Government senior debt – pari passu:</p> <ul style="list-style-type: none"> • the State is one of the lenders for a proportion of debt from commencement of the project on the same terms, conditions and pricing as private sector lenders.
<p>Models that are a material deviation from the standard PPP model (and therefore only likely to be attractive in exceptional circumstances)</p> <p>Foreign exchange risk:</p> <ul style="list-style-type: none"> • a tool to manage foreign exchange risk through a currency hedging facility contingent on the State being able to procure cheaper than the private sector. <p>Government senior debt – supported debt:</p> <ul style="list-style-type: none"> • the State becomes a lender for a proportion of debt that is drawn down once construction is completed. <p>Government senior debt – ‘wide equity’:</p> <ul style="list-style-type: none"> • the State provides all debt and the private sector provides a greater proportion of equity (e.g. 80 per cent debt and 20 per cent equity). <p>Government equity investor/ subordinated debt:</p> <ul style="list-style-type: none"> • as an equity investor the State would contribute alongside private sector providers of equity capital. Or under the subordinated model, the State is a lender on terms consistent with other private lenders but the State includes a risk premium that reflects its ranking below private senior debt. <p>Government guarantee debt:</p> <ul style="list-style-type: none"> • the State would guarantee a portion of the private sector debt which would then be triple-A rated and attract lower pricing. The guarantee could vary according to applicable time, and be a full or partial guarantee. <p>Government wholesale financing:</p> <ul style="list-style-type: none"> • the State provides partial or full debt finance and retains risk of funding costs. Then the private financiers provide a letter of credit to cover performance risk.

In considering alternative financing, it is critical to maintain the performance incentives for service delivery and continue the disciplines of private finance in managing risk.

Of the range of models (in Figure 3), the partial capital contribution model represents minimal intervention. The next level of intervention is where government considers forms of risk sharing and guarantees for specific projects. More material variations to the standard PPP finance structure include government directly investing in equity or debt. Alternative options need to be carefully evaluated against clear criteria to assess whether the benefits of private finance and value for money are maintained.

The analysis above is done from the perspective of the State Government. However, it is also generally applicable to the role of the Commonwealth Government in a PPP structure. The \$1.2 billion Victorian Comprehensive Cancer Centre is an example of where Commonwealth funding was provided to a PPP project. The State remained the contracting party and the Commonwealth grant funding of \$428.5 million was used as a capital contribution paid to the private consortium against milestones during the construction period.

In considering an alternative such as Commonwealth funding being provided through a long-term availability payment, the key issues of contracting parties and balance sheet impacts are important to address. Commonwealth funding via an availability payment stream would need to be direct with the private consortium in order to avoid the potential increase in liabilities on the State's balance sheet that may occur if the Commonwealth funding is passed through the State.

Where government takes a different role in PPP structures through provision of debt or guarantees within the structure alongside private financiers, the State retains risk that is normally transferred to the private sector. Another consideration is the potential conflict from being both the client and the financier. This issue was raised by industry in response to the consultation paper. Some of these concerns contributed to Victoria determining that a capital contribution through a milestone or lump sum payment is the preferred approach.

2.2 Assessment of alternative financing options

It is important to have an objective framework and criteria against which to assess alternative finance options. In considering the optimal level of private finance, government should assess what level maintains the incentive for long-term service outcomes, the disciplines of private finance in managing risk, while maximising value for money. The criteria in the *Partnerships Victoria* Requirements to assess modified structures against a standard PPP approach are:

- risk allocation;
- cost and complexity;
- preservation of the benefits of private finance;
- competitive tension;
- alignment of the tenor of finance with the project's risk profile; and
- potential for innovation.

Recommendation: The Productivity Commission could recommend a set of principles or assessment criteria that could inform decision making on alternative financing structures for infrastructure projects.

Following assessment of a range of options, Victoria's preferred modified financing structure is to use a capital contribution. The objective in considering partial State contributions is to continue to use private finance efficiency and risk transfer in PPPs, while optimising the timing of the use of State funding to reduce the overall cost of finance.

A partial government capital contribution can be made in two ways:

- as milestone payments during construction (for example for projects where the full private capital to fully finance construction cannot be raised); and/or
- as a lump sum payment once construction is complete to achieve greater value for money.

A capital contribution approach also ensures projects have a level of private sector capital in the operations period, which is appropriate for the risks being absorbed. It also provides an incentive to deliver the desired outputs. Government should only pay for the optimal level of risk capital to deliver desired performance and improved value outcomes. A capital contribution once construction is finished is appropriate to achieve greater value for money, while maintaining the integrity of risk transfer during the design and construction phase when project risk is at its peak.

Governments should continue to review developments in other jurisdictions to understand if there are other approaches and innovations that can be utilised or modified for use in Australia.

The Commonwealth Government has advocated for states to adopt alternative funding mechanisms including asset recycling, user and beneficiary charging. Victoria has taken steps to utilise user charging to support the construction of critical infrastructure, including new roads such as CityLink, EastLink and expansions of port facilities. Victoria's new metropolitan planning strategy, *Plan Melbourne*, identifies the need for new funding mechanisms including reform of development contributions and investigations to use value capture to fund city-shaping infrastructure.

While funding mechanisms such as user charging have been accepted over time, their introduction has required states to take on the full risk of engaging with the community on reforms that have, at times, been undertaken in a challenging environment.

In the United Kingdom, the national government has worked with cities to offer additional funding as an incentive to take on risk in the introduction of new funding mechanisms and this increases the pool of funding available for productivity enhancing infrastructure.

Recommendation: As part of its inquiry, the Productivity Commission could report on the likely costs and benefits of the Commonwealth working with states and territories to explore incentive options for Australia.

2.3 Role of superannuation funds in Victorian PPPs

Superannuation funds represent a significant potential source of financing for infrastructure projects. In Victoria, superannuation funds have invested equity in PPP projects (see Figure 4 below). Superannuation funds and fund managers will continue to invest equity in projects that deliver an appropriate risk weighted return. These institutional investors have a different risk appetite in relation to debt finance. It is noted that institutional investors and some superannuation funds also hold debt in infrastructure assets.

Initiatives that seek to increase investment from superannuation funds in infrastructure projects by removing barriers to entry and providing appropriate investment vehicles may provide benefits through greater competition. However, it is not appropriate to selectively advantage one group for the sake of encouraging entry.

Figure 4. Superannuation equity investment in PPPs

Partnerships Victoria Projects	Superannuation Fund Investors
Biosciences Research Centre	CDPQ
Casey Community Hospital	CDPQ
Desalination Plant	Unisuper, IFM, Australian Super
Melbourne Convention Centre	CDPQ
Peninsula Link Project	State Super, CBA Officers Super Fund, Prime Super
Royal Women's Hospital	CDPQ
Southern Cross Station	IFM
Victorian Comprehensive Cancer Centre	Unisuper, IFM, HESTA, Care Super, CDPQ

2.4 Secondary PPP markets

The PPP market has historically been financier led. These parties are not long term holders and tend to exit the project by selling down their equity and re-selling/syndicating debt in the project. Some financiers seed infrastructure funds with their transactions to free up capital for other projects. Secondary PPP market activity also can reflect change in business operations, such as a global divestment in PPP projects.

Superannuation funds are often reluctant to participate in primary bidding processes because of costs, time and risks associated with greenfield projects. As such, superannuation funds are active participants in secondary PPP markets with an interest in brownfield projects in steady operations.

PPP contractual structures allow for a change in ownership during the contract term, usually after a mandatory period of two years when the project reaches steady state operations. In Victoria several PPP projects have changed ownership, particularly to superannuation funds or other specialist fund managers.

2.5 Sovereign infrastructure funds

There are examples from overseas jurisdictions using sovereign funds to invest in PPP projects. The Productivity Commission could investigate the potential local application of such funds. As an example the P3 Canada Fund was established in 2009 by a Canadian national body, PPP Canada, to encourage and improve PPP project delivery by providing funding support to PPP projects in Canada.

The P3 Canada Fund supports provincial, territorial, municipal PPPs in fifteen eligible categories, with priority given to sectors such as transportation, water/waste-water, solid waste disposal, and brownfield redevelopment.

The Fund is a merit-based program and eligible projects can apply for funding during application rounds. There have been four rounds since 2009.

To meet the application criteria projects must:

- be well structured and deliver value for money;
- demonstrate substantial risk transfer to the private sector;
- establish public benefits; and
- promote jobs and economic growth.

The amount of the funding support, in combination with any other direct federal assistance, may not exceed 25 per cent of the project's direct construction costs. The Fund allows PPP Canada to step in at the early stages of infrastructure development to assess projects for their PPP viability and to assist clients in the development of PPP procurement strategies. As at August 2013, the Fund has committed over \$700 million to 15 PPP projects in Canada. Further material can be found at <http://www.p3canada.ca/p3-canada-fund-overview.php>.

Recommendation: In examining opportunities around infrastructure funding the Productivity Commission could investigate a National Infrastructure Fund – a dedicated fund for Infrastructure Australia recommended projects, comprising a fixed annual component, and a supplementary component based on annual Commonwealth budget capacity.

2.6 Infrastructure bonds in the PPP market

Recently, the State and AquaSure, the concessionaire for the Victorian desalination plant PPP contract, agreed to take advantage of the favourable financial market conditions by refinancing the project's entire senior and mezzanine debts earlier than contractually required. The refinancing included a combination of bank debt tranches (with varying tenors), domestic bonds (issued in the Australian Medium Term Note market) and United States and Australian dollar denominated bonds issued in the United States Private Placement (USPP) market (10 year tenor). As part of the United States bond issuance, AquaSure put in place cross currency swaps to mitigate exposure to foreign exchange risk associated with the United States dollar denominated bonds.

The diversified sources and tenors of the refinanced senior debts contributed to the favourable pricing achieved for each debt tranche, and have significantly reduced future refinancing risk. Importantly, this is the first time that an Australian PPP has utilised the USPP market as a funding source. The introduction of USPP bonds into the Australian PPP market is a positive step for the Australian PPP financing market, which will likely enhance competition for future PPP transactions in Australia, providing greater depth for capacity and pricing.

2.7 Widen sources of funding – value capture

Victoria has commenced work on developing a value capture framework for introducing a fairer and more efficient beneficiary pays model for funding infrastructure.

The Department of Treasury and Finance is exploring using part of the uplift in future economic and social value created by the construction of significant infrastructure to fund that same infrastructure today. This work explores value capture revenue opportunities and the complexities of implementation. Some complexity arises from the timing of value capture revenues. While some revenues can be collected upfront, for example through tendering of commercial and development rights, a more significant contribution will also require revenues to be collected over time as the benefits are experienced by beneficiaries. There are a number of issues that would need to be worked through on the planning, governance and financing structures required for a project that may be significantly funded through value capture.

Factors to consider in developing a value capture framework may include:

- the starting point is priority projects that have already been identified through the Government's normal planning processes, the presence of value capture opportunities is not of itself an investment rationale;
- a value capture approach may be warranted where there are ready opportunities upfront (big or small). However, for opportunities materialising over time the additional effort must be commensurate with the net benefit. In the latter case, the value capture implementation needs to significantly decrease the net call of the project on traditional budget funding sources, usually through project planning interventions that optimise the private beneficiaries and the benefit value; and
- project design and locality planning should occur with a clear commercial focus. The aim being to optimise those commercial opportunities for the private beneficiaries that result in optimal net risk adjusted value capture revenues whilst delivering on the Government's project service delivery objectives.

2.8 Developer contributions in growth areas

In May 2012 the Victorian Government announced a preferred framework for a new local development contributions system based on standard levies. It is proposed that the new system will contribute towards infrastructure in growth areas, strategic development areas and urban areas including brownfield sites.

The new levies will be tailored to align with different development settings in metropolitan and non-metropolitan areas for residential, retail, commercial and industrial development. The new system will be simpler to use and administer and will remove the need to prepare costly and complex development contributions plans. Implementation of the new system is expected to take place in the short term.

Growth councils in Melbourne have made the greatest use of development contributions and have identified them as a preferred method for funding infrastructure. Under *Plan Melbourne*, the Victorian Government will continue to provide improved transport infrastructure and other facilities in growth areas, improve funding coordination between levels of government and the private sector in urban renewal precincts and achieve better economies of scale in infrastructure development.

The new levies will be tailored to align with different development settings in metropolitan and non-metropolitan areas for residential, retail, commercial and industrial development. Certain levies will be able to be varied, depending on specific circumstances. The new system will be simpler to use and administer and will remove the need to prepare costly and complex development contribution plans. It will rein in escalating costs to developers and cut red tape. More importantly, it will help deliver essential infrastructure to support growth and meet the future needs of residents across Victoria.

The Government is investigating options to accelerate the delivery and development of land designated as employment precincts in outer growth areas, including consideration of flexibility in the application of contributions. Timeframes for developers to pay contributions have been made fairer and changes made to allow developers to pay for state infrastructure as works-in-kind in growth areas. For example, the Government is investigating provision of a discount on development contributions where an affordable housing component is delivered. The Government is clarifying rules about the level of developer contributions and what they can be spent on. These changes will fund local infrastructure including roads, footpaths, storm water management, open spaces and community facilities and ensure adequate local infrastructure is provided at the time of development.

In addition to developer contributions, the Victorian Government introduced a charge on land within the urban growth area to assist in funding infrastructure and services within the growth areas. The Growth Areas Infrastructure Contribution (GAIC) came into effect on 1 July 2010 and applies to land in a declared growth area that was brought within the Urban Growth Boundary in 2005-06, 2010 or 2012, and is zoned for urban development. The amount of GAIC payable on a particular parcel of land is calculated on the total area of the land and is applied uniformly to land in the contribution area, on a per hectare basis indexed annually.

Money raised by the GAIC is paid into one of two special purpose accounts and can only be used for the purposes of State funded infrastructure, including public transport infrastructure, walking and cycling infrastructure, and regional community, environmental or economic infrastructure.

2.9 Local government infrastructure

Local government in Victoria is a significant funder of infrastructure in its own right, and an important partner with other levels of government in planning for and co-funding or jointly facilitating infrastructure. In Victoria, 79 local councils invest approximately \$1.5 billion on average every year in infrastructure. Infrastructure requirements and expenditure levels vary considerably across the many local government areas comprising between four per cent and 30 per cent of their total revenue bases. The 31 councils that make up the five *Plan Melbourne* sub regions are forecasting a four year capital spend of around \$5 billion from 2013-14 to 2016-17.

Local infrastructure is generally funded from a number of sources:

- general rates revenue raised by Councils;
- development contributions approved under the *Planning and Environment Act 1987* particularly in growth areas of Melbourne;
- the Victorian Government's Regional Growth Fund (RGF);
- grants – including untied grants such as the Commonwealth Financial Assistance Grants and targeted grants; and
- borrowings.

Victorian councils have the power to borrow under the *Local Government Act 1989*. The prudent use of debt by councils may help manage the substantial cash flows needed during peak asset infrastructure renewal periods. In 2012, sector wide borrowings in Victorian councils were only \$700 million, in a sector of the Victorian economy with assets worth an estimated \$67 billion.

Under the *Local Government Act 1989*, local councils are responsible for preparing a Strategic Resource Plan to identify how they will commit resources over the next four years to achieve the Council plan. The *Performance Reporting and Accountability Bill* before the Victorian Parliament proposes to strengthen this planning approach. A more consistent and forward looking approach to infrastructure planning will promote more integrated local area, State and Commonwealth infrastructure planning, and create more potential to identify co-investment and partnership opportunities.

Plan Melbourne establishes the five subregional groupings to work with a new Metropolitan Planning Authority (MPA) to collectively plan for jobs, housing and investment in infrastructure and services. The MPA will work with the subregions and with State departments and agencies to identify infrastructure challenges in each subregion and provide advice to the Government on the pipeline of infrastructure and priorities for investment. This is expected to encompass both local and state infrastructure.

Through Local Government Victoria, further work is being undertaken to update rating guidance to local councils. The guide will set rating strategy beside other revenue raising ability of local governments and will also issue updated guidance in relation to borrowings.

The \$1 billion Regional Growth Fund (RGF) is a cornerstone initiative in ensuring Victoria's regions are resilient to economic change and making investments in key infrastructure and services. The RGF supports major strategic infrastructure and community led local initiatives that improve both the competitiveness and liveability of regional and rural Victoria, creating more jobs and better career opportunities.

The Local Government Infrastructure Program (LGIP) component of the RGF aims to provide regional and rural councils with certainty to plan for and build new infrastructure or renew assets. The LGIP will have the flexibility to support a range of local council initiatives including roads, bridges, new community assets such as halls and theatres, sporting grounds, grandstands, pools, libraries, and upgrading existing facilities. To maximise

certainty, each council will be allocated a notional four year total for projects nominated from its forward capital works plan.

Through a straightforward allocation of funds direct to all regional councils, greater certainty will be provided to plan and deliver key infrastructure projects already scheduled as part of existing local government forward capital works plans.

Many programs have co-funding requirements and in some instances departments and councils will jointly structure funding packages that leverage three or more funding sources, including the National Stronger Regions fund and state government contributions. The Building New Communities Fund under the Growth Areas Infrastructure Contribution, payable by developers subdividing landholdings in growth areas, is one source of co-funding for community infrastructure.

State Government funding programs such as the RGF and the community works program and community support grants provide an important catalyst to enable local governments to attract funding from other sources, including entering into partnerships with not for profit service providers or the private sector.

Part B

The scope of reducing the costs associated with major public infrastructure

4. TOR: Examine the cost structure of major infrastructure projects in Australia, including where infrastructure project costs have increased considerably, compared with other countries.

4.1 Infrastructure project cost structure and growth

High construction costs and low productivity growth are a challenge across the residential, commercial and infrastructure sectors of the construction industry throughout Australia.

All states and territories are experiencing high construction costs, growing faster than relevant cost benchmarks. However, policy action in one state or sector can have unintended consequences elsewhere.

Many of the policy levers necessary to impact the construction sector are not in State hands, such as competition, immigration, and workplace relations policy. The Commonwealth Government must therefore play a role in responding to these challenges.

The construction sector is an important and highly connected one. The performance of the construction sector has crucial impacts on our economy, workforce, liveability, government assets and expenditure and national productivity. There are many factors driving high construction costs and poor productivity growth. These include input costs such as materials, labour and finance. Other drivers are administrative, including regulatory compliance costs and corporate overheads. The level of competition in a market will also influence cost and productivity levels.

Construction cost analysis has indicated Australian construction costs are high relative to other jurisdictions. Victoria commissioned high level construction cost analysis by quantity surveyors in 2011, using project level data from their international affiliates to compare construction costs between countries. Germany, Canada, the United States and the United Kingdom were used as comparison countries.

The 2011 analysis indicated that in a number of categories of cost and building types, Australia was ranked first or second in terms of high cost.

However, international construction costs comparisons are challenging. Like for like comparison is difficult due to a range of factors such as exchange rates, data classification, purchasing power parity and industry structures. A more detailed inquiry such as this current one is critical to assist clarify and compare costs.

4.2 Construction cost structure – labour and materials

Victoria is at the forefront of the effort to contain labour costs and increase productivity in the construction industry. In the wake of the former Commonwealth Government moving to abolish the Australian Building and Construction Commission and water down the National Guidelines, the Victorian Government introduced *Implementation Guidelines to the Victorian Code of Practice for the Building and Construction Industry* (the Guidelines) with effect from 1 July 2012. The Guidelines reflect the Victorian Government's commitment to greater flexibility and productivity within the State's building and construction industry. The Construction Code Compliance Unit (CCCU) monitors compliance with the Guidelines and is responsible for reporting all breaches of the Code and recommending sanctions to the Minister for Finance. Sanctions include being restricted from being awarded future public sector contracts in Victoria.

The Guidelines can be found at <http://www.dtf.vic.gov.au/Publications/Infrastructure-Delivery-publications/CCCU/Implementation-Guidelines-to-the-Victorian-Code-of-Practice>.

Through the Guidelines, Victoria requires tenderers for large projects over \$10 million to submit a project specific Workplace Relations Management Plan that identifies their approach to various matters that can impact productivity. These include dispute resolution, response to industrial action, right of entry policy, management of subcontractors, communication and consultation with the workforce, productivity metrics and performance measures. As at 5 December 2013, Victoria has 49 projects in construction with these risk mitigation strategies that are inspected and audited by the CCCU to ensure compliance. A breach of the Workplace Relations Management Plan can also lead to a sanction.

The Victorian Government also led by example by promoting and requiring productive workplace arrangements and practices when selecting firms to tender. However on 20 May 2013, the Victorian Government announced interim changes to the Guidelines to comply with decisions of the Federal Court on 17 May 2013 while the State appealed those decisions. Under the interim changes set out on *Practice Direction 2013/1*, the Guidelines do not apply to the entering of enterprise agreements or to conduct engaged in under an enterprise agreement or other registered industrial instrument.

On 19 December 2013, the Victorian Government welcomed the decision of the Full Federal Court to uphold both of the Government's appeals. The Government always maintained that it had not infringed Commonwealth law and believed there were good grounds to appeal against the decisions. The Victorian Government is now considering the detail of the appeal judgment with a view to revising the Guidelines and maximising productivity on Victorian building sites.

The Guidelines play a key role in ensuring that Victorian building sites operate in a productive and law abiding manner and that Victorian taxpayers receive value for money on State funded projects. The Victorian Government considers that the Full Court has rejected the attempts by the Construction, Forestry, Mining and Energy Union to undermine the construction industry reforms. These court proceedings and the events leading to them also show the importance of the reinstatement of the Australian Building and Construction Commission by the Commonwealth Government to uphold the law on building and construction work sites around Australia.

The costs and productivity challenges faced by the construction industry are complex and involve a high level of interdependency across different policy domains and levels of government to avoid adding red tape and unnecessary costs to tendering.

The Victorian Government's Guidelines were emulated in New South Wales and Queensland with effect from 1 July 2013. The states are working closely together to streamline processes and reduce red tape for industry. The Government welcomes the Commonwealth Government's proposal to introduce a strengthened building code, to reinforce and work alongside Victoria's Code and Guidelines.

The Victorian Government welcomes the Commonwealth Government's commitment to restore the Australian Building and Construction Commission (ABCC), with a Bill currently before Parliament.

The abolition of the ABCC gave a green light to further unlawful industrial behaviour and misconduct within the industry which negatively impacts the cost of construction. The reinstatement of the ABCC is likely to create opportunities for the CCCU and ABCC to work together to ensure compliance, uphold the desired practices of the industry and increase productivity. Commonwealth legislation reinstating the ABCC needs to work harmoniously with State and Federal Codes and Guidelines.

4.3 Construction cost structure – managing tendering costs

The Victorian Government is reviewing its tendering protocols to increase competition and transparency in tendering taking account of interstate processes. To manage the tension between providing access to the market and managing tender costs, the Victorian Code of Practice recommends inviting between three and six tenderers. This limits those invited to tender to the contractors who can demonstrate the relevant capabilities and capacity to complete the requirements of the job. In addition, it means contractors are not wasting money and resources on unwinnable tenders, and limits tender costs being passed back to the State.

Along with open public tenders, the Victorian Government uses pre-qualification schemes as a means of managing tendering costs and reducing red tape. Victoria is centralising its whole of government pre-qualification scheme for building and construction industry consultants and contractors (the Construction Supplier Register) within the Department of Treasury and Finance. This will enable streamlined assessment and auditing of contractors for pre-qualification and for compliance with the Guidelines on projects.

Another example is the pre-qualification regime used by VicRoads, Victoria's road delivery agency. VicRoads works under the National Pre-qualification System for Civil (Road and Bridge) Construction Contracts, which ensures contractors with appropriate experience, competencies and financial capacity, are eligible to undertake particular categories of works and services. Under this pre-qualified arrangement, potential contractors can satisfy the basic tender conformance on a periodical basis.

Pre-qualification schemes can deliver efficiencies in tender processes. The pre-qualification of contractors drives value for money through lower tender costs for both government agencies and prospective tenderers. Pre-qualification schemes are efficient, particularly for small and medium enterprises with limited resources. The challenge is to ensure selective tendering from pre-qualification panels does not block access to the market. This issue is being considered by the Victorian Government in its review of tendering protocols.

Victoria actively participated in the development of the National Pre-qualification Scheme (NPS) which harmonised systems and provides for mutual recognition of contractor pre-qualification, reducing barriers to entry for contractors seeking to tender for non-residential government building contracts greater than \$50 million across state and territory borders. The Commonwealth needs to ensure any changes to the NPS work harmoniously and efficiently with state pre-qualification schemes.

Victoria is actively identifying ways to reduce tender costs associated with PPP projects. Government recognises the importance of continually improving the bid process for PPP projects to minimise these costs. There is always a balance between minimising the process costs for tenderers and maintaining sufficient information requirements and competitive pressures to ensure a value for money outcome for government.

Victoria has worked cooperatively with Infrastructure Australia and other jurisdictions to introduce initiatives for PPP projects to streamline the procurement process and improve project outcomes. Some examples of PPP tender process efficiencies include:

- Active market sounding prior to the commencement of the tender process, to test and incorporate market feedback in the design of the tender.
- Streamlining contractual documentation. A revised contract has been released for the two PPP tenders currently in the market that maintains precedent risk allocation however has reduced drafting so is shorter and simpler than previous contracts.

- Interactive tender process workshops following the release of the Request for Proposal documents, to facilitate clarification of tender requirements and test key issues.
- Deferring some tender submission requirements from the initial bid submission to the preferred bidder stage.
- Considering the number of parties shortlisted for specific projects. Complex PPP projects have tended to shortlist either three or two bidding consortia depending project specific circumstances.
- Trialling reimbursement of bid costs for specific projects. There will be a contribution to proposal costs of unsuccessful bidders on the East West Link - Stage 1 project subject to the transfer of intellectual property rights and compliance with tender conditions.

Recognising that time taken in procurement is a key driver of bid costs, in June 2012 Infrastructure Australia released a report identifying benchmarks for efficient procurement of major infrastructure. The timing of recent PPP projects has generally been consistent with the benchmarks identified for complex PPP projects.

Victoria's Regional Rail Link project is well progressed and also demonstrated process efficiencies during procurement. Key features of the tender process are outlined below.

Regional Rail Link procurement strategy

Market sounding

Early market sounding was mutually beneficial. The project team learnt about the market conditions, trends and potential impacts of its procurement approach whilst potential market contractors were able to prepare for how they might best respond. Preliminary market sounding was undertaken shortly after the project was announced, with subsequent market sounding undertaken following the development of the Strategic Procurement Plan for the project. In addition the early Registration of Interest process confirmed that there was sufficient interest in the project to enable a number of work packages to be procured in parallel.

Early works

The delivery agency undertook early works during the procurement process, which provided significant benefits to the overall delivery of the project by supporting critical path activities and de-risking the project program. The early works were able to identify services that needed to be relocated, including identifying the owner of those services and obtaining indicative costs. Formal agreements were established with many of the service authorities.

Early works also provided an opportunity to establish requirements for long rail occupations including use of rail replacement bussing and commuter communication activities. In addition long lead time materials and equipment were procured as early as possible by accessing an Accredited Rail Operators supply arrangements.

Procurement method and scope

Significant work was undertaken to clearly define the project scope in order to inform the procurement strategy, tendering and approvals phase. This enabled the project to be delivered through a number of work packages using the procurement methodology most suited to the scope of the specific package. As a result packages in the brownfields rail environment are primarily delivered through alliances and the accredited rail operator, whilst the greenfields' packages are delivered through a design and construct model. This allows the State to manage risk appropriately for the scope of each package and achieve strong value for money outcomes.

Procurement process for alliance work packages

Proponents were required to make submissions in stages (interim submissions), this allowed continual discussion and set up a feedback loop to validate risk and clarify the approach taken by proponents. It also ensured a 'no surprises' end to the proposal (target outturn cost) development phase. Partial reimbursement of bid costs to unsuccessful proponents secured the use of innovations in those bids to enhance value for money.

5. TOR: Provide advice on ways to improve decision making and implementation processes to facilitate a reduction in the cost of public infrastructure projects including in relation to:

- a) measures to improve flexibility and reduce complexity, costs and time for all parties;
- b) access to the market for domestic and international constructors, including barriers to entry, and what effect this has on construction costs;
- c) greenfield infrastructure projects.

5.1 Planning and decision making

The High Value High Risk process has been implemented in Victoria to provide decision makers with additional confidence around project delivery. A particular focus has been on getting the business case right to inform the investment decision and set the project up for success.

Asset investment decisions are made as part of the annual budget cycle supported by well-established processes across the stages of the investment lifecycle.

One source of advice is the High Value High Risk process which provides a greater level of transparency about project performance and assurance. Under the process, the Treasurer's approval is required at key milestones, including business case, procurement and contract variations before projects can proceed. Under the process any critical recommendations from Gateway Reviews must also be reported to the Treasurer along with an action plan outlining the steps to be taken to address the recommendations.

The Victorian Government uses Gateway Reviews as an independent assurance mechanism to review the progress of projects throughout their lifecycle, starting with proof of concept, progressing through business case preparation, procurement, construction and benefits realisation. Victorian projects have benefited from the experience of subject matter experts in other jurisdictions who are able to share knowledge through Gateway Review panels.

The information below summaries the High Value High Risk process.

Figure 5. High Value High Risk process

The High Value High Risk (HVHR) project review process is fully integrated with and builds upon the Investment Management Framework and the internationally accepted Gateway review process.

The process applies to all general government sector infrastructure and ICT investments that:

- have a total estimated investment (TEI) greater than \$100 million (regardless of funding source);
- are identified as high risk using an approved risk assessment tool; or
- are determined by the Government as warranting the rigour of increased oversight.

HVHR investments are subject to extra scrutiny and ongoing involvement by the Treasurer and the Department of Treasury and Finance (DTF) as explained below.

In undertaking its review and analysis, DTF works with departments along the lifecycle of project development from inception, investment decision through to procurement and contract award.

Preliminary Business Case

- DTF assesses preliminary business cases developed by departments and advises the Government on the strategic merit and need for each potential HVHR project.
- DTF assesses whether the investment proposal adequately addresses the identified service need or investment problem and whether a suitable range of alternative solutions, including non-asset solutions, have been sufficiently assessed.
- DTF advises Government on whether the proposal should be further developed into a full business case for an investment decision.
- This stage is integrated with the Gateway Review – Gate 1.

Business Case

- The Treasurer must approve all HVHR business cases as robust before they can be considered by government for funding.
- DTF reviews the full business case and undertakes a 'deliverability' assessment and advises the Treasurer on whether the business case is robust.
- This assessment focuses on interrogating the cost estimates, risks analysis and allowances, work program and timelines, and the proposed procurement approach and governance arrangements.
- DTF requires appropriate evidence that the cost estimates, risk and contingency allowances are adequate for the project. For less complex but high value projects this may take the form of cost benchmarking with similar projects, but for more complex projects, an independent third party cost review is recommended.
- In some circumstances, DTF may commission an additional independent review if it considers the business case is not fully substantiated.
- DTF also considers and provides advice on the department's remedial action plan to any critical issues and recommendations emerging from the Gateway Review Gate 2 - business case reviews in making its assessment of the project's level of 'readiness' for an investment decision.

Project procurement

- Following a funding decision by the Government, departments work with DTF to develop the transaction documentation.
- Most HVHR projects will employ a two stage procurement approach – an expression of interest process followed by a request for tender issued to shortlisted parties.
- DTF works closely with departments in developing the project specifications and agreeing the tender evaluation strategy and criteria.
- Once satisfied that the documentation is ready and that any recommendations from the Gateway Review - Gate 3 have been addressed, DTF then advises and seeks the Treasurer's approval that the documents can be released to the market.
- DTF plays a dual role during the procurement phase of HVHR investments. DTF sits on the Project Control Board or Steering Committee as appropriate to provide strategic direction for the project and may also be involved in the RFT evaluation process.

Following endorsement of the RFT outcome by the Project Control Board and conduct of the Gateway Review – Gate 4, DTF provides advice to the Treasurer that the evaluation process has concluded satisfactorily and requests endorsement of the evaluation outcome and approval to enter into a contract.

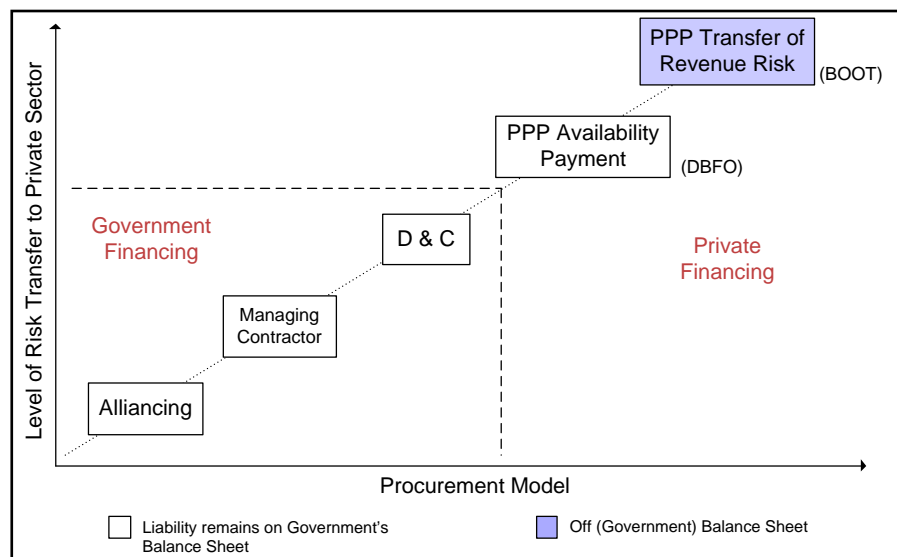
5.2 Selection of procurement model

Each investment has different characteristics and the procurement methodology is tailored to best suit the size, risk and complexity of the investment. The tendering process needs to be tailored to the project requirements, the relationships with and within the supplier market, the size of the supplier market and the existing commercial realities. The procurement method is selected depending on the maturity, capabilities and capacity of the market. Teams delivering projects in Victoria must have industry and market knowledge so they can assess whether offers from suppliers will meet government needs, are achievable and offer the best value for money solution.

Good procurement practice maximises opportunities and benefits whilst minimising and managing risks. Practice must comply with relevant legislation, government policies and public sector accountability requirements. Procurement success is not solely measured by how well an asset has been delivered, but also encompasses whole-of-life operational considerations to ensure the asset meets ongoing community service delivery requirements.

A fit for purpose procurement model is selected based on risk assessment. The figure below is a general depiction of risk in different procurement models.

Figure 6. Risk transfer under different procurement models



There is continued evolution in procurement practices for major infrastructure projects. This is clearly demonstrated by the recent history of alliancing in Australia and in particular the adoption of the national Alliance Contracting Policy and Guidelines. This has led to second generation alliance contracts delivering effective price competition and significantly improved value for money. The value of alliance contracts tendered on the basis of non-price competition in the road, rail and water sectors in New South Wales, Queensland, Victoria and Western Australia over the period 2004-09 was \$32 billion.

A benchmarking study conducted by the Department of Treasury and Finance in 2009 found that non-price competition in alliance contracting, mostly during 2004-09, led to some sub-optimal outcomes in public projects. The study found that it resulted in, on average, the actual cost at project completion increasing by 45 to 55 per cent from the approved business case cost estimate compared to when price competition was used, and it commanded a 10 to 15 per cent price premium relative to price competition with increased risk for the client. The study can be found at <http://www.dtf.vic.gov.au/Publications/Infrastructure-Delivery-publications/In-pursuit-of-additional-value>.

This study highlights the importance of maintaining effective price competition in tendering processes and ensuring that clients minimise the asymmetry of capability with their suppliers. Moreover, using cost data from these non-price competition alliancing projects is likely to present inflated benchmarks when costing future projects.

During 2010 an Inter Jurisdictional Alliancing Steering Committee worked on the National Alliance Contracting policy and guidelines which were published in July 2011. A key principle in the new (second generation) alliancing model was the use of price competition as a default requirement. Victoria has successfully delivered aspects of the Regional Rail Link project under the Alliance guidelines as well as a number of recent grade separation projects.

Victoria is researching the development of a productivity metrics framework for measuring and tracking productivity metrics in the delivery of projects and promoting continuous improvement. The proposed productivity metrics framework will be developed as part of a project contracting strategy that will:

- have selected quantitative, empirical and objective productivity metrics for infrastructure and building projects;
- incorporate comparative metrics that will allow data to be benchmarked across a portfolio of projects;
- allow for the establishment over time of best practice productivity targets; and
- enables context assessments for a qualitative causal analysis of productivity outcomes.

The aim is for the framework to promote improved performance and pricing over time and allow for a contractor's track record of performance on selected productivity metrics to be transparent and used in a tender evaluation criteria for future projects. This research is not related to the proposed use of productivity metrics to support investment decision making to boost overall productivity in the economy. Rather it refers to benchmarking the performance in delivering individual projects.

During 2011 an investigation was undertaken, on behalf of the Council of Australian Governments Infrastructure Working Group, into the design and construct model in contracting for public infrastructure. In June 2012 Victoria published *Towards Agreed Expectations – Tender strategies to improve Design and Construct infrastructure delivery outcomes* (<http://www.dtf.vic.gov.au/Publications/Infrastructure-Delivery-publications/Towards-agreed-expectations>). It identified five improvement areas that would make a significant difference to cost outcomes achieved by public sector clients:

- *Project definition and scope parameters* – this is critical to not only stating what the client wants to buy, thereby allowing a high degree of understanding between the client and tenderer and help avoid future disagreements; it also underpins the project budget and forms the basis of the subsequent tender documentation and negotiations.
- *Developing project budgets in business cases* – this has a critical impact on promoting greater transparency and accountability in developing and managing capital budgets and providing clear advice to government on the efficacy and veracity of the capital costs estimates.
- *Governance and contract management* - with a focus on a positive commercial relationship between the client and the supplier during the construction phase.
- *Continuous improvement and performance* – governments are a high value strategic client for infrastructure suppliers, therefore, agencies are in a strong position to promote continuous improvement. Suppliers have a strong motivation to cooperate and collaborate with public sector clients to improve project outcomes. An important way of promoting continuous improvement is by formalising performance

assessments during the construction phase that assist with future decisions on awarding contracts and performance enhancements.

- *Skills and capabilities* - clients should ensure they have appropriately experienced and capable personnel to conduct high quality practices in project planning, the tender phase and to interact and negotiate with suppliers. Clients should be appropriately resourced to understand the contracting and commercial practices of suppliers and match the suppliers' very good understanding of the clients' practices.

5.3 Cost estimation

Whilst acknowledging the significant role that good project risk identification, allocation and management plays in project success, there is concern that attention is being taken away from good practice on the base cost estimate that in the great majority of government projects is well in excess of 80 per cent of the total project cost.

Focusing management attention on estimation of project risks at the expense of the base cost estimate is not optimal. Moreover, the indiscriminate use of probabilistic methods should be avoided, as indeed the perception that a portfolio of projects, as well as in an individual project, delivered at a P90 average is immediately indicative of good project outcomes.

It is critical to containing and reducing construction costs that the public sector produces project budget estimates that are rigorous and are based on well investigated and detailed project definitions. The Department of Treasury and Finance is working with other jurisdictions to address these matters and has published exposure drafts of the *National* framework for traditional contracting of infrastructure, which can be found at <http://www.dtf.vic.gov.au/Infrastructure-Delivery/Alliance-and-traditional-contracting>.

Aside from the question of risk allocation and selecting the appropriate contracting model for a project's characteristics, it is worth noting that caution should be used to ensure the strict definition of project risk is applied.

The term project risk refers to possible events in project delivery, construction, regulatory planning approvals etc. with outcomes that can be substantially dimensioned (ie. the likelihood and impact of that event is quantifiable) at the time the project definition, design and the project cost is developed. However, there can be uncertainties (which can be very substantial) arising from systemic or world events outside the control of a project team or government, or through sub-optimal project planning, such as incomplete analysis of the investment rationale, scope and site conditions.

The inclusion of estimated or supposed financial impacts arising from such uncertainties (including those arising from poor project planning and analysis) are not acceptable as project risks and should not be considered in a project cost estimate. To do so would inappropriately inflate the estimate. However, it may be appropriate to deal with a number of uncertainties through real options (see section 5.4 below).

5.4 Real options analysis

There is an emerging area of infrastructure planning that changes the traditional management of project contracts.

Government normally enters into contracts for 'full' project delivery. However, in the use of real options the investor retains flexibility to respond to systemic impacts outside the control of the client or supplier. Real options are exercised by government (as the investor) as they will generally deliver a different outcome to that anticipated in the business case, but which in the circumstances provide for a greater value for money outcome.

Potential systemic events that can impact on the project include:

- global/systemic shifts;
- quantum technology changes;
- weather events;
- extraordinary industrial relations developments;
- unknown unknowns; or
- known unknowns.

The use of real options (with well-defined trigger points) is planned in the business case and, if approved, are documented as the investor's options and/or 'break points' in the project contract. Real options are of particular interest for projects that:

- have benefits, costs and/or risks that are volatile or uncertain; and
- value can be created by designing and introducing investor flexibility, that is options to potentially exercise during the contract period of detailed planning and delivery stages.

The exercise of a real option by the investor should be seen as responsible and informed resource management. It is a response to external (systemic) factors and not to the performance or non-performance of the project delivery stage.

The following examples of real options provide investors with the flexibility and ability to respond in real time to unfolding events. Such options, grouped here to indicate whether they are available to the investor before or after contract award, are not mutually exclusive and can operate in sequence:

Pre-contract award

- *defer* or wait before committing to the investment
- *stage* the implementation of the investment/project (acquire incrementally)
- *invest* in flexibility to *upgrade* in the future at a much lower cost

Post-contract award

- *abandon the* investment proposal or *exit* the project during delivery
- *change* the scale of the investment (expand or contract)
- *change* the scope of the investment (different mix of deliverables)
- *switch* inputs or processes during delivery

Real options are exercised in real time, either before or during project delivery, as events unfold and further information becomes available. In response to the additional information, decisions can be made that create additional value for government.

It should be noted that real options are a different concept to that of project risks:

- *Project risk* – a known event occurring with a known range of likelihood and consequence, and which the project team can manage, within its budget, in a manner that delivers the original approved project scope/outcomes. Project risks are what the project team manages, ensuring at all times they do not exceed their authority and still deliver the original approved project scope/outcomes.

- *Real option* – exercisable when circumstances arise that give the investor a choice to change the approved project scope/outcomes to be delivered. Exercising a real option delivers the optimal, but different, outcome for the investor (under these new circumstances).

5.5 Energy network regulation

The regulatory framework for electricity network pricing is under significant strain. Under the national energy rules, the Australian Energy Regulator (AER) makes network pricing determinations every five years through a process that focuses on examining the detailed costs estimates of the network businesses.

Network prices have been highest in jurisdictions such as Queensland and New South Wales. Victoria has also experienced electricity network real price increases for the first time since privatisation occurred in the 1990s. While there are pressures on networks to invest to meet demand in some areas, there are also deficiencies in regulatory frameworks that are contributing to project cost and consumer price increases. This highlights the significant information asymmetries faced by the AER which make it difficult to challenge cost estimates put forward by networks. The regulatory approach also distorts incentives of network businesses towards augmenting networks at regulated rates of return, rather than looking for opportunities to better utilise the current network.

Victoria notes reforms in this area have progressed. In December 2012 the Council of Australian Governments endorsed a package of energy market reforms for jurisdictions in the National Electricity Market. The Standing Council on Energy and Resources (SCER) was tasked by the Council of Australian Governments to progress energy market reform to support investment and market outcomes in the long term interests of consumers. Rule changes were made in late 2012 to provide more balanced regulatory settings and more discretion for the AER in making subjectively appropriate judgments about regulatory approaches. The review framework by which AER decisions may be appealed has been reformed. The AER itself is revamping its regulatory approach under the *Better Regulation Program*.

However, these changes have focussed on redressing specific shortcomings of the regulatory regime already in place. Limited consideration has thus far been given to alternative regulatory approaches which could create stronger incentives for distributors to lower costs for consumers and themselves, while maintaining service standards. In an era where demand for the bulk supply of electricity is highly uncertain, thought needs to be given to longer term reform.

Victoria has advocated for the full separation of the Australian Energy Regulator from the Australian Competition and Consumer Commission to create a stronger umpire with greater independence and clearer accountability.

The nature of network services demanded by customers is changing substantially, the technologies available for using and managing the grid are changing, quasi or even genuinely competitive technologies to grid supply of electricity are emerging for some customers, and the quantum of network investment required can no longer be readily inferred from volume growth in delivered energy.

In this environment, a regulatory regime which works by deriving efficient tariff levels from a return on a relatively unchanging regulated asset base, augmented by capital expenditure extrapolated from demand, is becoming anachronistic. If demand continues to decline driven by competition at the margins from distributed generation, energy efficiency and fuel substitution, then the current regime may derive price or revenue caps significantly in excess of what networks can sustainably charge their customers. It may also perversely

impede networks from taking rational commercial risks in changing their approach to doing business and developing new services and products.

A greater emphasis on benchmarking, incentive-based regulation and other comparative approaches would help improve competitive tension, encourage more productive use of the network, and drive more efficient investment strategies in network businesses. The AER has made initial steps in this direction by beginning annual benchmarking reviews of the network sector, but this is at a very early stage. The Productivity Commission's own *Electricity Network Regulatory Frameworks Inquiry* made extensive commentary on these matters and they have only grown in importance since its publication.

A preliminary discussion of alternative regulatory approaches and their applicability to electricity distribution network regulation in Australia has been undertaken by the Centre for Market Design, a partnership between the Victorian Department of Treasury and Finance, the Commonwealth Treasury and Melbourne University, and can be accessed at http://cmd.org.au/__data/assets/pdf_file/0006/892590/FranchiseRegulation2013.pdf.

5.6 National broadband network

The National Broadband Network (NBN) is one of the largest Commonwealth Government infrastructure projects and should be more explicitly recognised in the Productivity Commission's inquiry.

The NBN is a national infrastructure program, for a general purpose technology that will impact productivity and innovation across all sectors of the economy for the long term.

Victoria's specific concerns with the NBN stem partly from the way it was initiated in 2009, particularly the failure to follow sound Infrastructure Australia project development frameworks and principles (including cost benefit analysis taking into account different state circumstances, and reviewing public financing approach) and a lack of State engagement.

Failure to establish consistent public policy parameters for public infrastructure projects affecting multiple sectors risks ongoing economy-wide inefficiencies.

Victoria is aiming for digital infrastructure and a market that meets user needs at a low cost. This will enable high levels of uptake, use and innovation for businesses across sectors and regions. The efficiencies in Victoria's future service delivery and business productivity will be significantly linked to the Commonwealth's successful implementation of the NBN.

The Victorian Government considers that the NBN and related policy settings should:

- provide affordable access to high quality communications services that meet the needs of Victorian businesses, citizens and government;
- prioritise the roll-out of communications infrastructure on the basis of current needs and economic impact, instead of engineering convenience;
- adopt an economically efficient approach to infrastructure development enabled by market competition and using existing infrastructure where possible;
- consider the need for infrastructure that accommodates the growing demand for service mobility, not just services to a fixed premise; and
- employ a flexible approach to regional markets recognising that the best infrastructure outcomes here may require the involvement and coordination of local business, government customers, and private and public infrastructure owners.

The NBN is subject to a series of reviews by the Commonwealth Government, examining issues such as the status of the project, roll out priorities and cost benefit analysis.

Issues subject to the current Productivity Commission's inquiry are relevant to these NBN reviews. The NBN reviews and inquiry should be linked so that the analysis and subsequent policy development are consistent.

The Victorian Government will support the NBN reviews including by providing detailed input on Victorian roll out priorities.

5.7 Victorian cooperation with national reforms

Victoria has supported national reform in infrastructure policy through active participation in a range of inter-jurisdictional forums. Victoria has led work on developing national guidelines for *Traditional Contracting for Infrastructure* through the Council of Australian Governments Infrastructure Working Group. Victoria also led and collaborated with other jurisdictions to agree the national Alliancing Contracting policy and guidelines in 2011, the National PPP policy and guidelines in 2008, and continues to collaborate through the National PPP Working Group comprising all jurisdictions. Victoria works closely with other Australasian Gateway jurisdictions and has recently led development of a database on project delivery lessons available to participating jurisdictions in across Australia and New Zealand.

Victoria is part of the joint Australasian Procurement Construction Council (APCC) and Australian Construction Industry Forum (ACIF) Building Information Modelling (BIM) working group providing government and industry with structure and guidance on the implementation and use of BIM, including the delivery of a procurement model. BIM can facilitate a reduction in costs related to constructability, waste, rework and ongoing facility management.

BIM allows the virtual design, construction and operation of a building by developing and testing a digital prototype in advance of its physical realisation, thus delivering greater cost certainty, eliminating error, improving program duration and reducing risk. The safety of construction workers can also be integrated into the model by using a risk register to design safety solutions prior to work commencing.

Government implementation of BIM has commenced in international markets including the United Kingdom and Singapore. The United Kingdom Cabinet Office published the *Government Construction Strategy* on 31 May 2011, announcing that Government's intention to require collaborative 3D BIM on its projects by 2016. Essentially, the United Kingdom has embarked with industry on a four year program for sector modernisation with the key objective of reducing capital cost and the carbon burden from the construction and operation of the built environment by 20 per cent.

In 2011 Singapore's Building and Construction Authority announced that from 2012 public sector agencies will require their industry consultants to use BIM for their new projects. In addition, mandatory regulatory submissions using BIM would be introduced for architectural submission by 2013, structural and mechanical and electrical submissions by 2014 and eventually for plan submissions of all projects with gross floor area of more than 5 000 square metres by 2015.

5.8 Barriers to market access and impact on construction costs

The approach of the Victorian Industry Participation Policy (VIPP) is to encourage bidders to seek local suppliers in delivering a public project and facilitate connections between suppliers.

VIPP assists domestic and international bidders for government contracts by facilitating access to local suppliers via the services of the Industry Capability Network. International bids for construction projects are assessed in exactly the same manner as local bids. Bidders demonstrate how they will work with competitive local suppliers by submitting a VIPP Plan with their tender. VIPP does not require bidders to use local suppliers and value for money remains the key priority is selecting the preferred bidder.

A 2011 *Review of procurement policy* by Ernst & Young, commissioned by the then Department of Business and Innovation, found that VIPP did not create a significant burden on business. Reforms to VIPP implemented in 2013 have reduced red tape while strengthening monitoring and reporting to ensure commitments to local industry are being delivered. The *Review of procurement policy* was used as evidence in the Victorian Competition and Consumer Commission Inquiry into more competitive Victorian manufacturing industry and is discussed in the final report which can be found at <http://www.vcec.vic.gov.au/CA256EAF001C7B21/pages/vcec-inquiries-current-inquiry-into-victoria-s-manufacturing-industry>.

Productivity in the construction industry is negatively impacted by industrial disputes, causing additional costs which are borne by the industry, its clients and ultimately the Victorian economy. These factors are contributors to high construction costs and also present barriers for international construction firms seeking to operate in Australia. Unlawful behaviour continues to beset the construction industry, including illegal picketing, with the industry regularly losing more working days to industrial disputes than the average of all other private sector industries. The Victorian Government considers it unacceptable for any organisation to resort to unlawful methods to resolve workplace disputes or to pursue industrial objectives. Notably, major industrial disputes have not yet occurred on any projects covered by Victoria's new Guidelines.

Since building and construction are major contributors to Australia's gross domestic product and have flow on effects to many other sectors, it is clear that high levels of industrial disputation, such as the 2012 Grocon dispute, have a negative impact on the Australian and Victorian economies.

A positive industrial relations environment is vital to encourage future investment and sustained economic growth for the benefit of all Victorians. The reinstatement of the ABCC will support the Victorian Government's moves to encourage lawful behaviour through its construction Guidelines.

Major infrastructure projects in Victoria have increasingly attracted international as well as domestic bidders, driving market competition on price and innovation.

The Port of Melbourne \$1.6 billion Port Capacity Project is currently tendering for a range of infrastructure and operational services that has attracted a wide field of Australian and international bidders. There are three international bidders and one domestic bidder competing to operate the third container terminal at the Port of Melbourne. There is a mix of international and domestic bidders shortlisted for the automotive terminal development and pre-delivery vehicle inspection hub.

The Regional Rail Link is another example where there has been active competition in the domestic market for packages and also participation from an international bidder. The early Registration of Interest process resulted in a small number of international contractors registering their interest. One international company, Balfour Beatty, is a member of a

successful consortium. As the Regional Rail Link project is jointly funded by the Commonwealth Government, all contractors undertaking works must have federal safety accreditation. The Office of the Federal Safety Commissioner assessed the international contractor through a site visit to an overseas project. The contractor is the first international company to obtain this accreditation.

International construction companies are participating in the local market for PPP projects. The Canadian company PCL Construction is in a joint venture with Grocon to build the Victorian Comprehensive Cancer Centre. The Spanish company Acciona Infrastructure has also been active in the tender processes for Peninsula Link in 2009, Victorian Comprehensive Cancer Centre tender in 2010 and Bendigo Hospital tender in 2011.

Specialist companies such as the French company Degremont have also been successful as part of the winning consortium on the Victorian Desalination Project.

Victoria's largest infrastructure project, the East West Link Stage 1, has also attracted an international field of bidders. The shortlisted consortiums currently going through the tender phase are:

- the East West Connect Consortium comprises Capella Capital, Lend Lease, Acciona and Bouygues. Members have experience in significant projects both in Australia and overseas, including Legacy Way (Brisbane), Pajares Tunnel (Spain), Peninsula Link (Melbourne) and Port of Miami Tunnel (Miami);
- the Inner Link Group Consortium comprises Cintra Infraestructuras S.A, Retail Employees Superannuation, Samsung C&T Corporation, Ferrovial Agroman (Australia), Ghella, Transfield Services (Australia), and Macquarie Capital (Australia) Pty Ltd. The group has been involved in significant local and international projects including 407ETR (Canada), EastLink (Melbourne), Incheon Bridge (South Korea) and Legacy Way (Brisbane); and
- the Momentum Infrastructure Consortium is made up of John Holland, Dragados Australia, Leighton Contractors, Iridium Concesiones de Infraestructuras S.A and The Bank of Tokyo – Mitsubishi UFJ. Members have worked on significant projects both in Australia and overseas, including EastLink and CityLink (Melbourne), Airport Link (Brisbane), CLEM7 (Brisbane), Lane Cove Tunnel (Sydney), Alaskan Way (Seattle), Madrid M-30 (Spain) and Interstate595 (Florida).

5.9 Unsolicited proposals from the private sector

In *Plan Melbourne* the Victorian Government committed to implementing a clear framework for consideration of unsolicited private sector proposals for infrastructure investment to harness private sector innovation and ideas. A new unsolicited proposal guideline is being developed to enable the Government and the private sector to work together to deliver projects and services. The Victorian Government will seek to strengthen collaboration with the private sector to leverage the private sector's expertise and experience and unique advantages to harness the best ideas and innovations for the benefit of Victorians.

The guideline will seek to strike a balance between providing confidence and certainty of process to the private sector, encouraging new and innovative ideas, and allowing Government flexibility to address individual project requirements and drive the best value outcomes. This will create opportunities for a two way engagement with the private sector in the development and delivery of new infrastructure and services.

For the purpose of a guideline, an unsolicited proposal is one made to Government by the private sector to build infrastructure and/or provide services. It originates within the private sector and involves organisations developing basic project specifications and then approaching Government for approval and support of the project. This support is typically financial but may also include regulatory or other forms of assistance.

The guideline in development includes a five stage assessment process, as well as governance and probity arrangements. A key element will be to ensure the private party's Intellectual Property is respected and that private parties are fairly compensated as part of the process.

6. TOR: Comment on other relevant policy measures, including any non-legislative approaches, which would help ensure effective delivery of infrastructure services over both the short and long term.

6.1 Approval processes

Streamlining environmental approval processes will provide confidence and certainty in the delivery of major infrastructure. From 2000-09, Victoria experienced a rise in average assessment and approval times for major infrastructure projects, particularly transport projects. This led to the development of the *Major Transport Projects Facilitation Act 2009*.

This Act reduces costs by shortening aggregate timeframes and providing greater certainty to public and private partners. It provides a single assessment regime and can grant approvals under eleven statutes. This removes duplication and risks around inconsistent approval conditions.

Statutory timeframes for decision making and reduced approval risk translate to lower risk premiums and improved procurement. This is in addition to administrative efficiencies and benefits associated with quicker approvals such as reduced construction cost escalation.

Duplication of assessment and approval regimes at the State and Commonwealth level is a major cause of risk and uncertainty. Sequencing issues and the prospect of delays and conflicting conditions significantly increases cost to the State. Recent Commonwealth commitments to reduce red and green tape are welcomed by Victoria. Removing duplication through a bilateral approval agreement is the key step in delivering a one stop shop for projects that are subject to Commonwealth approvals.

The *Major Transport Projects Facilitation Act 2009*, a vehicle Victoria is using for the East West Link – Stage 1, the Melbourne Rail Capacity Project and intends to use for the Port of Hastings project, needs to be part of the bilateral process and accredited for both assessments and approvals, to ensure the major benefits for the State are realised.

Currently, public and private major projects that are deemed to have potentially significant environmental impacts require approval under both the Victorian *Planning and Environment Act 1987* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

The recently released Productivity Commission research report into *Major Project Development Assessment Processes* has identified that overlap and duplication of similar regulatory processes as one source of unnecessary burden for proponents of major projects. A national reform agenda for environmental regulation has been advanced by the Council of Australian Governments in recent years. The streamlining of requirements for environmental assessment and approvals of development projects has focussed on overcoming regulatory duplication.

Establishing a one stop shop for environmental approvals, through Commonwealth accreditation of Victorian processes, will reduce overall approval times for public infrastructure projects that are deemed to have potentially significant environmental impacts. Reducing approval times will allow for faster completion of public infrastructure projects at a lower cost to the taxpayer.

The National Access Regime generates benefits to the community in that it promotes competition in goods and services using monopoly infrastructure. However, to the extent the regime imposes costs (and reduces certainty) for investors in infrastructure, the Commonwealth should minimise this. Victoria notes that, in its *National Access Regime Draft Report* released on 28 May 2013, the Productivity Commission finds that reforms are necessary to better target the regime so that the use of access regulation is confined to where it is most likely to generate net benefits to the community.

6.2 Skills and capabilities

The Victorian Government's Investment Lifecycle and High Value High Risk guidelines (the guidelines) outline key issues that should be addressed in developing and implementing new projects. In particular the guidelines outline a range of competencies and skills required by public sector managers involved in infrastructure development and delivery.

The guidelines point to six key roles required for shaping investments, recommending investments to be undertaken, acquiring infrastructure and delivering the expected outcomes over the life of an investment:

- *subject matter expert* – the person or group who has the majority of content knowledge to determine if a particular service of government requires additional investment and the specifications of any required solution;
- *investment policy and financial advisers* – those people who are responsible for developing the business case and/or who advise Government on the merits of investment proposals and the robustness of the business case;
- *investment owner* – the person in a delivery department or agency who identifies the business need, advocates for investment funding and is responsible for delivering and managing the infrastructure and delivering the services and benefits;
- *project governance body* – the bodies (or people) who are responsible for providing project oversight and high level guidance, ensuring accountability of the Project Director and addressing risks to enable successful investment delivery and operation;
- *project manager/project director* – the person responsible for managing the government project team, key stakeholders and the external contractor to deliver the infrastructure and implement the required changes in order to deliver the benefits; and
- *contract/operations manager* – the person responsible for ensuring the infrastructure investment delivers the required level of service within the budget and level of allocated resources. If the asset operation is provided by the private sector this role may include managing contracts with a third party.

The Victorian Government also operates a Commercial and Financial Advisory Services procurement panel arrangement that expedites State and local government departments' and agencies' access to experienced and expert providers of commercial and financial advice. Panel members offer advisory services across all project phases linked to the planning, development, tendering and implementation of infrastructure assets and services.

6.3 Project governance

Effective governance is of paramount importance to ensure successful project delivery. The project steering committee or control board provides high level oversight of implementation and management of the project and ensures that both the project team and contractors are held accountable for effective delivery of the project.

The Investment Lifecycle and High Value High Risk Project Governance guideline provides best practice guidance, templates and techniques, and promote the effective governance of programs and projects in a consistent, transparent and robust way. Victoria considers governance bodies must comprise of individuals who possess the range of capabilities, skills and experience to support sound decision making. Effective governance bodies for infrastructure projects benefit from a breadth of knowledge covering legal, financial, project management, general management, operational management, construction and subject matter knowledge. The effectiveness of the governance body's leadership can critically impact decision making, governance effectiveness and therefore project success.

A second aspect of governance is the management of external project relationships with key stakeholders. External stakeholders include key users of the infrastructure, customers and other special interest groups. An important aspect of project management is involving the stakeholders at the right point in time, in the right way and through the most appropriate governance mechanism.

The Department of Treasury and Finance is working with other jurisdictions to address governance during the construction phase and has already published exposure drafts of the *National Framework for Traditional Contracting of Infrastructure*.

Having the right skills and capability is critical to support effective public sector infrastructure delivery. Skills development and retention is an ongoing challenge across the public sector as the complexity of projects and the skills required to deliver them change over time.

Victoria supports working with other jurisdictions through the Council of Australian Governments Infrastructure Working Group to develop initiatives to improve skills and capability in undertaking complex infrastructure procurement. In particular, Victoria supports contributing to developing a number of initiatives being led by the Commonwealth including a national forum for contract managers, and further work to investigate the potential for a national training program. There are also opportunities for further collaboration across jurisdictions to share approaches to project planning, delivery and lessons from project experiences.

In 2012 the Victorian Parliamentary Accounts and Estimates Committee conducted an inquiry into the effective decision making for the successful delivery of significant infrastructure projects. The scope of this inquiry included a the skills and capabilities of the public sector in infrastructure delivery. A range of international precedents were reviewed. The report and the Victorian Government's response can be found at <http://www.parliament.vic.gov.au/paec/inquiries/article/1498>.

List of figures in submission

Section	Figure	Title
1.2	1	Shares of national revenue raised and service delivery responsibilities 2011-12
1.8	2	Four key asset life cycle stages
2.1	3	Summary of modified financing options
2.3	4	Superannuation equity investment in PPPs
5.1	5	High Value High Risk process
5.2	6	Risk transfer under different procurement models

List of websites in submission

Section	Description	URL
1.4	Victorian Essential Services Commission	http://www.esc.vic.gov.au
1.6	Bureau of Infrastructure, Transport and Regional Economics urban traffic and congestion costs	http://www.bitre.gov.au/publications/2007/wp_071.aspx
1.6	Victoria's 2012 Infrastructure Australia submission	http://www.dpc.vic.gov.au/index.php/featured/infrastructure-australia-update
1.7	<i>Plan Melbourne</i>	http://www.planmelbourne.vic.gov.au/
1.7	Regional Growth Plans	http://www.dpcd.vic.gov.au/planning/projects-and-programs/regionalgrowthplans
1.7	<i>Victoria - The Freight State</i>	http://www.transport.vic.gov.au/freight/freight-projects-and-initiatives/victorian-freight-and-logistics-plan
1.9	Moving Victoria	http://movingvictoria.vic.gov.au/
1.10	Investment policy and guidance	http://www.dtf.vic.gov.au/Investment-Planning-and-Evaluation
1.10	Procure guide	http://www.dtf.vic.gov.au/Publications/Investment-planning-and-evaluation-publications/Lifecycle-guidance/Investment-lifecycle-and-High-Value-High-Risk-guidelines-Procure
1.11	Prove guide	http://www.dtf.vic.gov.au/Publications/Investment-planning-and-evaluation-publications/Lifecycle-guidance/Technical-guides-Stage-2-Prove
2.1	<i>Partnerships Victoria</i> Requirements	http://www.dtf.vic.gov.au/Publications/Infrastructure-Delivery-publications/Partnerships-Victoria/Partnerships-Victoria-Requirements
2.1	Partnerships Victoria consultation paper	http://www.dtf.vic.gov.au/About/Projects/Future-directions-for-public-private-partnerships
2.1	Victorian Auditor General's Office	http://www.audit.vic.gov.au/
2.5	P3 Canada Fund	http://www.p3canada.ca/p3-canada-fund-overview.php
4.2	Victorian Guidelines	http://www.dtf.vic.gov.au/Publications/Infrastructure-Delivery-publications/CCCU/Implementation-Guidelines-to-the-Victorian-Code-of-Practice
5.2	In pursuit of additional value	http://www.dtf.vic.gov.au/Publications/Infrastructure-Delivery-publications/In-pursuit-of-additional-value
5.2	Towards Agreed Expectations	http://www.dtf.vic.gov.au/Publications/Infrastructure-Delivery-publications/Towards-agreed-expectations
5.3	Draft National framework for traditional contracting of infrastructure	http://www.dtf.vic.gov.au/Infrastructure-Delivery/Alliance-and-traditional-contracting
5.5	Regulatory approaches to electricity distribution	http://cmd.org.au/__data/assets/pdf_file/0006/892590/FranchiseRegulation2013.pdf
5.8	Victorian Competition and Consumer Commission manufacturing industry inquiry	http://www.vcec.vic.gov.au/CA256EAF001C7B21/pages/vcec-inquiries-current-inquiry-into-victoria-s-manufacturing-industry
6.3	Parliamentary Accounts and Estimates Committee infrastructure delivery inquiry	http://www.parliament.vic.gov.au/paec/inquiries/article/1498

