

16.0 Funding and delivery

Summary

- All new infrastructure is ultimately funded via taxation or user charges. Private financing in its own right does not create more money for infrastructure development.
- NSW Government spending on infrastructure has doubled since 2006 and now amounts to \$15 billion per year. There is little room to increase spending further whilst retaining the benefits of NSW's AAA credit rating.
- Infrastructure NSW proposes its priorities are delivered within a sustainable budgetary framework by using the following six funding strategies:
 - tolls on new and upgraded motorway links
 - Restart NSW funding, using net proceeds of asset sales and other windfall gains
 - reduction of public transport subsidies, consistent with regulatory determinations
 - limited reprioritisation of current capital plans
 - Commonwealth contributions for projects that align with Infrastructure Australia's key themes
 - value capture from beneficiaries of new infrastructure where feasible.

- Public private partnerships (PPPs) need to evolve to reflect current market conditions. This includes steps to mitigate the gap between public and private cost of capital, and limited sharing of demand risks if necessary.
- Procurement strategies can have a material impact on value for money. Infrastructure NSW's recommendations include the use of special purpose delivery entities, output specifications and transparency around project contingency costs. The overarching objective is to improve the quality of infrastructure outcomes by encouraging innovation.
- A case study for WestConnex shows how the funding and delivery principles proposed by Infrastructure NSW can be put into practice. WestConnex is proposed to be predominantly user funded, with limited Government financial support in the early years.
- Infrastructure NSW's next steps include the preparation of a detailed five year plan for infrastructure priorities and implementation of a project assurance framework to improve capital management and the delivery of project benefits.

16.1 Funding

The recommended actions set out in the Strategy (summarised in Section 15) have been designed to be realistic and affordable. This Section considers in more detail the constraints and opportunities for delivering the Strategy's priorities.

16.1.1 Funding versus Financing

The distinction between funding and financing is an important one that is sometimes lost in public commentary:

- all new public infrastructure is ultimately funded via taxation or user charges¹
- project financing (public or private) is used to meet the immediate cash needs of infrastructure construction; this only changes the timing of required funding payments²

The Government's capacity to fund new infrastructure is limited to the difference between revenue (primarily taxation) and recurrent expenditure on Government services and policies. This means that Government-funded infrastructure investment can only sustainably grow in line with the economy and tax revenues (about 5 percent nominal or 2 percent per annum in real terms)³.

¹ Value capture mechanisms such as special levies are also a form of taxation.

² Efficient management of the State's balance sheet operational savings and recycling of assets provides additional Government financing capacity.

³ 5.0% p.a. nominal capital expenditure growth is based on revenue growth of 5.0% assuming CPI is 2.5%, NSW population growth continues at about 1% p.a. and productivity growth increases tax revenues per capita by about 1.5% p.a. 2.0% real growth in infrastructure spending assumes 3.0% construction cost escalation. The 2011 NSW Financial Audit (Lambert Report), estimates a medium-long term trend revenue growth rate of 5.2% p.a.

The Government's capacity to finance major infrastructure (even if it is user funded) can also be constrained due to the need to preserve a conservative risk profile consistent with an AAA credit rating.

Private sector debt and equity can be used to finance capital expenditure through PPPs, but must ultimately be repaid by either user charges (for example, road tolls) or availability payments made by Government (funded by taxation). Private finance does not in its own right create more infrastructure funding capacity. The principal purpose of private financing is to better manage project risks and thereby deliver better value-for-money outcomes.

16.1.2 Constraints on Funding

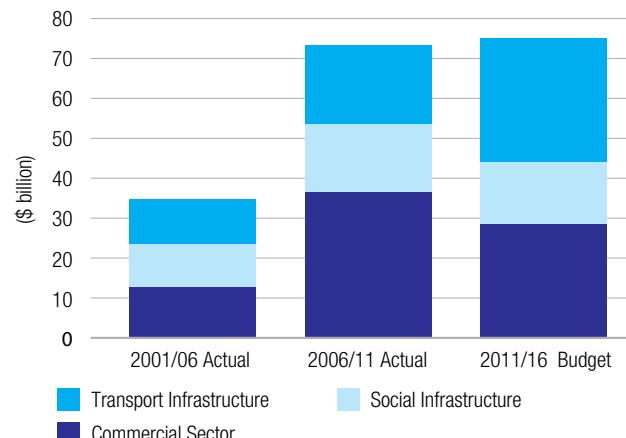
Government Funding

Over the last decade, the NSW Government's capital expenditure has grown rapidly as noted in the 2011 Lambert Report. Capital spending has increased from an average of \$7 billion per annum in the early 2000s, to an average of around \$15 billion per annum today.

Trends in capital spending are most easily understood when divided into three categories as shown in Figure 16.1:

- Transport infrastructure – mainly spent on rail and road projects, transport spending is overwhelmingly funded by government
- Social infrastructure – including health, education and other investments which are funded by government
- Commercial Sector – including electricity and water, where spending is generally funded through user charges over time.

Figure 16.1 NSW Capital Program 2001-16, five year blocks



Source: NSW Treasury.

The largest increase in spending in recent years has been in the commercial sector, particularly on electricity distribution networks, with a total of \$37 billion spent in the five years to 30 June 2011. This expenditure is forecast to fall to a total of \$29 billion in the five years to 30 June 2016, but this is still more than twice the historic level. Spending on electricity distribution networks, in particular, is forecast to remain at high levels compared with the long-term trend.

This enormous investment has placed the State's balance sheet under strain. Although the new debt can be repaid through user charges, the risk profile of NSW's balance sheet has changed. This has potential implications for the State's credit rating, and, as a result, the capacity of Government to finance non-commercial infrastructure investments is currently limited.

Capital spending on transport increased from a total of \$11 billion in the five years to 30 June 2006 to \$20 billion in the five years to 30 June 2011. It is forecast to increase a further 60 percent to \$32 billion in the five years to 30 June 2016. Transport spending is concentrated on roads outside of Sydney and the rail network in and around Sydney.

Other Government-funded expenditure includes health, education and other social infrastructure. Total expenditure of \$17 billion in the five years to 30 June 2011 was boosted by \$3 billion of Commonwealth stimulus spending. Total expenditure in the five years to 30 June 2016 is forecast to be \$15 billion.

Commonwealth funding of NSW infrastructure projects is currently forecast to fall from \$2 billion in 2011-12 to \$1 billion in 2015-16⁴. This places further pressure on the State's ability to invest in new infrastructure.

User Funding

Users already fund a substantial proportion of the State's infrastructure. User charges can support the allocation of capital to the most urgent infrastructure needs, and help increase economic efficiency. Even without taking account of the State's funding constraints, Infrastructure NSW favours user charging as a principle.

In practice, the application of user charges in the infrastructure sector can sometimes be opposed by sections of the community. This is particularly true if there is no clear linkage between a charge and a specific infrastructure improvement.

These issues are discussed further in 16.1.3.

⁴ NSW Treasury, 2011/12 Budget Paper 2.

Implications for the Strategy

Infrastructure NSW has concluded that it is highly unlikely that Government spending on infrastructure can be materially increased in real terms during the next 20 years without threatening the State's credit rating and increasing NSW's cost of borrowing. This constraint has underpinned Infrastructure NSW's strategy for the selection and prioritisation of projects, and the preference for better utilisation of existing assets where possible.

Within the next five years, only very limited new Government funding will be available, due to the scale of existing project commitments. Beyond five years, project commitments are inherently less fixed and capital is potentially more available.

Infrastructure NSW has focused on ensuring the priorities for the next five years are affordable and deliverable. Section 16.1.3 sets out the proposed funding strategies to allow delivery of the projects proposed during this first period of the Strategy.

16.1.3 Funding Strategies

Infrastructure NSW has identified the following six strategies to secure funding for the recommendations in Section 15.

Motorway Tolls

Road tolls have played an important role in funding new infrastructure in Sydney since Governor Macquarie's establishment of the Parramatta Road turnpike in 1811. Most of the roads that form the Sydney Orbital Network are currently tolled under concession agreements held by private sector investors.

The Draft Transport Master Plan proposes the introduction of distance based tolling on NSW motorways, in particular the introduction of a standardised cents-per-kilometre charge across the entire Sydney motorway network. It is proposed that revenue raised be allocated to a new transport fund to improve and upgrade transport networks. Infrastructure Australia has also commented favourably on the potential for a new network-wide charge on Sydney's motorways⁵.

This model has the potential to raise significant sums of additional revenue, and may have efficiency benefits, but it faces a number of obstacles prior to implementation, in particular:

- community opposition to the introduction of tolls on roads that are currently free and are not being upgraded
- equity impacts arising from increasing the proportion of revenue raised from motorists in Greater Sydney, particularly the West and South-West, who have relatively longer journeys
- valuation and financing issues arising from unwinding existing tollroad concessions.

⁵ Infrastructure Australia 2012, Progress and Action Report to Council of Australian Governments.

Infrastructure NSW is concerned that the practical effect of pursuing a network tolling structure will be that new road projects are deferred for a number of years, while the new scheme is developed and implemented.

Recommendation Given the urgency of delivering the missing motorway links identified in Section 6, Infrastructure NSW recommends that focus is placed on tolling only new and upgraded roads. This approach will allow an incremental introduction of distance based tolling on the Sydney motorway network as it is expanded over the next twenty years.

This strategy is considered further in relation to WestConnex in Section 16.4.

Restart NSW

The NSW Government has established Restart NSW as a fund for investing in new infrastructure, which is administered by Infrastructure NSW and NSW Treasury.

Restart NSW is funded from the net proceeds of asset sales, windfall revenues to Government and borrowings, including the issue of Waratah bonds. The divestment of assets for which there is private sector demand, including ports and electricity assets, will allow priority projects to move forward using Restart NSW.

The objective of Restart NSW is to improve the economic growth and productivity of the State by funding essential infrastructure. Restart NSW will provide initial funding to accelerate the delivery of the priorities identified in the Strategy⁶.

⁶ Restart NSW, Fund Act 2011.

Recommendation As the Government's asset sales program proceeds, Infrastructure NSW will provide advice to Government on the use of Restart NSW to fund the delivery of the prioritised projects.

Reduction of public transport subsidies

The rationale for subsidising public transport is that many of the benefits flow to the wider community, rather than to the user. For example, road congestion can be reduced if commuters adopt public transport. However, the level of public transport subsidy in NSW is very high by international standards.

As noted by the Commission of Audit, only around 20 percent of the urban rail network's costs are currently recovered through fares. This is due to both operational inefficiency and fare levels being kept below levels recommended by their independent regulator.

Analysis by the regulator⁷ states that CityRail's costs are almost \$400 million per annum higher than the level it judges to be efficient. Other analysis has indicated an even greater inefficiency⁸. TfNSW is starting to address the cost side of the equation through its rail reform program. More substantial reform will be needed over the medium-term to improve efficiency and release funds for capital investment.

In 2009, the regulator determined that CityRail fares should increase by CPI plus three percent per annum. However actual increases in fares since 2009 have only increased in line with inflation, so that CityRail's farebox

revenue is now around \$65 million per annum less than it would have been under the regulator's determination.

For ferries and buses, while the levels of inefficiency identified by the regulator are less acute, the same cap on real fare rises has applied in recent years.

The regulator is in the process of reviewing rail fares for the period from 2013-2016. Increasing rail fares in line with CPI plus three percent over four years could deliver the equivalent of \$2.0 billion of additional funding capacity for new infrastructure, providing costs are kept under control⁹.

In the UK, fares on the London Underground and London suburban rail services have progressively increased in real terms over the last two decades. Despite these fare increases, patronage on these networks has grown much faster than on the Sydney network (refer Section 8.1). Fare increases have been used to fund major network enhancements, improving the customer experience.

Recommendation Consistent with the NSW Commission of Audit, Infrastructure NSW recommends that the NSW Government reduce the proportion of funding that transport agencies receive from public subsidy to the levels determined as efficient by IPART. This will be achieved through a combination of operational efficiencies and modest fare rises.

Reprioritisation

It is possible that funding contributions from users and from Restart NSW will be sufficient to support the delivery of the priority projects. To the extent that a funding shortfall exists, Infrastructure NSW proposes a limited reprioritisation within the State's existing capital program. For example a reprioritisation of \$2 billion would affect only three percent of the budgeted capital program over the next five years.

Any reprioritisation of capital investment will be challenging. However, the significant benefits offered by the priority projects are essential to making NSW Number One again.

The process for turning the strategy into a fully funded infrastructure program is through the Five Year Infrastructure Plan, discussed in more detail in section 16.5.2.

Recommendation Infrastructure NSW will develop the Five Year Infrastructure Plan in conjunction with Treasury and Agencies. This process will consider opportunities to reprioritise capital works to allow the priorities identified in the Strategy, where endorsed by Government, to proceed.

⁷ IPART regulates public transport fares in NSW.

⁸ LEK 2008, Cost Review of CityRail's Regular Passenger Services.

⁹ Based on 2010/11 RailCorp fare revenue, 1.2% pa patronage growth and a 4% Government discount rate.

Commonwealth

Commonwealth funding may augment the funding options under the State's control. The Federal Government has made significant contributions to NSW infrastructure projects in recent years, particularly the Pacific Highway, freight rail upgrades and the M7.

Infrastructure Australia has identified a number of key themes and challenges that are consistent with the approach taken by Infrastructure NSW. In particular there is a shared focus on improving the liveability and productivity of our cities, the efficiency of our international gateways and the prosperity of regional areas.

The challenge is to ensure that NSW's infrastructure projects are best positioned to secure Commonwealth support going forward. This requires a more rigorous approach to planning and selecting projects for submission to Infrastructure Australia, as well as a more thorough exposition of their benefits relative to Infrastructure Australia's priorities.

Nonetheless it must be recognised that current fiscal pressures at the Federal level mean that Commonwealth support cannot be seen as an alternative to the other funding strategies set out in this section, in particular the user funding options.

Recommendation Infrastructure NSW will develop and co-ordinate funding submissions to Infrastructure Australia that best respond to Infrastructure Australia's key themes and challenges.

Value Capture

Some infrastructure projects, especially in transport, can increase the value of nearby landholdings and other assets over time. Where the taxpayer has made a financial contribution, it is desirable that a share of this value should be recovered by Government.

"Value capture" mechanisms have been devised which can contribute to the funding for new projects. Most of these schemes involve a charge on owners of assets whose value is enhanced by new infrastructure provision. Examples include the special business rate levy in the City of London to support Crossrail and the rates supplement on the Gold Coast to contribute towards the construction of light rail.

Challenges for value capture mechanisms include identifying the beneficiaries, quantifying the gains and crystallising cashflows to Government. In the short term, value capture will not provide a substitute for the other funding strategies set out in this section.

Recommendation Infrastructure NSW supports the use of targeted value capture mechanisms, including special purpose property levies, in situations where there is a clear link to new infrastructure.

Conclusion

There are six strategies available to Government to unlock the funding required for delivery of the Strategy's identified priorities. With the exception of Commonwealth contributions, all are under the control of the NSW Government, albeit that they involve difficult choices.

Infrastructure NSW supports user charges for the new infrastructure prioritised in the Strategy. This reflects the constraints on Government funding in the short to medium term and the benefits that user charging can bring to project selection and scoping.

16.2 Financing

NSW's AAA credit rating ensures the lowest possible cost of borrowing, which allows more funds to be spent on infrastructure over time. However within the constraints of its credit rating, the State's balance sheet has only limited potential to finance new infrastructure, even if it is user-funded. This means that delivery of the Strategy's priorities will require at least some private sector financing.

16.2.1 Public-Private Partnerships (PPPs)

Under PPP arrangements, new infrastructure is financed by the private sector. This finance is repaid either through user charges (such as tolls) or availability payments from the Government.

PPPs are most commonly used for large, complex projects, which by their nature tend to involve significant risks and a high public profile. The primary purpose of pursuing a PPP model is to better manage project risks and thereby deliver better value-for-money outcomes. The key advantages of PPPs are:

- contracted time and cost outcomes for Government
- clarity around project definition
- payments tied to service delivery, not asset provision
- whole-of-life cost management

The development of PPPs in NSW has not always been smooth and it is vital that lessons are learned to improve outcomes for future projects.

The PPP market has matured both from a procurer and bidder perspective. There is a clearer understanding on both sides that a successful project must be a genuine partnership and that this requires a higher level of interaction than has sometimes occurred in the past.

Recommendation PPPs should continue to be considered for all major infrastructure projects, consistent with past practice, subject to meeting value for money hurdles set out under the National PPP Guidelines.

16.2.2 Cost of Capital

Other than construction costs, the cost of capital is the main driver of the price of new infrastructure assets. An efficient long term cost of capital in both private and public sectors is fundamental to the efficient delivery of major infrastructure projects.

Since the start of the Global Financial Crisis in 2008, private sector investors have a much reduced appetite for risk. As one of the small number of AAA-rated issuers left in the world, the NSW Government is now able to raise funds more cheaply than it has for 70 years. NSW bond yields are currently in the order of four percent per annum.

Conversely, private finance is now significantly more expensive – for example the weighted average cost of capital (WACC) for social infrastructure is currently 9–10 percent compared with 6.5 percent before the Global Financial Crisis.

Accordingly, the challenge for NSW is to devise financing strategies that preserve the benefits of PPPs, whilst not incurring costs of capital that do not represent good value for money.

Infrastructure NSW recommends that this challenge is addressed in two principal ways:

- provision of direct capital grants. This will not impair incentives on the private sector so long as there is a sufficient amount of private finance to attract proponents and provide appropriate returns
- payout of a significant proportion of project debt after completion of construction. This mitigates the impact of the WACC differential on whole of life basis, and is consistent with the reduced risk profile of mature PPPs

Government grants have been used on recent Queensland PPPs, while debt pay down is an option for the SICEEP project.

Recommendation The current differential between public and private cost of capital, if sustained, requires an evolution of the PPP model to ensure value for money for Government.

16.2.3 Risk Allocation

In most infrastructure PPPs, demand risk is retained by the public sector through availability-based payment mechanisms. The major exception has been in the road sector, where full traffic risk has historically been passed to the private sector. However the financial failure of the last four tollroad projects in Australia (Cross City Tunnel, Lane Cove Tunnel, Clem 7 and Airport Link) has

significantly eroded investor confidence in greenfields tollroads.

In order to promote new greenfields tollroads, it is likely that the NSW Government will need to respond to market conditions and reconsider risk allocation on traffic demand.

At one extreme, the State could wholly retain demand risk, and tender an availability-based PPP. Other options include a sharing of traffic risks. This may take the form of a cap and collar arrangement on toll revenue for a certain period, or a blending of greenfield and mature revenue streams. Assessment of these options will need to take account of the implications for the State's balance sheet.

Refinancing risks are also of concern to some investors, particularly for very large projects. Given the unavailability of long term debt in Australia, projects are exposed to illiquid debt markets when refinancing is required.

Recommendation Infrastructure NSW recommends a limited reassessment of PPP risk allocation as required by market conditions, recognising that any changes must demonstrate value for money to Government.

16.2.4 Sources of Capital

Australian capital markets for infrastructure have historically lacked depth and liquidity compared with North America and Europe, notwithstanding the world's fourth largest pool of superannuation funds. Additionally, some of the financing options available

prior to the Global Financial Crisis, such as monoline bond credit enhancement, 20 plus year debt and listed tollroad equity, are not readily available. As a result, the ability of the private sector to provide sufficient financing capacity for the largest Australian infrastructure projects continues to be a matter of debate.

Infrastructure NSW recommends that the NSW Government continues to work with the Commonwealth Government to promote the development of capital markets in Australia, including tax incentives to foster the organic development of domestic greenfield equity and long term debt markets.

Australian superannuation funds can do more to contribute to financing Australian infrastructure. This will be a gradual process, dependent in part on consolidation of the funds industry which will mitigate liquidity risks and support a higher level of analytic expertise.

Recommendation Infrastructure NSW recommends that the Government continue to engage with the Australian superannuation industry regarding a risk transfer arrangement for greenfields investment that represents value for money to taxpayers.

16.3 Procurement

The priorities identified in the Strategy need to be delivered using best practice procurement approaches.

16.3.1 Delivery Model

Better outcomes can be achieved for both Government and private parties through clear and accountable project delivery and governance arrangements during pre-tender, procurement and post-contract phases.

For major and complex projects, Infrastructure NSW recommends the following approach:

- early establishment of a project-specific delivery entity, separate from the agency client
- integrated project team, combining public and private sector skill sets and including independent industry experts
- establishment of dedicated governance arrangements with representation from various levels of government
- interactive engagement with industry and other government agencies throughout the process
- transparent scope control and change process
- delegated authority to resolve key project issues as they arise during both procurement and delivery.

This is the approach taken in successful offshore projects and other Australian states.

16.3.2 Technical Specifications

Innovation in tender processes can save Government money, and provide superior outcomes. However innovation can only be applied in tender processes that facilitate and reward innovative thinking.

There are two distinctly different approaches to technical specification in infrastructure tenders, which have a major impact on the level of innovation: output specification and input specification.

An output specification defines the performance outcome required by Government. By contrast, an input specification defines how the solution is to be provided. The two approaches are compared in the Table 16.1.

Recommendation Output specifications, rather than input specifications, should be used for the procurement of major infrastructure projects. This approach is most likely to improve the value for money in infrastructure procurement, by encouraging private sector innovation.

16.3.3 Project Contingency

All infrastructure projects require a contingency to pay for unanticipated cost items. The level of contingency for major infrastructure will vary depending on the project risk assessment, but will generally be in the range of 15 percent to 30 percent of the cost.

Table 16.1 Two Approaches to Technical Specifications for New Infrastructure

Output Specification		Input Specification
Benefits	Bidders can innovate in a much broader area, improving value for money. The “mission critical” objectives for a project are emphasised over subordinate factors. Government can bring projects to market much sooner and at lower cost	Evaluation of competing bids is easier because the scope for variations between bids is low. Earlier confirmation of detailed scope can be given to the public and for Environmental Impact Statements.
Risks	Requires an interactive engagement process with bidders. Technical aspects of bid evaluation may be more complex where bids differ substantially. Government may have to underwrite a share of bid development costs.	Government's specification may exclude better value alternatives. Scope may become “gold plated”. Government may underestimate the cost impact of the inputs specified.

NSW practice has been to set project budgets on a ‘P90’ basis, where there is a 90 percent chance that the actual cost will be less than budget and a 10 percent chance that it will be more. The benefit of this approach is that there is a high degree of certainty that the budget will not be exceeded.

However the disadvantage of the P90 approach is that project contingency is set at a very high level. Once budgets are approved, there is little incentive on the deliverer to underspend and accordingly the tendency is for contingency to be absorbed within the project or the delivery agency.

Escalation of contingency is one mechanism by which the cost of procuring infrastructure tends to increase faster than other prices. Contingency can allow for scope to be upgraded to include ‘nice to have’ elements. Typically these items then become part of the base scope of future projects.

Recommendation Contingency for major infrastructure projects should be managed in a transparent fashion at the centre, in order to improve management.

16.3.4 Planning

Industry reports that a major source of cost and time delays for projects is the planning system for major infrastructure. Infrastructure NSW supports:

- new arrangements for Commonwealth and state environmental assessment and planning approvals - a single process to eliminate the time delays and costs associated with duplicate reviews and assessments (as submitted to the Council of Australian Governments in April 2012, Better Value Infrastructure Plan)
- the NSW Government’s proposed amendments to the planning system (A New Planning System for NSW Green Paper July 2012) to introduce regional growth plans and subregional delivery plans.

16.4 WestConnex case study

As described in Section 6, The WestConnex scheme has a target cost of \$10 billion over the next 10 years. Accordingly it presents significant challenges in terms of funding, financing and procurement approach. Infrastructure NSW has applied the concepts set out in Sections 16.1 to 16.3 to its development of the WestConnex scheme.

16.4.1 User Funding

Given its existing commitments, the NSW Government is extremely unlikely to have the capacity to fund WestConnex itself over the next ten years. Accordingly development of the project in the short to medium term will require a tolling structure that can fund the great majority of the delivery cost over time.

Initial modelling indicates that around 75 percent of the funding for WestConnex can be sourced from user charges, having regard to:

- significant high value traffic flows, particularly freight, with strong growth characteristics
- substantial mature traffic flows on the existing M4 east of Parramatta and on the existing M5 East

The proposed tolling scheme will comprise a distance-based charge and a flagfall charge for access to WestConnex. It is proposed that the total toll will be capped for cars (as on the M7) and that trucks and commercial vehicles will pay a higher toll (as on the M2). The precise level of tolls will not be set until further traffic modelling for WestConnex has been completed.

It is envisaged that tolls will be imposed on the existing M5 East and the existing M4 east of Parramatta in lockstep with construction work to expand these corridors.

Time of day tolling is not proposed as a mechanism for managing congestion, in accordance with Government policy. However some form of dynamic tolling may be considered at particular pinch points to avoid overloading the legacy road network.

Infrastructure NSW proposes engaging with the market to identify ways of expanding the pool of capital available to finance WestConnex using toll revenues. This will include discussions with domestic and overseas superannuation funds.

16.4.2 Government Financial Support

Infrastructure NSW has assumed that Government funding using Restart NSW and other sources may become available for the approximately 25 percent of the scheme not funded by users. The precise level of potential Government funding is uncertain and will depend on factors such as the outcomes of the asset sales program and the achievement of spending targets.

In addition to any funding contribution, it is likely that the Government may have to provide financing support for WestConnex during the construction and ramp-up

phase. This recognises that in the current market, the necessary quantity of financing may not be available at commercial rates. Additionally the use of private finance alone may burden the project with higher interest costs than are justified to achieve risk transfer.

Government's financing support may include equity and debt contributions into WestConnex which will be repaid over time as traffic flows mature. Infrastructure NSW proposes working with NSW Treasury and the market to identify any opportunities to generate upfront finance by the securitisation of future revenue streams that may accrue to Government.

WestConnex will provide material productivity benefits to NSW and Australia by improving transport links to Sydney's international gateways. Accordingly WestConnex is a strong candidate for funding support from the Commonwealth Government. Infrastructure NSW will make a submission to Infrastructure Australia for consideration as part of the 2013-14 budget process and the Nation Building Two scheme. This submission will make the economic case for allowing all categories of vehicle to use WestConnex, and not restricting access to trucks, light commercial vehicles and buses.

16.4.3 Demand Risk

As discussed in Section 16.2, the financial failure of recent tollroads has resulted in the private capital now being generally unwilling to take unprotected exposure to greenfields traffic risk. In addition some contractors are unwilling to participate in processes where traffic forecasting is the principal driver of bid competitiveness, and traffic forecasters are generally concerned about their risk exposure.

However in the case of WestConnex, a majority of traffic will comprise mature traffic flows on the existing M5 East and M4 corridors. Infrastructure NSW recommends that a reference case of traffic forecasts be commissioned and made available to bidders under appropriate reliance conditions.

There are reasonable grounds for expecting that private sector financiers will be able to take a view on the reference case traffic flows. For greenfields traffic on the central part of WestConnex, a cap and collar arrangement may be appropriate for a transitional period. The principal purpose of any arrangement would be to protect debt from traffic risks and preserve the capital position of equity under downside scenarios.

At this stage, Infrastructure NSW is of the view that significant and substantial components of traffic risk on WestConnex can be transferred to the private sector. Subject to Government's approval for the development of WestConnex, Infrastructure NSW will directly engage with the market regarding the optimal mechanism for transferring patronage risks to the private sector.

16.4.4 Procurement

A disciplined procurement approach is essential if WestConnex is to be delivered within the budget nominated by Infrastructure NSW. The procurement structure must have a rigorous focus on achieving the core project outcomes and providing value for money.

Accordingly Infrastructure NSW recommends that WestConnex be delivered by a special purpose vehicle, with a project team blending skills across Government supported by private sector consultants. Under this model, TfNSW will take on a client role.

Innovation will be critical to the successful delivery of WestConnex. New ideas are required to minimise the capital cost of the project, and optimise the traffic flows within a complex urban environment. Accordingly, great care needs to be taken to define the minimum set of mandatory criteria that is presented to the market.

To accommodate this new approach, it is likely that the traditional approach to Environmental Impact Statements will need to be amended. Subject to consultation with the Department of Planning, Infrastructure NSW recommends the development of a strategic EIS across the whole WestConnex scheme, to be followed by a detailed EIS for each section once a preferred tenderer has been appointed.

The sizing of contract packages will be a function of range of factors, including procurement efficiency, security package requirements and delivery timetable.

16.5 Infrastructure NSW: next steps

This section has set out a series of recommendations to reform how new infrastructure is funded, financed and procured. Section 16.5 explains how Infrastructure NSW will work with State agencies to ensure these reforms are implemented on major new infrastructure projects.

16.5.1 Infrastructure NSW Responsibilities

Infrastructure NSW has been tasked with the functions needed to implement the Strategy's recommendations.

Requirements of Infrastructure NSW Act (2011)

The Infrastructure NSW Act (the Act) tasks Infrastructure NSW with 14 functions including:

- preparation and submission to the Premier of a 20-year State infrastructure strategy
- preparation and submission to the Premier of five-year infrastructure plans and other plans as requested by the Premier
- preparation of sectoral State infrastructure strategy statements
- review and evaluation of proposed major infrastructure projects by government agencies or the private sector
- advice on infrastructure planning and delivery assessment, economic or regulatory impediments and funding models
- Coordination of infrastructure submissions by NSW to the Commonwealth Government.

Five Year Infrastructure Plans

Infrastructure NSW is required to prepare and submit to the Premier a five year infrastructure strategy to identify specific major infrastructure projects to be undertaken as a priority in the following five years. These five year plans are to be reviewed every year and a revised plan submitted to the Premier, if required. In preparing the five year plans, Infrastructure NSW must have regard to the 20 year State Infrastructure strategy adopted by the Premier.

Infrastructure NSW will:

- prepare a five year infrastructure plan, based on the Strategy adopted by the Premier, identifying the specific infrastructure projects to be undertaken as a priority
- employ an enhanced major projects assurance and review process to improve the planning and procurement of infrastructure
- prepare sectoral state infrastructure strategy statements to plan the next steps for the reforms which have been recommended throughout this document. The relevant recommendations for further work, which may lead to a strategy, are listed in Section 15
- revise the State Infrastructure Strategy each five years or earlier as requested by the Premier.

16.5.2 Five Year Infrastructure Plans

The Strategy that is adopted by the Premier will be implemented through annual Five Year Infrastructure Plans. Infrastructure NSW will submit the first five year plan to support the 2013-14 Budget.

Infrastructure NSW (working with NSW Treasury and Agencies) will identify the major infrastructure projects to be undertaken as a priority in the next five years and publish this in the annual Five Year Infrastructure Plan.

In order to do so, Infrastructure NSW will:

- review major projects, using the review and assurance process, described below, for projects above \$100 million to determine the five year plan major infrastructure priorities.

- review each agency's Total Asset Management Plans and infrastructure strategies. Each agency prepares and submits a Total Asset Management Plan annually outlining their infrastructure strategies and capital requirements
- work with NSW Treasury to ensure the prioritised list informs the 2013-14 budget process

However, Infrastructure NSW notes that the vast majority of the Government's ongoing infrastructure program consists of projects under \$100 million (the threshold for the Major Projects Assurance process).¹⁰ The task of identifying, scoping and prioritising these smaller projects is an ongoing task carried out by the various Agencies on a day to day basis.

16.5.3 Major Projects Assurance Process

Infrastructure NSW has established an enhanced project assurance and review process, Major Projects Assurance, to review and evaluate major infrastructure projects with a capital investment value of more than \$100 million. This oversight will help the Government ensure that infrastructure projects are:

- the highest priority and scoped for maximum value-for-money
- delivered in a timely and efficient way
- managed and maintained efficiently over their life

NSW Treasury will continue to manage the process for independently reviewing agencies' capital project plans for projects between \$10 million and \$100 million.

This "Gateway Review" process is based on the similar system first established in the UK and recommended in Infrastructure Australia's guidelines, largely adopted by all Australian states. It aims to ensure agencies follow a sound and rigorous approach to developing, evaluating and delivering infrastructure projects.

The NSW Financial Audit 2011 (the "Lambert Report") identified significant failures in NSW Government infrastructure planning and variable compliance with the Gateway Review process, particularly for a number of very large, high-profile transport projects. It specifically identified the problem of projects being approved without supporting economic or financial analysis (or assessed as having community benefits worth less than their costs), and then subsequently running over budget in cost and/or being delayed or cancelled¹¹.

The NSW Commission of Audit Interim Report noted that many projects which had been subjected to the Gateway Review process rated poorly on affordability and Value for Money due to a failure to adequately explore alternative options to desired service outcomes, and a lack of proper business cases including economic and financial appraisals¹².

Accordingly, for projects over \$100 million, Infrastructure NSW will now strengthen the assurance process by applying a mandatory Major Projects Assurance process across the full project lifecycle. The process is illustrated in Figure 16.2. Infrastructure NSW endorsement of major infrastructure projects will be dependent on participation in the Major Projects Assurance process.

Each of the "gates" in this framework can be used to test project scoping and delivery plans, assess project delivery and benefit risks, and encourage new approaches to be considered to maximise value-for-money.

The monitoring and reporting role provides an opportunity for individual agencies and Infrastructure NSW to work together on each major infrastructure project to ensure that due consideration has been given to the imperatives of:

- cost control and "value engineering" so projects are scoped for maximum value-for-money
- management of contingency budgets to minimise scope creep
- use of high level output specifications as a means of encouraging innovative private sector solutions to the desired outcomes

Infrastructure NSW's assurance framework will assist Government with this project development and prioritisation process by providing independent advice on project merit and risks.

¹⁰ About 50% of Transport's program, 70% of Health's program and almost all of the rest of the Budget-funded capital program consists of projects under \$100 million.

¹¹ Refer to Chapter 8, Part B (Volume 1) and Chapter 16, Part C (Volume 2).

¹² NSW Commission of Audit 2012, NSW Interim Report: Public Sector Management.

An important new component of the Major Projects Review process is an initial “gate zero” for project justification, which occurs at the time of initial project inception. At this initial stage the options considered should be wide-ranging and should include, for example:

- alternative service delivery models that are less asset-intensive
- options for new asset capacity versus better utilisation of existing assets
- different forms of infrastructure with differing value-cost characteristics
- substantial variations in scope and standard
- alternative timing for delivery
- the use of pricing or other mechanisms to moderate demand.

Figure 16.2 Major projects assurance framework

Objectives

Develop a framework to increase confidence and assurance in planning and implementation of selected major projects through their entire lifecycle, specifically;

1. Prevent projects failing or not realising their stated objectives/ benefits.
2. Improve clarity in feasibility phase of projects.
3. Drive better governance.
4. Inform CIC intervention.

Benefits

1. Leverage from existing NSW Government assurance and reporting frameworks.
2. Visibility and transparency for respective stakeholders across government.
3. Opportunity for early detection of potential symptoms and root causes of project distress/ failure.
4. Early intervention where problems are detected.
5. Enhanced investment decision making and project governance.

